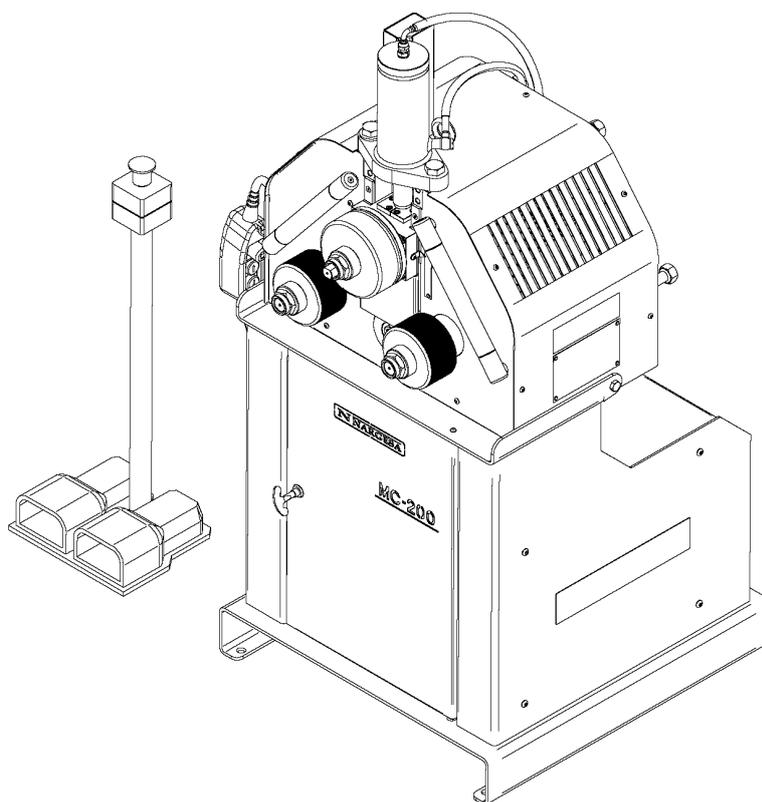


SECTION BENDING MACHINE

MC200H



INSTRUCTIONS BOOK

PRADA NARGESA, S.L

Ctra. de Garrigàs a Sant Miquel s/n · 17476 Palau de Santa Eulàlia (Girona) SPAIN
Tel. +34 972568085 · nargesa@nargesa.com · www.nargesa.com

Thank you for choosing our machines



www.narges.com

TABLE OF CONTENTS

1. MACHINE DETAILS	3
1.1. Machine identification details	3
1.2. Dimensions	3
1.3. Description of the machine	3
1.4. Machine part identification	4
1.5. General characteristics	5
1.6. Description of the guards	6
2. TRANSPORT AND STORAGE	7
2.1. Transport	7
2.2. Storage conditions	7
3. MAINTENANCE	8
3.1. General maintenance	8
4. INSTALATION AND START UP	9
4.1. Positioning the machine	9
4.2. Dimensions and work area	9
4.3. External admissible conditions	9
4.4. Instructions for connecting to the power supply	10
5. INSTRUCTIONS FOR USE	13
5.1. Bending principles	13
5.2. Assembling the rollers	13
5.3. Positioning the base-plate	14
6. WARNINGS	15
6.1. Residual hazards	15
6.2. Counter-productive methods	15
6.3. Other recommendations	15
7. ASSEMBLY OF THE ROLLERS	16
7.1. Bending capacity	17
7.2. Different bending samples	18
8. OPTIONAL ACCESSORIES	19

TECHNICAL ANNEX

1. MACHINE DETAILS

1.1. Machine identification details

Trademark: NARGESA

Type: Hydraulic bending machine

Model: MC 200H

1.2. Dimensions

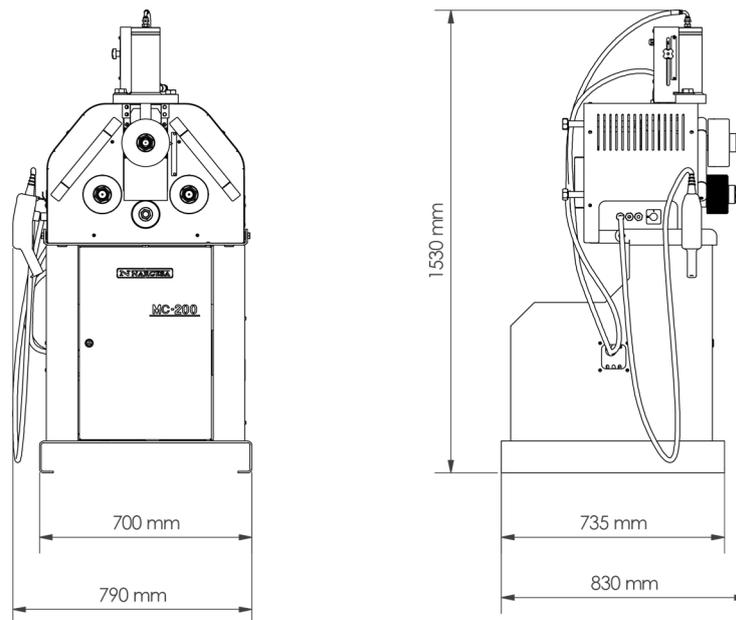


Figure 1. External dimensions of the MC200H bending machine

1.3. Description of the machine

The MC200H bending machine is a machine specifically designed for bending profiles, the majority of which are metal, with different thicknesses and configurations, such as solid profiles, pipes, T-profiles, angles, etc.

The bending machine offers a set of standard tools, rollers, to allow the bending of profiles in a range of shapes and sizes.

Apart from the standard rollers, the manufacturer also offers different types of additional rollers to produce other types of bending, according to the configuration of the material to be handled, as well as specific rollers for works with stainless steel or aluminium, manufactured with **Sustarin*, that prevents scratches and damage on the surfaces.

* *Sustarin*: Polyoxymethylene, high resistance and high rigid crystalline thermoplastic, low friction and excellent dimensional stability

PRADA NARGESA S. L is not liable for any damage that might occur due to misuse or failure by users to comply with the safety standards.

1.4. Machine part identification

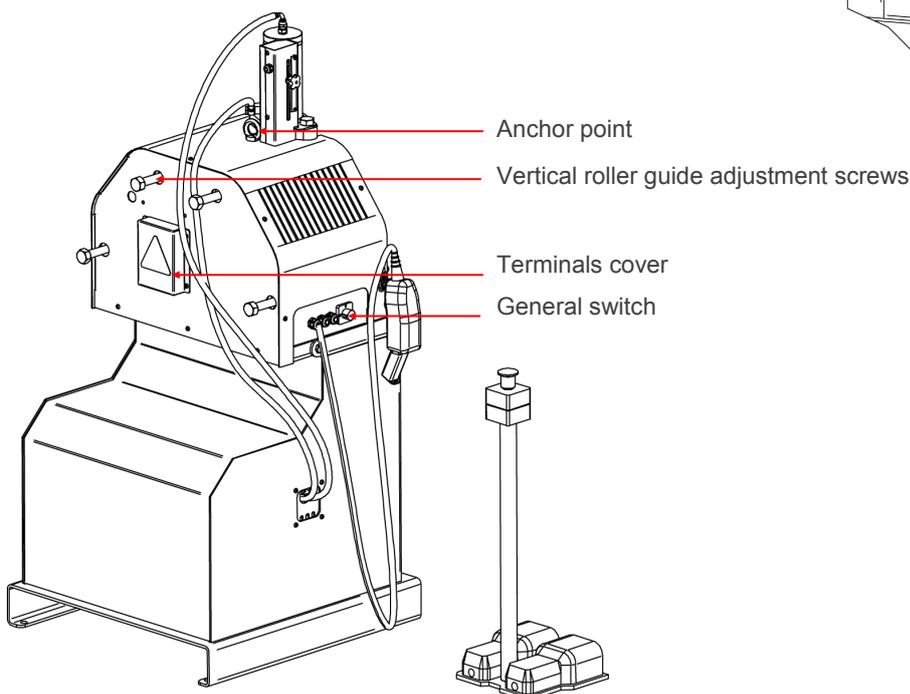
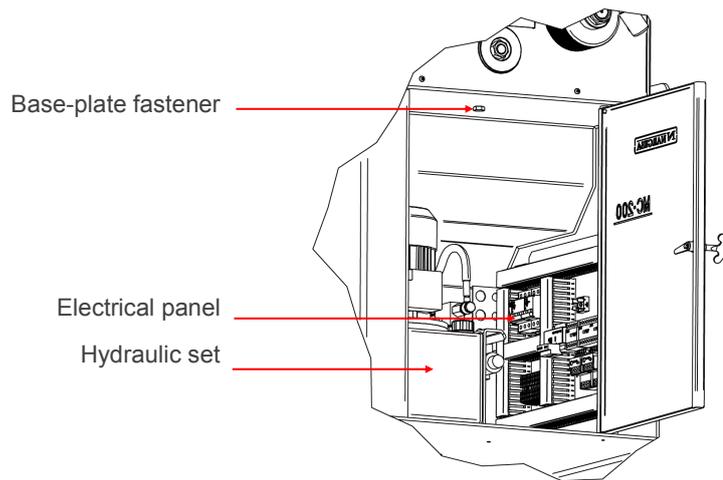
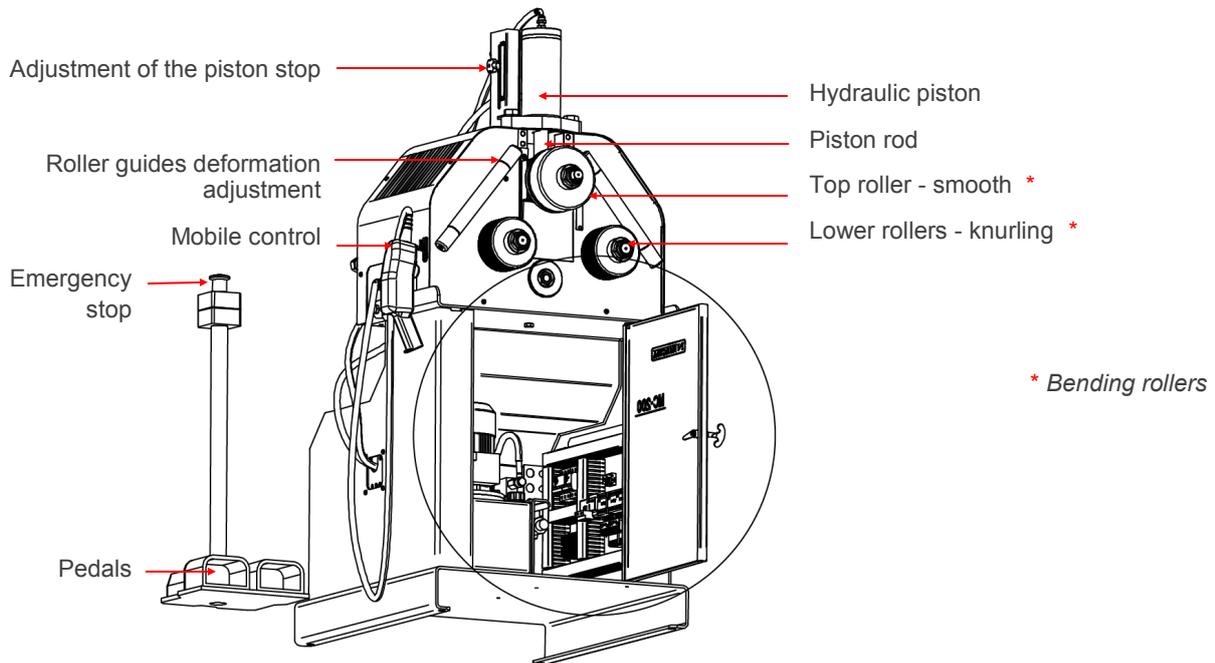




Figure 2. Nameplate

1.5. General Characteristics

Motor power	1.1Kw/1.5 CV a 900 r.p.m.
Voltage	230/400 V Triphase
Intensity	5.2 / 2.6 A
Type of pull	Two rollers
Roller speed	8 r.p.m.
Axes diameter	40 mm
Axes useful length	74 mm
Structure material	Plate
Total weight	360 Kg
Dimensions	700x830x1530 mm
Hydraulic engine characteristics	
Motor power	0.75 Kw/1 CV a 1400 r.p.m.
Pump flow	1.5 l/min
Work pressure	210 bars

1.6. Description of the guards

The gear motor and all the gears that allow the operation of the machine are located under the main upper cover that protects the mechanisms.

Although the major mobile elements are protected by the upper cover, it is necessary to take special precautions during bending operations in order to avoid entrapment between the rollers and the piece being bent.

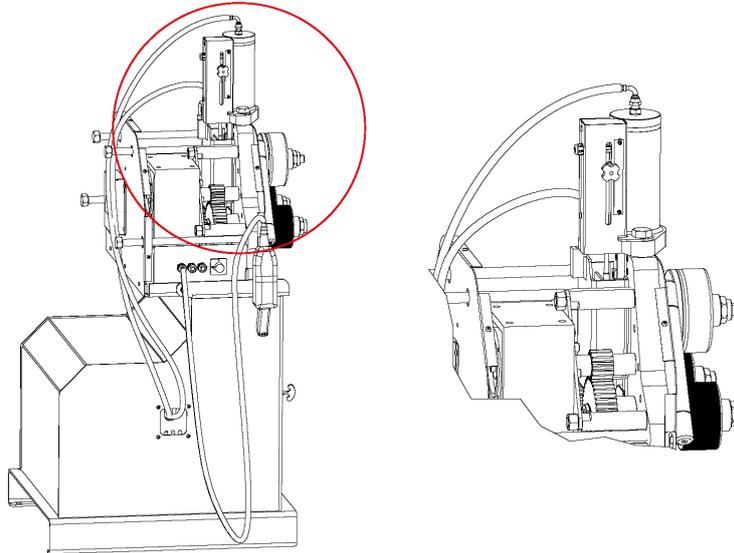


Figure 3. Mechanism protection guards

2. TRANSPORT AND STORAGE

2.1. Transport

There are two ways of carrying out the transportation of the machine:

- From the bottom, through the base of the machine, using a pallet jack or forklift as shown in the illustration. Never raise the machine more than 200 mm from the surface in order to prevent the risk of tipping
- From the top of the machine, from the anchor point designed for this purpose defined in figure 4, using a crane or forklift.

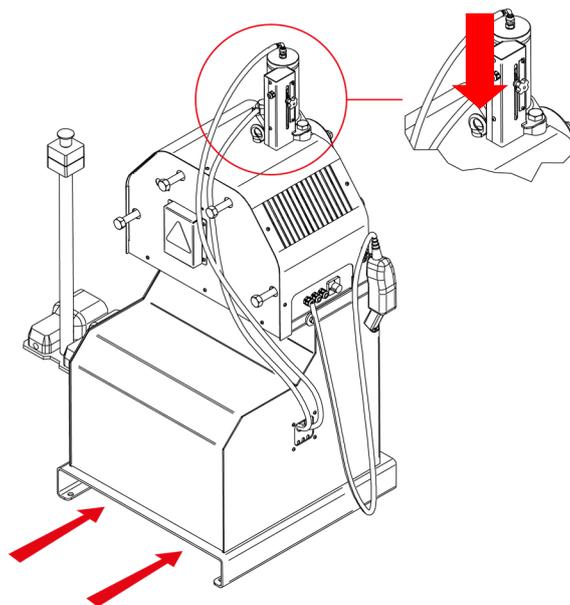


Figure 4. Transportation of the machine

CAUTION:

Before moving the machine, it is essential to check that the screw located in the interior of the cabinet, at its top, is properly secured. This ensures the work of the machine in vertical position without it moving. If the machine is moved while it is in upright position without the screw being correctly secured, there is danger that the machine could tip over, damaging its structure or harming users handling it.

2.2. Storage Conditions

The bending machine shouldn't be stored in a place that does not meet the following requirements:

- Humidity between 30% and 95%
- Temperature of -25 °C to 55 °C or 75 °C for periods not exceeding 24hrs (remember that these temperatures are in storage conditions)
- Machines or heavy objects should not be stacked on top
- Do not take apart for storage

3. MAINTENANCE

3.1. General maintenance

- It is recommended to keep the piston rod clean, whenever possible, to ensure proper operation and to extend its useful life.
- It is advisable to keep the friction rule lubricated along which the upper roller support slides. It is also necessary to ensure a minimum lubrication of the inner walls along which the upper roller support slides.
- Carry out a regular check of the oil level in the hydraulic tank located in the interior of the base. The upper roller must be positioned at its highest point in order to obtain a correct oil level reading .

CAUTION:

The "Emergency Stop" push button must be pressed and the machine brought to a stop in order to lubricate the machine".

In order to lubricate the moving parts of the machine that require lubrication, it's recommended to follow the next instructions:

- Clean the surface to be lubricated with a cotton cloth or a soft rag that does not release any threads. To remove the accumulated grease and any possible residues that have become stuck to it.
- After cleaning, reapply grease onto the surface with the help of a rag or a spatula.
- Spread the grease evenly without creating excesses or clumps.
- Once the machine is lubricated, using the mobile control that manages the height of the upper roller, raise this until it reaches its highest point.
- When the upper roller comes to a stop, reverse the direction of the piston to lower the roller down to its lowest point.
- Repeat the operation to ensure that the friction rule is lubricated.
- Lubricate the machine on a regular basis according to its use.

** It is recommended that you use lithium grease type: N.850 EP-2 for bearings.*

The following is recommended to replace the hydraulic oil:

- Each 500 hours of use, check the oil level in the tank
- The oil plug is located at the top of the tank. In the event of having to add oil, fill until the peep hole, at the front of the tank, is covered.
- Replace the hydraulic oil in the tank after every 2000 hours of work, or every 5 years. The screws holding the tank must be removed in order to replace the hydraulic oil. The drain plug is located at the bottom of the tank.
- Extract the oil with the help of a bucket and deposit it at the nearest recycling point.
- Fill the tank with new hydraulic oil until the oil covers the peep hole located at the front. The tank capacity is approximately 8 litres.
- Return the hydraulic unit to its location and secure it to the machine using the screws.

** It is recommended the use of CEPSA HYDRAULIC HM 68 hydraulic oil.*

4. INSTALLATION AND START UP

4.1. Positioning the machine

Locate the machine properly in order to avoid moving it; otherwise, follow the guidelines described in the paragraph transport (no. 2). Must be placed on a flat, level surface to prevent it vibrating and moving during bending operations.

It is possible to fix the machine using bolts due to the fact that it already comes with a lower base with four holes as shown in figure 5.

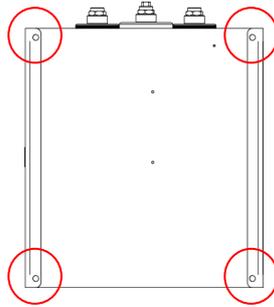


Figure 5. Anchor points of the machine

4.2. Dimensions and work area

The dimensions must be considered when the machine is being placed, the working area for the operator and the possible lengths of the parts to be worked.

The bending machine can be used by a single operator, who must be directly in the front of the machine to be able to handle the piece being bent with safety, and never on the side.

Prior to commencing the bending operation, with the machine shut down, the operator must adjust the bending rollers, adapting them to the material and the profile to be bent, as shown in paragraph 7, figure 13.

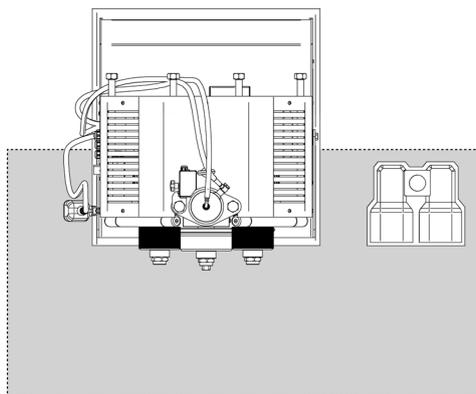


Figure 6. Operator's working area

4.3. External permissible conditions

- Room temperature between +5 °C and +40 °C without exceeding an average temperature of +35 °C within 24 hrs.
- Humidity between 30% and 90% without water condensation .

4.4 Instructions for connecting to the power supply

IMPORTANT This machine must be connected to an electrical outlet with earthing contact.

The MC200H bending machine comes equipped with a 230V/ 400V 1.1Kw three-phase motor for the operation of the rollers and a 230V/ 400V 0.75 Kw three-phase motor to regulate the hydraulic piston, both ready to be connected to a 400V power supply. The machine must be connected with the plug installed to a compatible power supply that meets the requirements specified.

If you want to connect the machine to a 230V three-phase voltage, a series of changes must be made to the electrical panel. These are the following:

- Change of the main motor coil connections
- Change of the hydraulic motor coil connections
- Change of the transformer connections
- Adjustment of the intensity range of the motor guard contactors.

Change of the motor connection:

When the power supply voltage is 400V three-phase, we perform the connection in a Star shape (default setting in the machine). In the case of 230V three-phase, we perform the connection in a Triangle shape. As shown in the figure.

The modification of the connection must be made through the motor terminal box located in the rear of the machine, changing the configuration of the flats according to the power voltage.

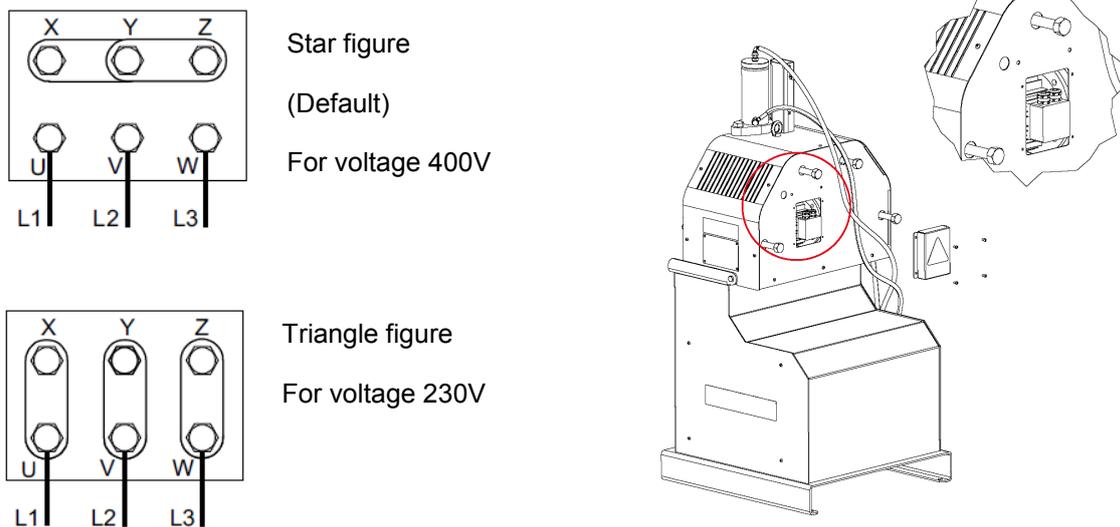


Figure 7. Change of engine connections

A check must be carried out to ensure that the machine is not connected to the power supply prior to making any modification to the connection or the electrical panel.

Changing of the hydraulic motor connections:

The hydraulic system motor is located in the inside of the cabinet, at the base of the machine.

The hydraulic group is located inside the cabinet, with the motor secured to the tank and the terminal box located at the front of the machine.

Just like the main motor, when there is three-phase 400 V power voltage, we make the connection in a Star shape (already pre-installed in the machine). If it is 230 V three-phase, we make the connection in a triangle shape, as shown in the diagram.

The modification of the connection must be done in the same way as the main motor, changing the configuration of the plates.

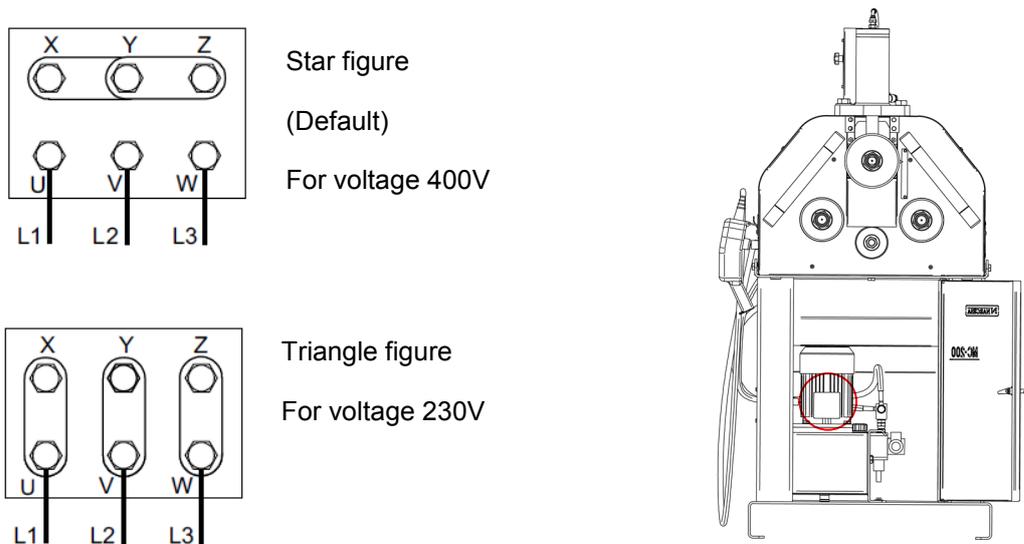


Figure 8. Changing the hydraulic engine connections

Change of the transformer connections:

Depending on the operation voltage required, the connections will also have to be changed in the transformer. This is located secured to the electrical panel inside the machine cabinet as shown in section A3.

Electrical cabinet

This is like the one shown in the diagram below. In order for the machine to operate at 400V, the inlet terminals connected are identified as “0v” and “415v”. To modify the operation voltage to 230V, all you have to do is release terminal “415v” using a star screwdriver and connect the released cable to the “230v” inlet and tighten it with the screwdriver .

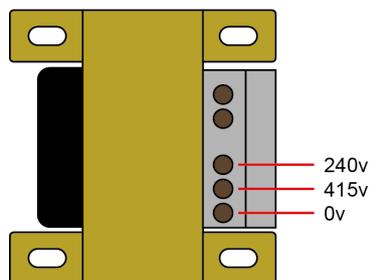


Figure 9. Changing the transformer connections

Adjust the range of intensities of the motor guard contactors:

Depending on the power voltage, the working intensity also varies, and it is therefore necessary to also modify the working range of the motor protection devices. The motor guard contactors are secured to the electrical panel as shown in section A3. *Electrical cabinet*

The motor guard contactor have a structure like the ones shown in the diagram below and allow a rapid adjustment through the regulator located at their front.

The right-hand contactor is responsible for protecting the main motor:

The regulator indication arrow must be around "5A" for 230V three-phase connection. In the case of a 400V three-phase connection, this must be around "2.6A".

The left-hand contactor is responsible for protecting the hydraulic motor:

The regulator indication arrow must be around "3.5A" for 230V three-phase connection. In the case of a 400V three-phase connection, this must be around "2A".

**If the motor guard contactor cannot assume the intensity range required, this must be replaced with one with a greater range.*

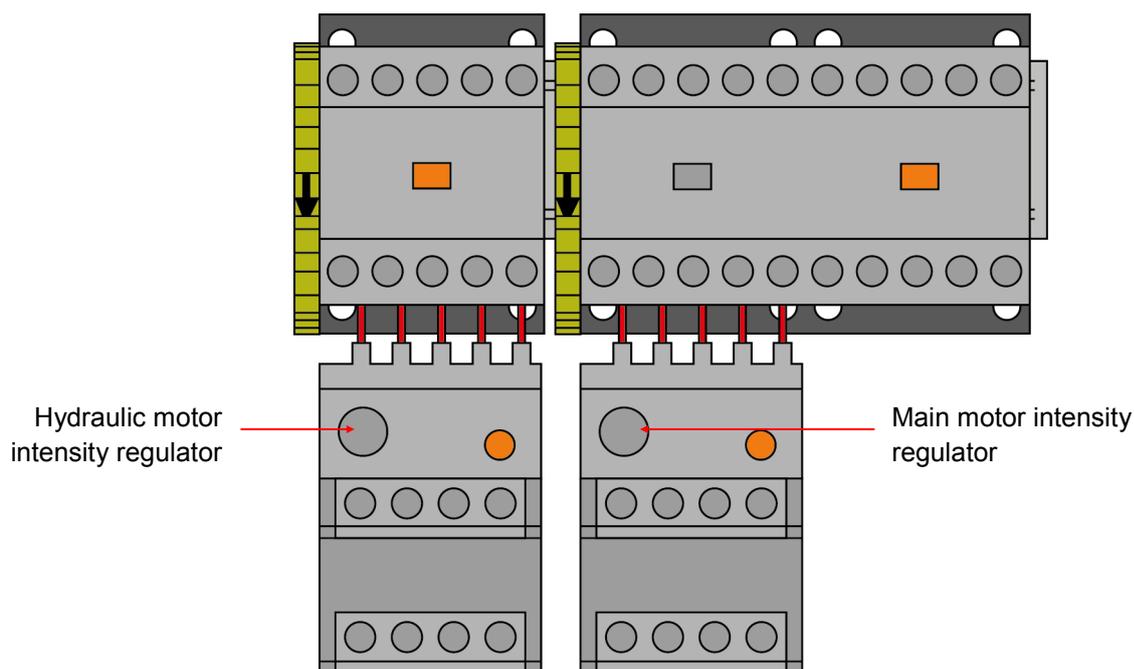


Figure 10. Intensity range adjustment

**We recommend contacting the Technical Service Department of NARGESA S.L.
if you wish to change the operation voltage of the machine in order to be guided and assisted
through the procedure.**

5. INSTRUCTIONS FOR USE

5.1. Bending principles

- The bending machine engine is started up using two pedals without interlocking, one for the clockwise rotation and the other for the anti-clockwise rotation.
- The bending machine radius is regulated by activating the mobile control push buttons, adjusting the height of the upper roller.
- There are two emergency stop buttons, one at the top of the pedals and another on the mobile control. Both stop the operation of the machine.
- The material can be placed in the machine through both sides. Use the mobile control to adjust the height of the upper roller, thereby adjusting the entry of the material. We can position the central roller end point at the end stop, which will allow us to obtain a high level of positioning repeatability.
- The distance between the deformation adjustment roller guide and the work surface must be modified in order to adjust the alignment of the material. This task will be performed by tightening the adjusting screws located at the rear of the machine. These roller guides guide the material to minimise lateral deformation. (The support roller guides must gently press against the profile to be bent)
- It is recommended to cut the tip into a wedge shape in order to obtain optimum bending in the profile to be worked, to facilitate its entry.
- In the event of not obtaining the proper results, the position of the guide rollers for deformation must be adjusted.
- The roller mounting nuts must be tightened by manual force only .

5.2. Assembly of the rollers

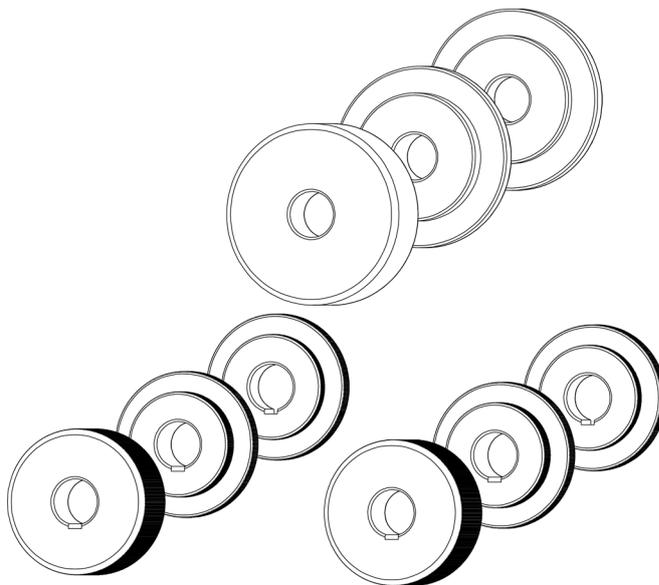


Figure 11. Position of the rollers in relation to the machine axes

5.3. Positioning the base-plate

The MC 200H can be worked with the base-plate in the horizontal or vertical position according to what is deemed necessary, depending on the tasks to be performed.

In order to place the bending machine in horizontal position:

- Open the cabinet and loosen the clamping screw located in the interior, in the top of the cabinet, as specified in paragraph 1.4 *Machine identification details*.
- Once the screw is loosened, tilt the base-plate backwards that houses the rollers and the gear motor with the help of another operator.
- Take care to handle the base-plate via the cylinder and the rear of the same during the tilt operation. Never handle the base-plate via the horizontal base that supports the work area, owing to the risk of entrapment.
- The machine will be supported on top of the cabinet that holds it allowing the horizontal work.

To return the machine to its vertical configuration:

- With the help of another operator, handling the base-plate through the rear (now located in horizontal) and the cylinder, reposition the base-plate in an upright position.
- Once positioned in vertical, screw the clamping screw, located in the inside of the cabinet, to prevent the base-plate from returning to its horizontal position.

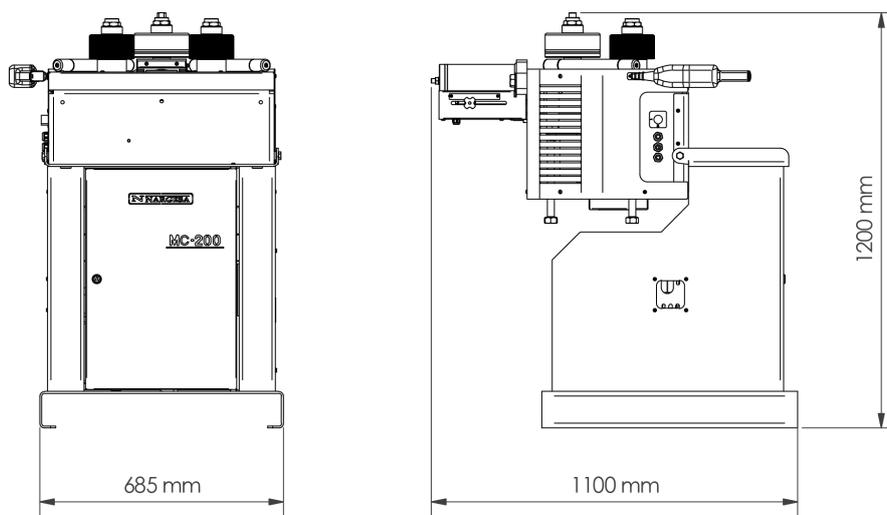


Figure 12. Machine dimensions with the base-plate in a horizontal position

CAUTION:

To change the configuration of the machine from vertical to horizontal or vice versa, the machine must be stopped and the "Emergency Stop" push button pressed.

Never handle the machine around the axes or the rollers while changing configuration.

Before using the bending machine in a vertical position, and after the configuration change, ensure that the fixing screw has a proper torque and the machine is stable.

Ensure that the hydraulic lines are not being pinched by the base-plate when carrying out the manoeuvre .

6. WARNINGS

The MC200H bending machine is designed and assembled to allow the operator to handle the machine and bend the necessary parts in a completely safe manner. Any change to the machine's structure or characteristics could modify the safety offered by the machine, breaching the EC certificate of conformity and could endanger the operator.

6.1. Residual hazards

Hazardous conditions may occur during the bending of materials that must be analysed and prevented. Attention should be paid to the movements of the piece to be bent and the roller while the material is being introduced into the machine as well as during its shaping. Despite the fact that the forward speed of the rollers is slow, there is a risk of entrapment in the extremities between the rollers and the part.

Users of the machine are recommended to handle the part to be bent firmly with one hand and to move the hand according to the progress of the bending operation in order to maintain a safe distance from the rollers.

It is also necessary to prepare the work area to prevent other operators from injuring themselves during operation of the machine.

6.2. Counter-productive methods

Tools or rollers that are not supplied by the manufacturer of the machine, NARGESA S.L., and which have not been specially designed for the MC200H bending machine should never be used .

6.3. Other recommendations

- Use gloves for handling the machine and during the bending processes.
- Wear EC-approved goggles and protective boots
- Handle the material at the ends, and never around the area being bent
- Do not work without the protection devices that the machine is fitted with
- Ensure that there is a safe distance between the machine and the operator

7. ASSEMBLING OF THE ROLLERS

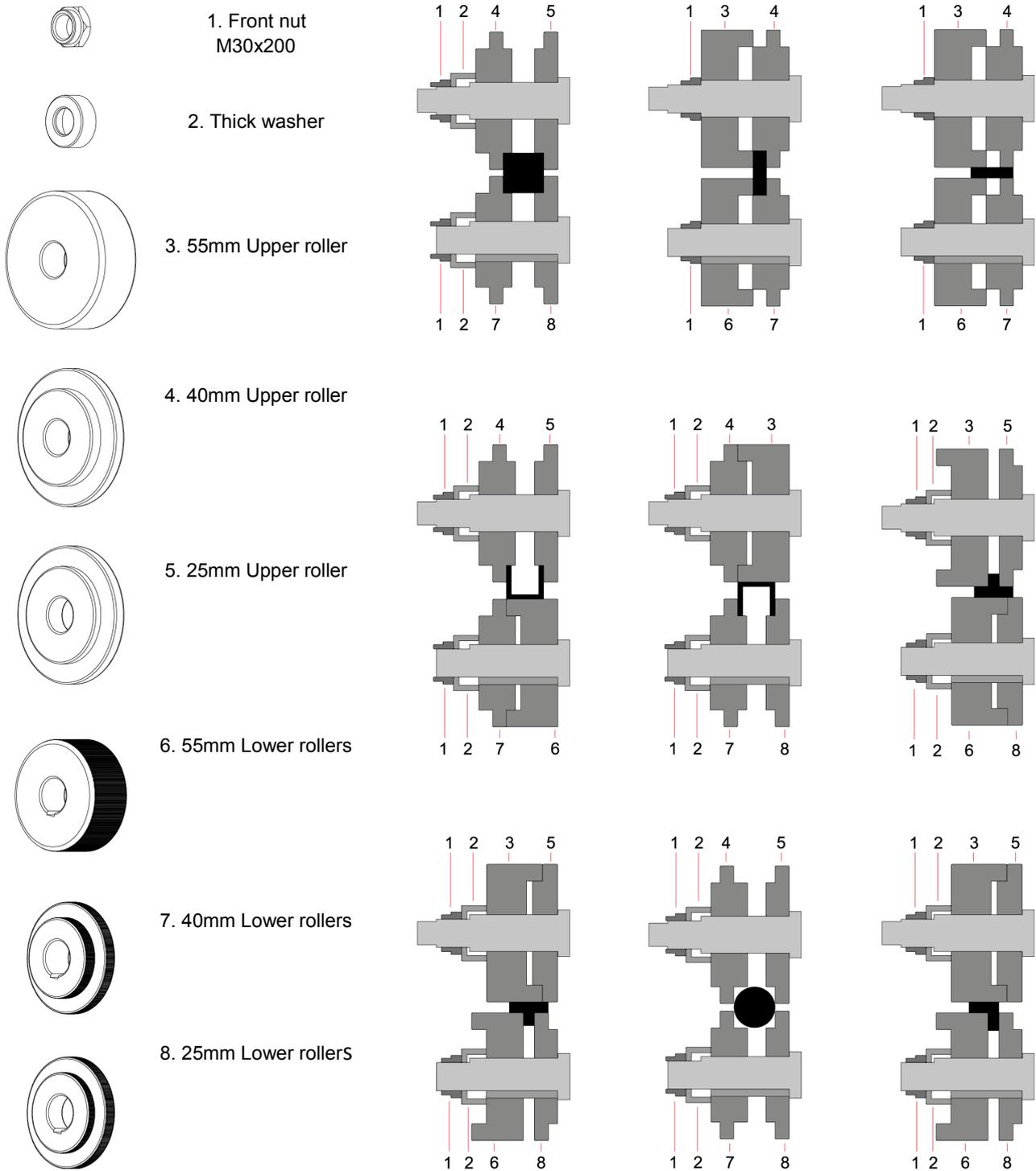


Figure 13. Nomenclature of the rollers and assembly

IMPORTANT NOTE:

The clamping nut of the rollers should never be tightened with a wrench and only by hand. If pipe rollers are being used, the nuts must be loose.

7.1. Bending capacity



Profile	MC150B		MC200		MC400		MC200H		MC650	
	Measures	Min. radius	Measures	Min. radius	Measures	Min. radius	Measures	Min. radius	Measures	Min. radius
	50 x 8	300	50 x 10	300	50 x 10	250	60 x 10	200	100 x 20 80 x 20	1250 450
	60 x 20	200	80 x 20	150	80 x 20	150	80 x 20	150	100 x 25 80 x 20	350 200
	25 x 25	200	30 x 30	200	30 x 30	150	30 x 30	150	45 x 45 25 x 25	300 200
	40 x 40 x 3	350	50 x 50 x 3	700	50 x 50 x 3	600	50 x 50 x 3	450	70 x 70 x 4 40 x 40 x 3	750 350
	40	200	40	200	40	150	40	200	80 * 70 40	500 400 150
	40	250	40	250	40	200	40	250	80 * 60 40	500 400 150
	50	200	60	300	60	225	60	225	120 * 100 * 80	600 600 400
	50	250	60	300	60	225	60	225	120 * 100 * 80	700 700 400
	40	500	40	420	40	200	40	300	70 40	600 250
	25	180	30	150	30	150	30	150	50 25	300 175
	40 x 2 * 50,8 x 3 * = 2" x 3 *	300 600 600	40 x 2 * 63,5 x 3 * = 2"1/2 x 3 *	250 500 500	40 x 2 * 63,5 x 3 * = 2"1/2 x 3 *	200 450 450	40 x 2 * 76,2 x 2 * = 3" x 2 *	200 500 500	88,9 x 4 * 101,6 x 3 * = 4" x 3 *	700 700 700

* Optional rollers

7.2. Different bending samples

Figure 14. Examples of bending in different pipes and profiles



8. OPTIONAL ACCESSORIES

The bending machine has been designed for bending all kinds of profiles irrespective of their shape.

The standard rolls included as standard on the bending machine allow the configuration of all kinds of handrails, angles, square, round pipes, etc., thanks to their multiple configurations.

In order to facilitate the bending of certain more delicate materials that require a very good surface finish or to facilitate the bending of more common sections, NARGESA has designed a series of rollers that can be purchased at an official dealership or by directly by contacting NARGESA S.L.

Besides the accessories shown below, NARGESA also designs special rollers upon specific request for customers .

Set of treated steel rollers

Set of 3 sets of treated Steel rollers for Steel round pipe or stainless Steel, thickness bigger than 2 mm.

For pipe

in mm	Weight	ISO in mm	Weight	Whitwort inches	Weight
(30+25)	17,00 Kg	(26,9+21,3)	17,70 Kg	(1/2"+1"1/4") = (12,700 + 31,751 mm)	18,00 Kg
(35+20)	16,50 Kg	(33,7+17,2)	17,00 Kg	(1"+3/4") = (25,401 + 19,051 mm)	18,50 Kg
40	16,60 Kg	42,4	16,00 Kg	1"1/2 = 38,101 mm	17,25 Kg
50	14,25 Kg	48,3	14,40 Kg	2" = 50,802 mm	13,60 Kg
60	11,10 Kg	60,3	11,15 Kg	2"1/2 = 63,502 mm	9,75 Kg
70		76,1		3"=76,2 mm	



1" GAS = 33,250 mm 1" WHITWORT = 25,401mm

When pipe sizes are small, two sizes are included in the same roller.
Eg. (20+35) or (1/2"+1"1/4)

It is advisable to clean up very well the rollers before using stainless Steel to prevent from contaminating the pipe.

Set of sustarin rollers

Set of 3 Sustarin rollers for stainless Steel pipes, aluminium and delicate materials for thickness smaller than 2.5 mm.

For pipe in mm.

(25+30) - (20+35) - 33 - 40 - 43 - 50 - 50,8 - 60



1" GAS = 33,250 mm 1" WHITWORT = 25,401mm

Weight: 2,5 Kg

When pipe sizes are smaller, two sizes are included in the same roller.

Eg. (20+35) or (1/2"+1"1/4)

Sustarin rollers do not spoil or contaminate the pipe.

For any other size or profile please ask the manufacturer.

Technical annex

MC200H Bending Machine

General Parts Diagram

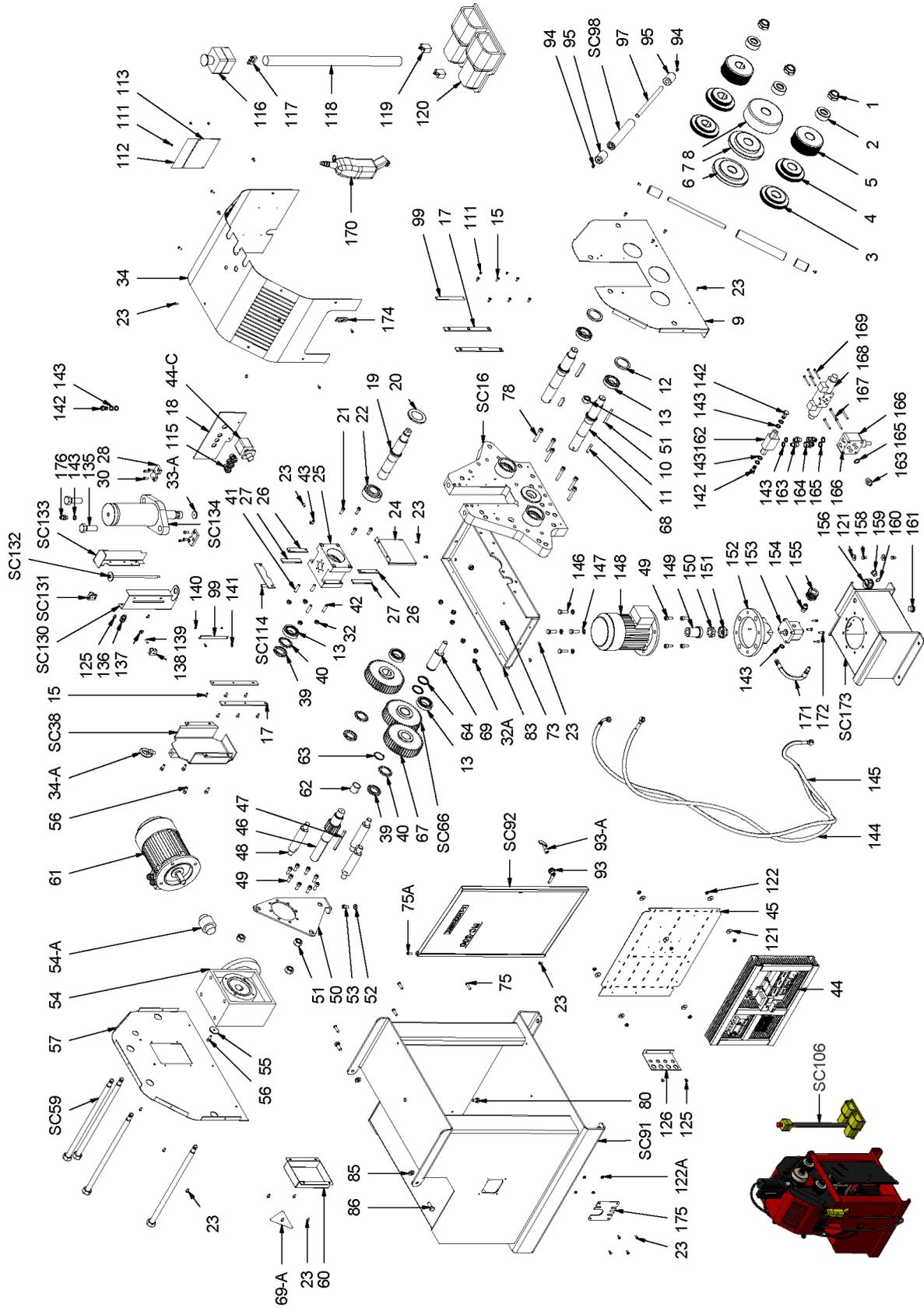
Pedal Diagram

Electrical Panel

Power diagram

Operation diagram

A1. General parts diagram



Nº ORDEN	DIBUJO	Nº PIEZA	CANTIDAD	DESCRIPCION
1		120-08-01-00001	3	TUERCA DELANTERA M30x200
2		120-08-01-00002	3	ARANDELA DE VASO (MISMO MODEL MC400)
3		120-08-02-00160	2	RODILLO INFERIOR DE 25
4		120-08-02-00161	2	RODILLO INFERIOR DE 40
5		120-08-02-00162	2	RODILLO INFERIOR DE 55
6		120-08-02-00165	1	RODILLO SUPERIOR DE 25
7		120-08-02-00164	1	RODILLO SUPERIOR DE 40
8		120-08-02-00163	1	RODILLO SUPERIOR DE 55
9		120-08-02-00023	1	TAPA FRONTAL
10		030-DIN6885AB-12X8X75	2	Chaveta paralela DIN 6885 - AB 12x8x75
11		120-08-02-00008	2	EJE TRACCION
12		120-08-02-00014	2	TAPA BUJE TRACCION
13		030-CJ-32008-40X68X19	5	Rodamiento de rodillos cónico DIN 720 - 32008X - 40 x 68 x 19
15		020-DIN7991-M6X16	12	TORNILLO ALLEN CABEZA CONICA DIN 7991 M6x16
SC 16		130-08-02-00022	1	CUERPO PRINCIPAL
17		120-08-02-00026	4	REGLA DE FRICCION
18		120-08-02-00155	1	SOPORTE INTERRUPTOR GENERAL

Nº ORDEN	DIBUJO	Nº PIEZA	CANTIDAD	DESCRIPCION
19		120-08-02-00011	1	EJE BUJE MOVIL
20		120-08-02-00015	1	TAPA BUJE MOVIL
21		020-DIN912-M8X25	4	TORNILLO ALLEN M8x25
22		030-CJ-33208-40X80X32	1	Rodamiento de rodillos cónico DIN 720 - 33208 - 40 x 80 x 32
23		020-ISO7380-M6x12	30	TORNILLO ALLEN CABEZA REDONDA ISO 7380 M6X12
24		120-08-02-00071	1	TAPA PROTECCION DELANTERA
25		120-08-02-00010	1	BUJE MOVIL
26		120-08-02-00012	2	PASAMANO FRICCION BUJE MOVIL
27		120-08-02-00013	2	PASAMANO FRICCION AJUSTE BUJE MOVIL
28		120-08-02-00021	2	PASAMANO FIJACION
30		020-DIN912-M6X16	6	TORNILLO ALLEN M6x16
32		020-DIN934-M10	4	TUERCA DIN 934 M10
32A		020-DIN985-M10	6	TUERCA AUTOBLOCANTE M10 DIN 985
33-A		120-08-02-00128	1	DISCO DE APOYO
34		120-08-02-00149	1	TAPA PRINCIPAL
34-A		020-DIN580-M12-ZN	1	CANCAMO MACHO DIN 580 M12 ZINCADO
SC 38		130-08-02-00003	1	PLACA ELEVACION

Nº ORDEN	DIBUJO	Nº PIEZA	CANTIDAD	DESCRIPCION
39		020-DIN981-KM8	3	TUERCA DE COJINETE DIN-KM8 M40X1,5
40		020-DIN981-MB8	3	ARANDELA DE BLOQUEO DIN-MB8 PARA EJE DE Ø40
41		020-DIN913-M10X40	2	ESPIGA ALLEN DIN 913 M10x40
42		020-DIN913-M10X35	2	ESPIGA ALLEN DIN 913 M10x35
43		120-08-02-00060	1	FLECHA INDICADORA
44		130-08-02-00032	1	KIT INSTALACION ELECTRICA MC-200 - HIDRÀULICA
44-C		050-IG-00001	1	INTERRUPTOR GENERAL KG10AK300
45		120-08-02-00152	1	PLACA MONTAJE ELECTRICO MC200
46		120-08-02-00033-01	1	EJE PRINCIPAL Z15
47		030-DIN685A-10X8X110	1	Chaveta paralela DIN 6885 - A 10x8x110
48		120-08-02-00038	3	SEPARADOR REDUCTOR
49		020-DIN912-M10X25	12	TORNILLO ALLEN M10x25
50		120-08-02-00039	1	PLACA REDUCTOR
51		020-DIN934-M20	4	TUERCA DIN 934 M20
52		120-08-02-00144	1	ARANDELA GRUESO SOPORTE MOTOR Ø20xØ10,5x5
53		020-DIN912-M10X16	1	TORNILLO ALLEN DIN 912 M10x16
54		050-RT-00002	1	REDUCTOR MRT 85 B3 1:40 G6/35

Nº ORDEN	DIBUJO	Nº PIEZA	CANTIDAD	DESCRIPCION
54-A		040-AE-00005	1	ACOPLAMIENTO ELASTICO VKG6,024
55		120-08-02-00035	1	ARANDELA FIJACION REDUCTOR
56		020-DIN912-M8X20	5	TORNILLO ALLEN M8X20
57		120-08-02-00025	1	TAPA TRASERA
SC 59		130-08-02-00004	4	VARILLA REGULACION RULINA
60		120-08-02-00062	1	TAPA CAJA DE BORNES
61		050-ME-00002	1	MOTOR ELECTRICO 1,1Kw 900 rpm BRIDA B5
62		030-DP-30X34X30	1	DOLLA PARTIDA Ø30xØ34x30
63		030-DIN471-40	1	Anillas de retención para el eje DIN 471 - Ø40x1,75
64		120-08-01-00090	2	GRUESO BRONCE PIÑON CENTRAL
SC 66		130-08-01-00107	1	PIÑON DE REENVIO
67		120-08-02-00032	2	ENGRANAJE Z45
68		030-DIN6885A-12X8X45	2	Chaveta paralela DIN 6885 - A 12x8x45
69		120-08-02-00041	1	EJE REENVIO
69-A		122-ADH-00003	1	ADHESIVO TRIANGULAR 400 VAC 100 mm
73		020-DIN985-M12	2	TUERCA AUTOBLOCANTE M12 DIN 985
75		020-ISO7380-M8x30	4	TORNILLO ALLEN CABEZA REDONDA ISO 7380 M8x30

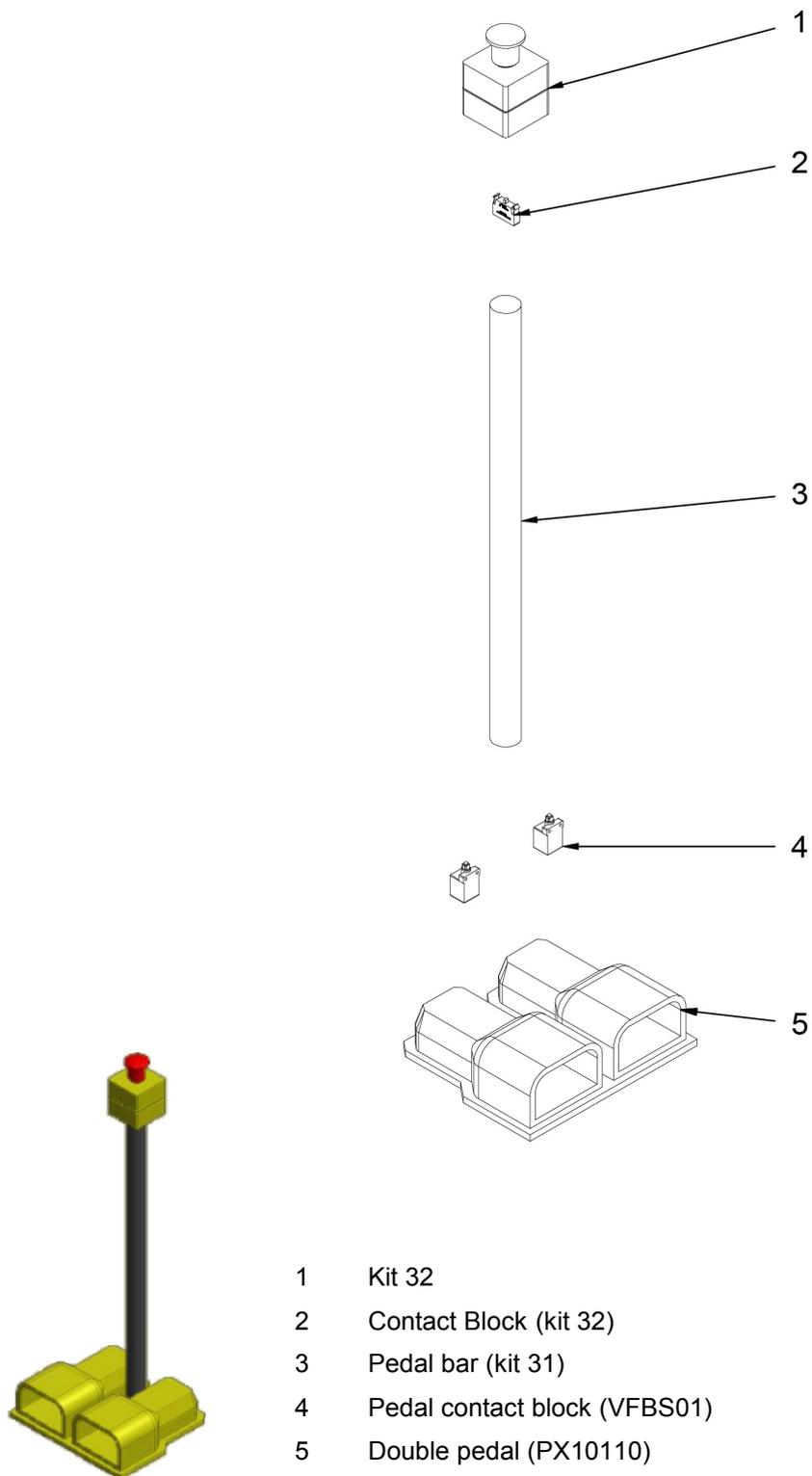
Nº ORDEN	DIBUJO	Nº PIEZA	CANTIDAD	DESCRIPCION
75A		020-ISO7380-M6X20	1	TORNILLO ALLEN CABEZA REDONDA ISO 7380 M6X20
77		122-ADH-00017	1	Adhesivo Logo NARGESA + WEB
78		020-DIN912-M10X60	6	TORNILLO ALLEN M10x60
80		020-DIN933-M12X20	1	TORNILLO HEXAGONAL DIN 933 M12x20 CALIDAD 8.8
83		120-08-02-00037	1	PLACA BASE
85		120-08-02-00117	2	ARANDELA DE GRUESO Ø24xØ12.5x5
86		020-DIN933-M12X30	2	TORNILLO HEXAGONAL DIN 933 M12x30 CALIDAD 8.8
SC 91		130-08-02-00030	1	ESTRUCTURA PIE
SC 92		130-08-02-00020	1	CONJUNTO PUERTA
93		031-CLT-00001	1	CERRADURA DE LENGÜETA CON TRIANGULO 8 M20
93-A		031-LLT-00001	1	LLAVE PARA CIERRE TRIANGULO DE 8 FLOTANTE NIQUELADA
94		020-DIN7991-M6X12	4	TORNILLO ALLEN CABEZA CONICA DIN 7991 M6x12
95		120-08-01-00016	4	CABEZA RULINA VERTICAL
97		120-08-01-00019	2	EJE RULINA VERTICAL
SC 98		130-08-01-00025	2	RODILLO AJUSTE LATERAL
99		120-08-02-00072	2	Regla Aluminio Serigrafada Milimetrada 0 - 12 MC200
SC106		050-PED-00010	X	CONJUNTO PEDAL ACCIONAMIENTO

Nº ORDEN	DIBUJO	Nº PIEZA	CANTIDAD	DESCRIPCION
111		020-DIN7337-4X10	6	REMACHE DE CLAVO DIN 7337 Ø4X10 ALUMINIO
112		122-CAL-0802-004	1	ADHESIVO PRECAUCIÓN MC200
113		122-PLC-0000-001	1	PLACA DE CARACTERÍSTICAS
SC114		130-08-02-00021	1	CONJUNTO SOPORTE VARILLA POSICION
115		050-PE-00003	3	PRENSAESTOPA PG 13.5
116		050-PED-00011	1	KIT 32 (PARO EMERGENCIA)
117		050-PEMG-00001	1	BLOQUE DE CONTACTOS (KIT 32)
118		050-PED-00012	1	BARRA PEDAL (KIT 31)
119		050-PPED-00001	2	BLOQUE DE CONTACTOS (VBF-501)
120		050-PED-00013	1	PEDAL DOBLE (PX10110)
121		020-DIN9021-M8	10	ARANDELA DIN 9021 M8 ZINCADA
122		020-DIN934-M8	9	TUERCA DIN 934 M8 PAVONADA
122A		020-DIN934-M6	4	TUERCA DIN 934 M6 PAVONADA
125		020-ISO7380-M6X10	4	TORNILLO ALLEN CABEZA REDONDA ISO 7380 M6X10
126		120-08-02-00151	1	POSICIONADOR PRENSA-ESTOPAS - MC200
127		122-CAL-0802-003	1	CALCA MC200
SC 130		130-08-03-00007	1	CONJUNTO TAPA DELANTERA

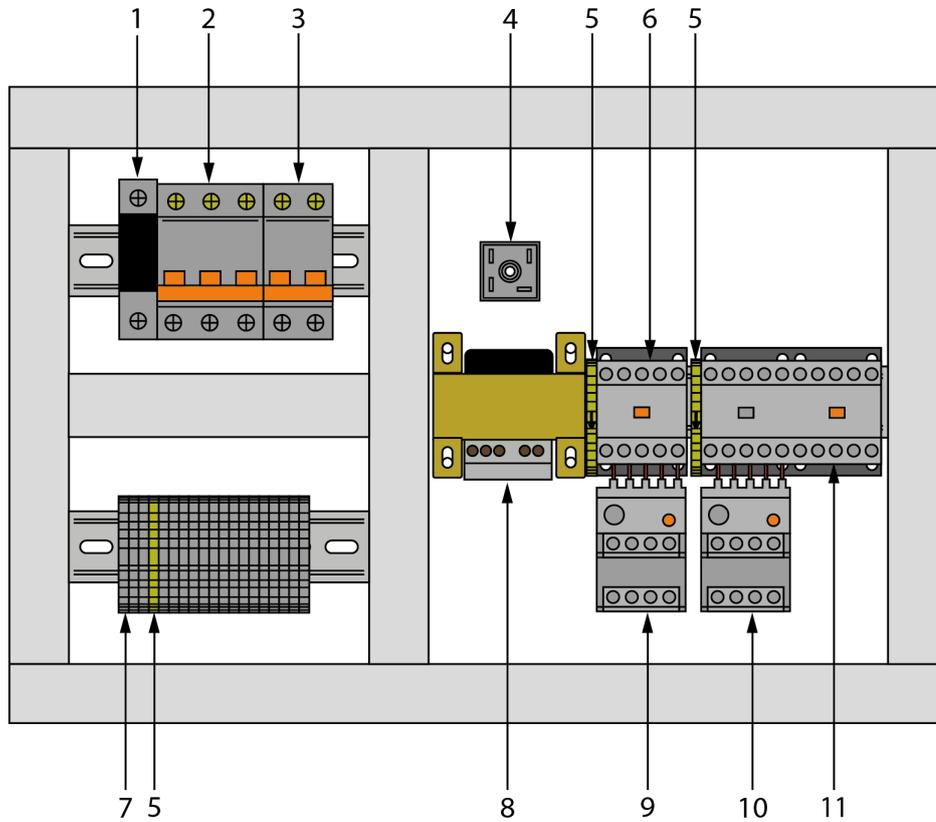
Nº ORDEN	DIBUJO	Nº PIEZA	CANTIDAD	DESCRIPCION
SC 131		130-08-03-00010	1	CONJUNTO SOPORTE MICRO
SC 132		130-08-03-00009	1	CONJUNTO VARILLA
SC 133		130-08-03-00006	1	CONJUNTO TAPA TRASERA
SC 134		130-08-03-00008	1	CILINDRO HIDRAULICO
135		020-DIN933-M22X60	2	TORNILLO HEXAGONAL DIN 933 M22X60
136		050-PE-00002	1	PRENSAESTOPA PG-9
137		120-08-03-00023	1	ARANDELA GRUESO Ø18XØ6,5X3
138		031-POMH-00001	1	POMO HEMBRA MATE EN ESTRELLA M6 Ø40 ALTO 20
139		020-DIN913-M6X20	1	ESPARRAGO ALLEN DIN 913 M6X20
140		020-DIN934-M4	2	TUERCA DIN 934 M4
141		020-DIN912-M4X10	2	TORNILLO ALLEN DIN 912 M4X10
142		040-TES-014	3	TORNILLO PARA ESFERA DE 1/4"
143		040-JMG-00002	10	JUNTA METAL GOMA 1/4"
144		120-08-03-00031	1	Manguera Hidráulica 1/4" Codo 90 T Giratoria 1/4" - Bola 1/4" . Long:1850mm 250 bars
145		120-08-03-00030	1	Manguera Hidráulica 1/4" Bola 1/4" - Bola 1/4" Long:1700mm 250 bars
146		020-DIN933-M10X35	4	TORNILLO HEXAGONAL DIN 933 M10X35
147		020-DIN125-1-B-10	4	ARANDELA M10

Nº ORDEN	DIBUJO	Nº PIEZA	CANTIDAD	DESCRIPCION
148		050-ME-00007	1	MOTOR ELECTRICO .75KW A 1400 rpm BRIDA B5
149		040-AE-00011	1	ACOPLAMIENTO LADO MOTOR 0.75 Kw BOMBA LO
150		040-AE-00013	1	ESTRELLA ACOPLAMIENTO 0.75KW BOMBA LO
151		040-AE-00012	1	ACOPLAMIENTO LADO BOMBA LO
152		040-CA-00003	1	CAMPANA ACOPLAMIENTO BOMBA LO MOTOR 0.75/1 CV
153		040-BH-00004	1	BOMBA HIDRAULICA DE ALUMINIO DE 1.5 L
154		040-R-00003-MM	1	RACOR MACHO MACHO 3/8"
155		040-FL-00004	1	FILTRO 3/8"
156		040-TLL-00003	1	TAPON DE LLENADO 1/2"
158		020-DIN933-M8X12	2	TORNILLO HEXAGONAL DIN 933 M8X12
159		040-NA-038	1	NIVEL DE ACEITE 3/8"
160		040-JNA-038	1	JUNTA PAPEL "CLICHERI" NIVEL ACEITE 3/8"
161		040-TVA-00001	1	TAPON ALLEN 1/2
162		040-ARPD-00001	1	ANTIRRETORNO PILOTADO DOBLE 1/4"
163		040-RR-00002-MM	3	RACOR REDUCIDO 3/8-1/4 MACHO MACHO
164		040-RG-00003	2	RACOR GIRATORIO MACHO HEMBRA 3/8"
165		040-JMG-00004	3	JUNTA METAL GOMA 3/8"

Nº ORDEN	DIBUJO	Nº PIEZA	CANTIDAD	DESCRIPCION
166		040-VLP-00002	1	VALVULA LIMITADORA DE PRESION
167		020-DIN912-M6X50	4	TORNILLO ALLEN DIN 912 M6X50
168		040-ELV-00002	1	ELECTROVALVULA 5EVP3D1C02D24
169		020-DIN912-M5X50	4	TORNILLO ALLEN DIN 912 M5x50
170		050-MAN-00001	1	MANDO DE FUNCIONAMIENTO
171		120-08-03-00028	1	Manguera Hidráulica 1/4" TG1/4" - Macho 1/4" Long:400mm 250 bars
172		020-DIN912-M6X20	4	TORNILLO ALLEN DIN 912 M6x20
SC 173		130-08-03-00001	1	DEPOSITO HIDRAULICO
174		120-08-03-00024	1	SUJECIÓN MANDOS
175		120-08-02-00154	1	TAPA INSTALACION
176		040-R-00002-MM	1	RACOR MACHO MACHO 1/4"

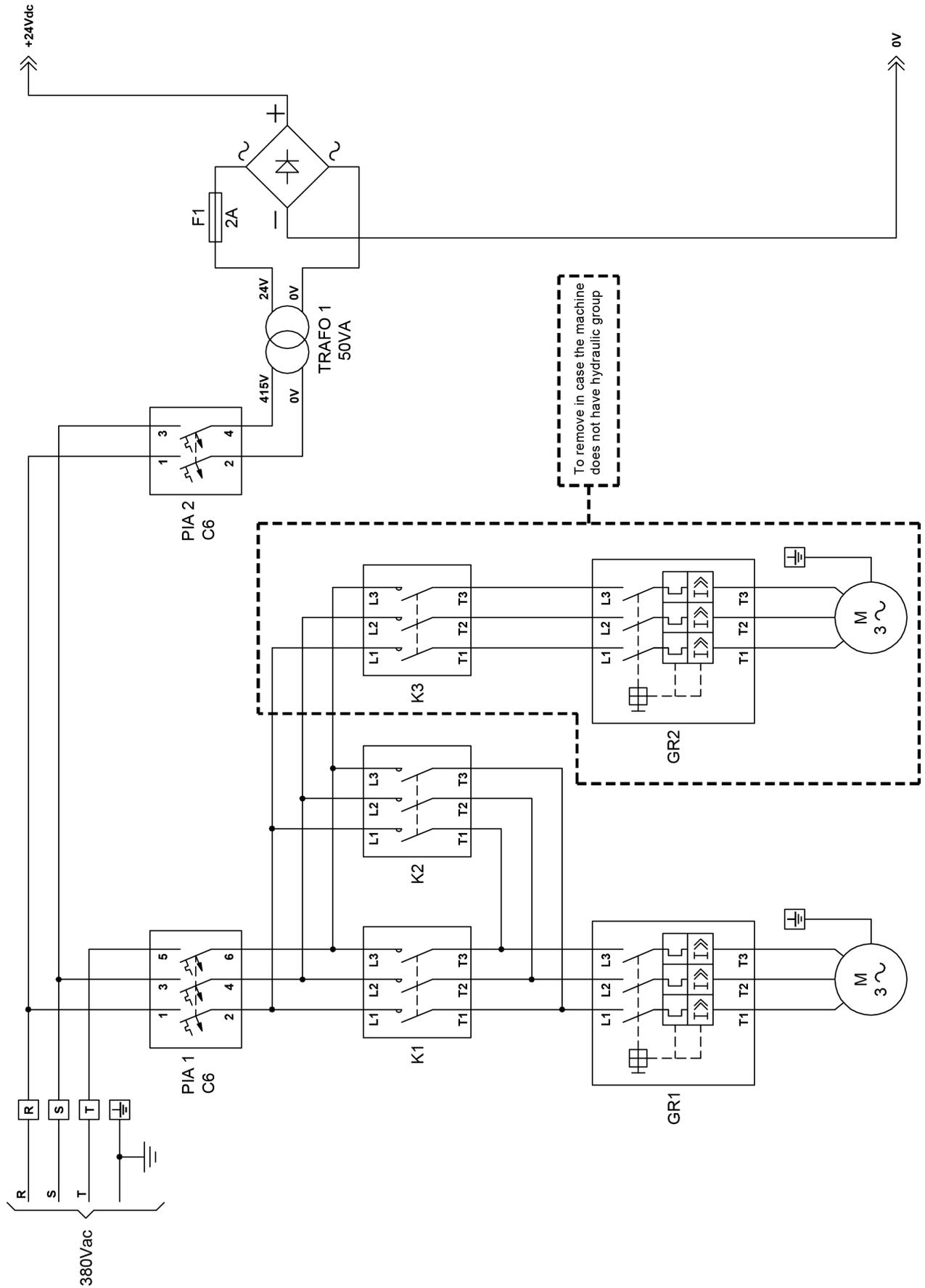
A2. Pedal diagram

A3. Electrical panel

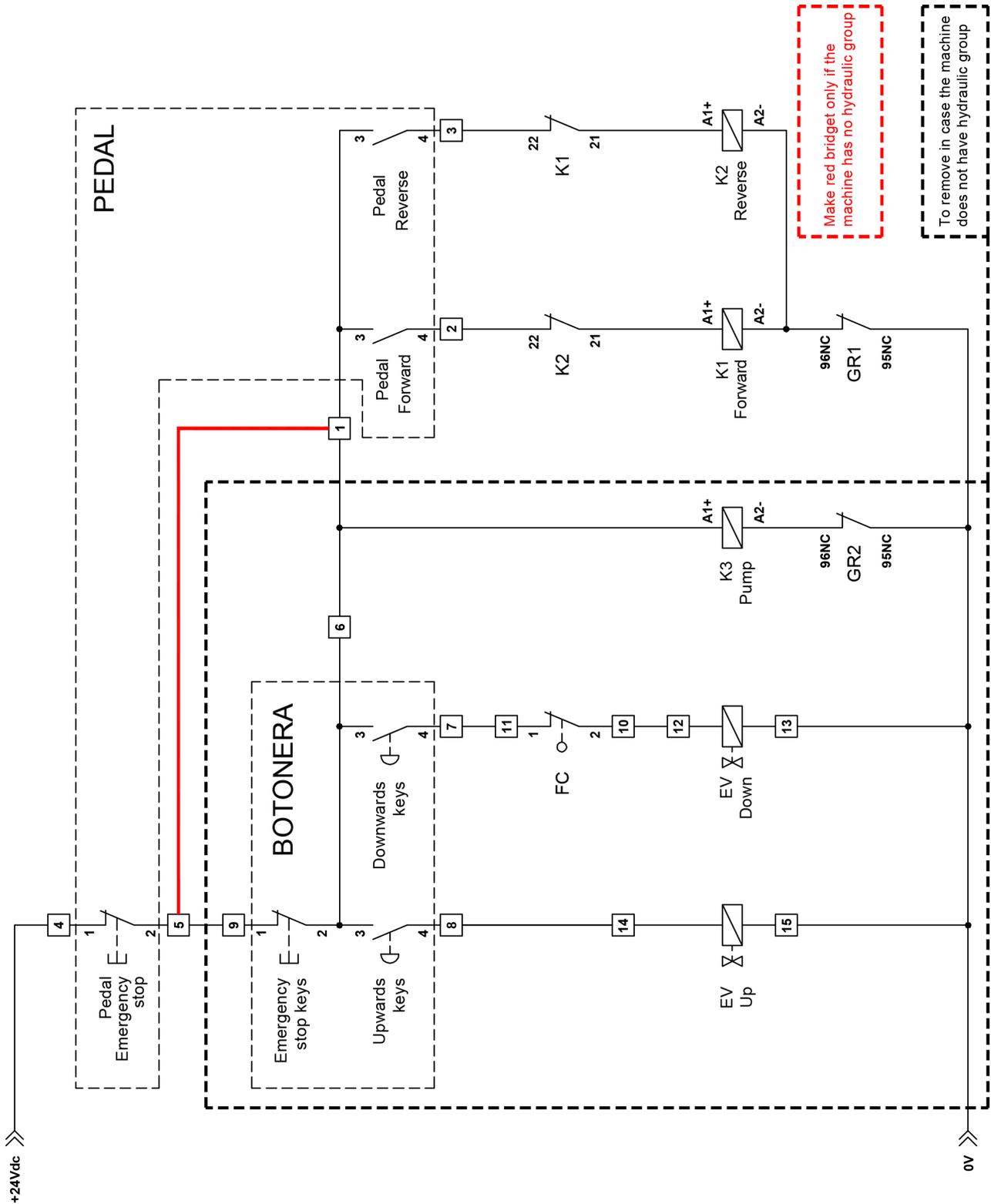


- 1 Fuse holder UT - 10X38
- 2 Automatic switch 3p - C6
- 3 Automatic switch 2p - C6
- 4 AC/DC converter
- 5 Electronic Terminal
- 6 GMD-9M Switch
- 7 Electronic Terminal
- 8 Transformer
- 9 GTK - 12M Breaker Switch (1.6-2.5A-380V // 2.5-4A-220V)
- 10 GTK - 12M Breaker Switch (2.5-4A-380V // 4-4A-220V)
- 11 Double Switch GMD-6M

A4. Power diagram



A5. Operation diagram



WARRANTY REGISTRATION

1. Among www.nargesa.com on our site
2. Select the menu [Warranty Registration](#)



3. Complete the form with your details and press

Submit

4. **Message Sent:** confirms your data has been successfully sent to Prada Nargesa SL. Your machine has been registered and has a warranty of three years in total.

Your request has been sent correctly. We will contact you right away to confirm that your warranty has been extended up to three years