OPERATIONS MANUAL

IM-30 CE MP

!!! For your safety In order to obtain higher performance of your equipment !!!

Read the instructions manual carefully

INMES

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CONGRATULATIONS!

Congratulations for choosing the IM-30 CE MP and thanks for your confidence in INMES products.

This equipment was developed to satisfy safety and meet your needs for high performance. The IM-30 CE MP was especially designed to make high-quality cuts in wood, plastic and aluminum profiles, however each material requires the proper blade.

We developed this Owner's Manual to help you install and use your machine correctly in order to obtain the maximum benefits of economy and output.

Read the manual carefully and call us to answer any question you may have about your equipment and it's operation.

Visit our web site:

http://www.inmes.com

Visit us and check out our wide range of products.

1 – SAFETY INSTRUCTIONS

For operator safety and durability of your equipment, the instruction must be carried out with great care when installing and operating your machine, staying alert and learn how to use the IM-30 CE MP.

1.1 – Safety Signals

DANGER

If the safety instruction is not followed the operator will be seriously injured or killed.

WARNING

Means if the safety instruction is not followed the operator could be seriously injured or killed.

CAUTION

Safety instruction if not carried out with care, might injury the operator.

1.2 – Before using the machine

DANGER

In order to cut aluminum profiles with this equipment it is mandatory to use the pneumatic clamping system. Never cut aluminum material without the pneumatic clamping.

WARNING

In order to cut aluminum profiles use appropriate sawblade only. Never use sawblade for plastic or wood for cutting aluminum profiles.

WARNING

- ✓ Read the owner's manual before operating the equipment;
- ✓ Wear safety goggles,
- ✓ Keep the acrylic blade guard down;
- ✓ Keep hands out of the saw blade path;
- ✓ Turn off and wait for blade to stop, before adjusting;
- ✓ Plug power cord into properly grounded outlet protected by 15 amp circuit breaker and 10 amp for cabinet base;
- ✓ The manufacturer advice: you should make sure the circuit is properly grounded, using the green and yellow wire for this purpose;
- ✓ The machine must be mounted on a flat surface in an appropriate work area, well lighted and enough air;
- ✓ This machine only accept blade of 300mm
- ✓ In order to obtain high performance at work, make sure that you read the owner's manual.

1.3 – Blade Requirement

The saw blade must proceed the following specifications:

- Extern diameter => 300mm;
- Arbor diameter => 30mm;
- Blades marked for 4 000 rpm or higher;
- Blades must be appropriated for each specific material (wood, plastic or aluminum).

1.4 - When Installing the equipment

- The machine must be mounted on a flat surface in an appropriate work area, well lighted and enough air;
- Before switching on the machine, verify the frequency and voltage;
- The electrical installation should be made by an electrician, as well as questions or problems you may have with your electric installation should be resolved by an electrician;
- Make sure you are using the correct voltage.

1.5 - Before Each Use

- Make sure switch is in OFF position before plugging in
- Make sure before operating that all parts and connections are tight;
- Keep the machine free from cutting residuals;
- Remove any existent foreign objects or tool between the fence and clamping;
- Verify blade spreader before start again;
- Always use the acrylic blade guard assembled;
- Check out if the clamping cylinder is well tight; if not, do it.

1.6 – To reduce the risk of injury

CAUTION

- When cutting the profiles, the rabbet must be facing the operator, as shown in figure 01 (F). Must be avoid cuts as figure 01 (C) or else the saw blade can pull the scrap piece into the machine, and that way offering risk to the operator or damage to the machine.
- In order to obtain a good finishing and safety when cutting observe on top of the profile that you must allow at least 3/8" (10mm) of wood between the cut and the end of the stick as figure 01 (B).

- Never place your hand near the blade;
- Hold the profile firmly to the fence;
- Be careful when cutting small pieces, the profile or small scrap may move and break the blade or even damage other parts;
- When cutting long profiles, its necessary to use extension table (have our authorized distributor called), this accessory will let the profile lay flat on the extension during cutting operation;

- Let the blade get full speed before cutting;
- Do not use blades which are not in a good shape, for instance, broken teeth, because they are out of balance and will not make good cuts, as well as creating a hazard for the operator;
- Before starting the machine make sure that no objects have been left on the base;
- Soldered and unbalance blade must not be used;
- If any part is missing, bent or broken in any way, or electrical part does not work properly, turn the saw off, unplug the saw and provide the proper maintenance;
- Never use your machine if you observe something which can cause an accident or damage the machine;

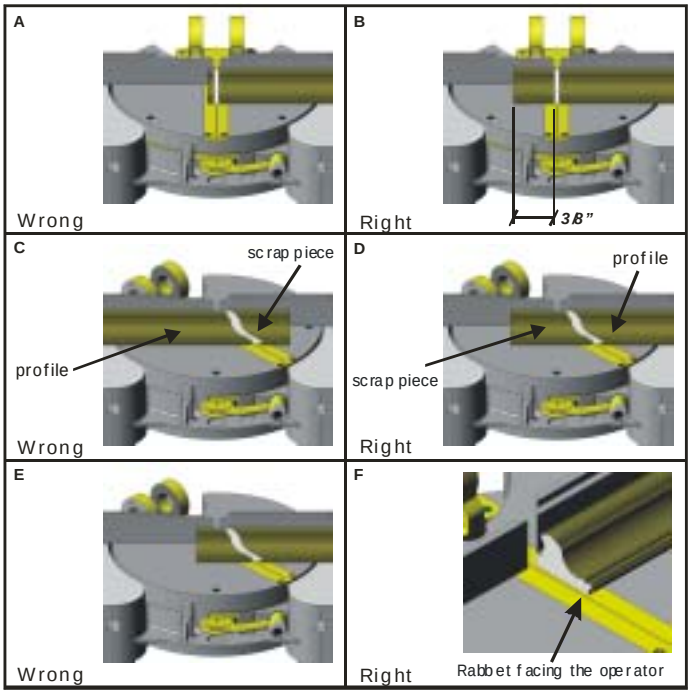


Figure 01

- Use only sharp blade;
- Keep the saw blade clean;
- Keep work area around clean, sawdust can make the floor slippery;
- Make sure there is no debris between the work piece and the fence;
- Never cut more than one work piece at a time;
- Anytime the saw blade is removed for replacement or maintenance; make sure that the machine is unplugged from the wall socket;
- After replacing make sure the blade is properly tight;
- Keep visitors and children away when using;
- Be aware that when you descend the blade both clamping will automatically operate, so do not place your hands between the clamping and the fence when operating the equipment.

Note: Always remember that careless fraction of a second is enough to cause a severe injury

1.7 – Plan your cut

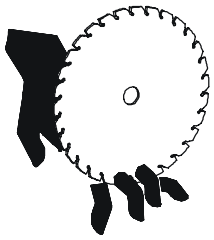
Tip:

✓ When you have a large quantity of profiles to be cut, and you want to do this in a quick way, we advice the operator to cut first one side, and then the other side. It means rapidity and will save your time, for it's not necessary to move the blade position several times.

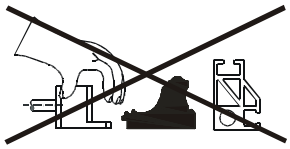
- Make sure the machine has enough cutting capacity to cut the profile you wish to;
- Use appropriate blade for cutting, depending on the type of material to be cut (wood or plastic);
- When cutting the profiles with rabbet, the rabbet must be facing the operator as figure 01 (F).

1.8 – Protection:

- Do not wear loose clothing, gloves or jewelry, neckties. They can caught you and draw you against the moving parts;
- Tie back long hair;
- Wear ear plugs or muffs;
- Always wear safety goggles;
- For dusty operations, wear a dust mask along with safety goggles;
- Always remember that a fraction of a second can cause a serious injury.



Keep hands and fingers away from saw blade.



Do not place your hands between the hold-downs and the fence.

Before leaving the machine

- Turn the saw off and wait for all moving parts stop;
- Unplug the saw;
- *Disconnect the circuit breaker from the power.*

2 – UNPACKING AND CHECKING CONTENTS

As soon as you receive the IM-30 CE MP Rotating Miter Saw, make sure that all parts are included.
The following parts are included:

Part or Assembly	Quantity
Basic IM-30 CE MP Rotating Miter Saw	01
Right Table Extension	01
Left Table Extension	01
Moulding Stop	01
Combination Wrench 24 x 27 mm	01
Phillips 3/16" x 4"	01
Wrench (for motor flange)	01
Allen 6mm	01
Warranty	01
Inmes Repair Center	01
Owner's Manual	01

WARNING

✓ If you are missing any part, do not assembly the saw, contact our authorized distributor.

DANGER

✓ Do not plug the power cord into a power source outlet when unpacking and assembling.

CAUTION

✓ To avoid back injury get help whenever you have to lift the saw.
✓ Inmes developed a movable base for IM-30, contact our distributor for further information.
✓ Place the saw on a secure work surface.

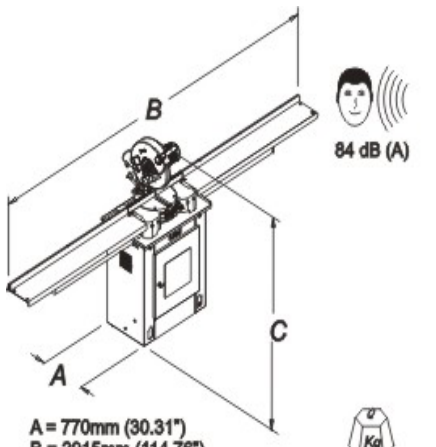
Important:

✓ Before installing the machine, make sure that you have all the parts included.
✓ If you are missing any part, please do not hesitate to contact our distributor.
✓ Always order by part number, use "Vista explodida" you may find it at the list of parts located in the end of the manual.
✓ This manual is extremely useful when ordering spare parts, therefore keep it in a appropriate place, should you have more than one equipment the same model, identify the equipment writing the serial number on its manual .

Optional Accessories:

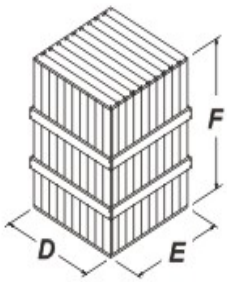
- ♦ Additional Right Table Extension
- ♦ Additional Left Table Extension
- ♦ Pneumatic Fluid Sprayer
- ♦ Work Stand
- ♦ Additional accessory for Fence
- ♦ 90º moulding stop or 45º moulding stop

3 – TECHNICAL DATA

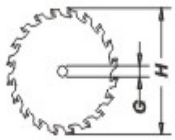


A = 770mm (30.31")
B = 2915mm (114,76")
C = 1350mm (53,15")

102Kg (222.6lb)



	Mod Nacional	Export Package
D	625mm (24.6")	650mm (25.5")
E	894mm (35.1")	840mm (33.0")
F	1400mm (55.1")	1450mm (57.0")
Kg	121kg (266.7LB)	129kg (284.3LB)
Volume	0.78m³ (27.54cu.ft)	0.79m³ (27.96cu.ft)



G = 30mm (1,18")
H = 300mm (11,8")
Z = 96 (dentes)

Motor IM-30
IM-30 motor

Potência/Saw motor..... 1 cv
Rotação/Arbor speed..... 3400 rpm
Consumo (kw/h). ..... Mono 110V 1,03 kw/h
Consuption..... Mono 220V 1,03 kw/h
Trif. 220V 1,08 kw/h
Trif. 380V 1,08 kw/h

Pressão/Pressure.....6 bar
Consumo/Consumpiton...0,3 ft³/mim (8 ciclos/ Cycles)

Motor do Exaustor
Dust collector motor

Potência/Saw motor.....3/4cv
Rotação/Arbor speed..... 3400 rpm
Consumo (kw/h)..... Mono 110V 0,97 kw/h
Consuption..... Mono 220V 0,97 kw/h
Trif. 220V 0,77 kw/h
Trif. 380V 0,77 kw/h

Vazão/Output .....15 m³/min (529,72 ft³/min)
Pressão Estática/.....209 mm c.a
Static pressure.....(8,23 inch c.a)
Diâmetro de saída/Output diameter ....1 x 3"

4 – UNPACKING THE MACHINE

CUIDADO

This saw is heavy, to avoid risk of back injury get help whenever you have to make any moment.

Tools needed:
01 13mm wrench (Not supplied with the machine);
01 19mm wrench (Not supplied with the machine).

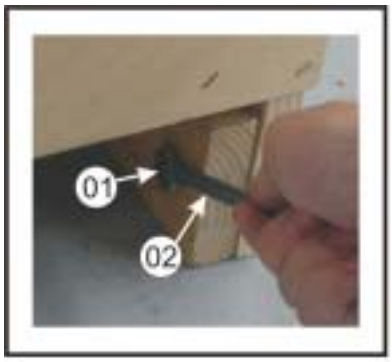


Figure 02

Figure 03

The IM-30MP is shipped from the factory packed in a wooden crate. In order to remove the machine from the wooden package loosen the nuts 01 using a 13mm wrench as shown in figure 2 and get help to remove the hood package as shown in fig. 03.

Make sure that all items are included with your machine:

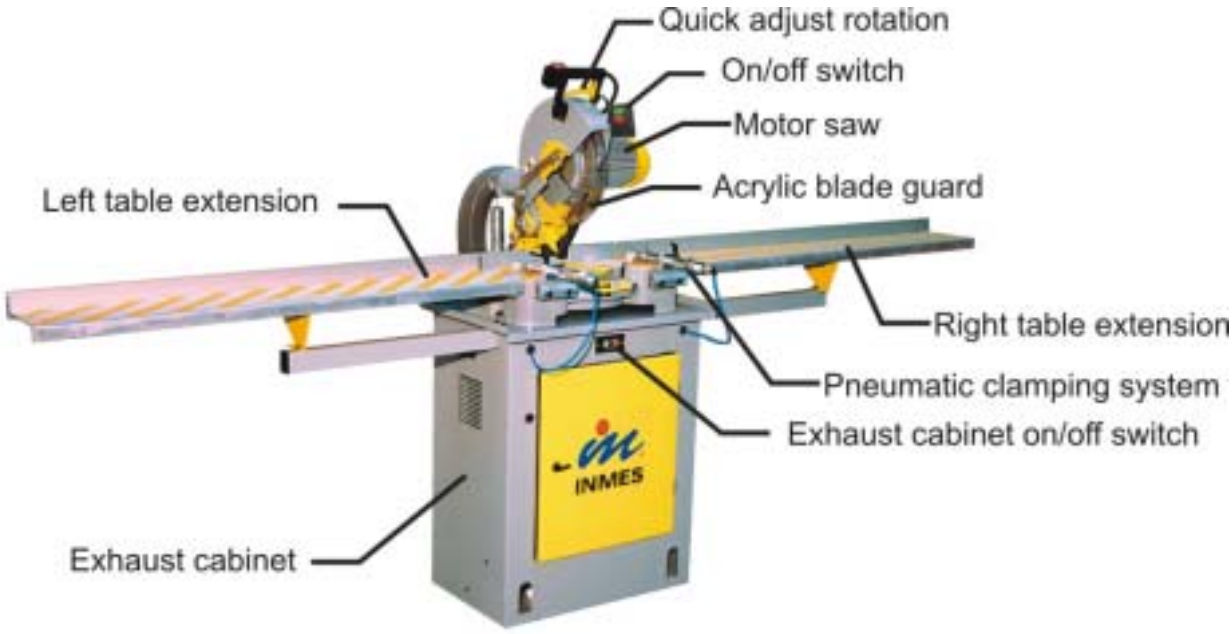
01pc. IM-30MP Single Miter Saw;
01pc. Right Arm Extension Table;
01pc. Left Arm Extension Table;

5 – INTERNAL TRANSPORTATION

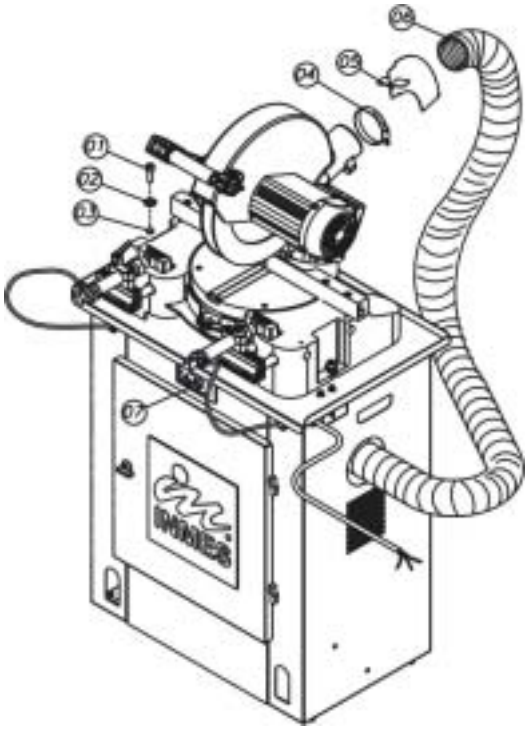
Figure 04

- ✓ The machine must be handled in a flat surface with appropriate illumination. .
- ✓ Use a forklift to place the machine at a desired location as shown in figure. 04.

6 – GETTING TO KNOW YOUR MITER SAW



7 – INSTALLING THE EXHAUST CABINET



To install the exhaust cabinet you must fit the part (05) into the hose, after that you must fit the hose (06) over the part number (04) using clamp fig. (05) Then fit the other side of the hose over the dust collector located inside the exhaust cabinet, using clamp to tight the hose.

The sawdust is collected in a cloth bag located inside the cabinet, its extremely important to empty it at least twice a week in order to keep a high performance.

To turn the exhaust **On** or **OFF** you must use the switch (07) located on the front of the cabinet.

Figure 05

8 – IM-30 CE MP ELECTRICAL INSTALLATION

WARNING

- ✓ Read the manual and the safety instruction carefully before connecting the plug to the power source.
- ✓ Make sure that all the screws are tight before installing the machine.

- ✓ To reduce electrical shocks or damage to the machine, unplug it from the power source before any maintenance;
- ✓ If power cord is worn, cut or damage in any way, you must replace it right way;
- ✓ The electrical service must be performed by an specialist;
- ✓ Always install the machine in a dry floor, never expose the equipment in rain;
- ✓ Never place your hand or finger on the terminals of plug when installing or removing the plug to or from the outlet;
- ✓ Overloading can occur if the operator start and stop many times in a short time, also the use of improper or dull saw blades are used;
- ✓ It's extremely important to install a circuit breaker of 15A for IM-30 CE MP and a circuit breaker of 10A for Exhaust Cabinet.

When using the machine for the first time, the operator must check out if the direction rotation of the motor is right, otherwise he (she) must invert it.

- To invert the direction rotation in **three phased** machines, its necessary the inversion the two of the three wire from power source, changing one for another. This proceed must be done by a specialist.
- To invert the direction rotation in **single phased** machines, you must change the wires position 5 and 8 (change one for another), inside the connection box. This proceed must be done by a specialist.

8.1 - Motor specifications for IM-30 CE MP

Induction motor three phase or single phase.

	Available in:	Consumed Power km/h:	Amps:
115 V	Single Phase	1,03 kw/h	9,92 A
208-230V	Single Phase	1,03 kw/h	4,46 A

Rotation	3400rpm
Power	1 hp
Frequency	50Hz

Bearing	
Front	6204 DDU ARZ S1
Back	6201 ZZ ARZ S1

8.2 - Motor Specification for Exhaust Cabinet

Motor Induction three phase or single phase.

	Available in:	Consumed Power kw/h:	Amps:
115 V	Single phase	0,97 kw/h	12 A
208-230V	Single Phase	0,97 kw/h	6 A

Rotation: 3535 rpm
Power: 1hp
Frequency: 50Hz

9 - INSTALLING AND MANTAINING THE SAW BLADE

WARNING

- ✓ Use only blades of 300mm diameter.

Important

Each material that you wish to cut (wood, plastic or aluminum) requires a specific saw blade.

DANGER

- ✓ The manufacturer advice do not use either cracked or welded saw blade.
- ✓ Make sure all safety protection are correctly installed.
- ✓ After changing or maintaining the blade, make sure it is well tightened before starting the machine.

9.1 – Mounting the saw blade on the saw

Tools needed:

01- 24x27 wrench (supplied with machine)
02- 27 wrench (supplied with machine)
03- 3/16”x4" Phillips (supplied with machine)

You must follow the following steps:

Wear leather gloves when replacing or maintaining the blade.

Remember: Whenever the operator remove the blade for replacement or sharpening, its extremely important to unplug the power cord from power source.

Once this is done proceed as shown as figure 03, following these steps:

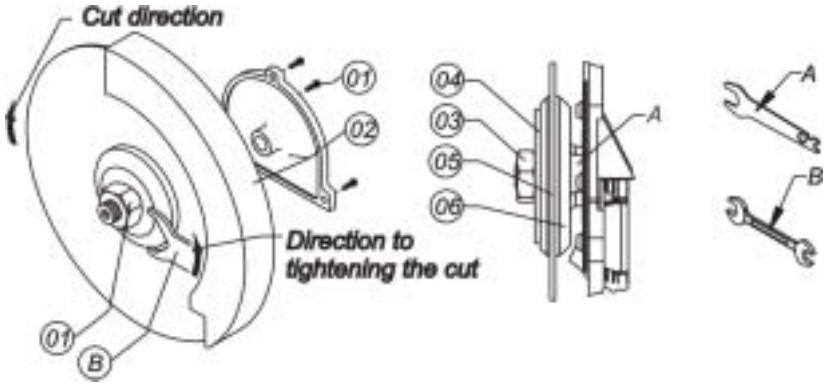


Figure 06

1) Remove the three bolts from the yellow plastic flange, figure 06 (01);
2) Remove the yellow plastic flange and the acrylic blade guard figure 03 (02);
3) Insert wrench 1 in the region A as shown in figure 06 (06);
4) Then Using wrench B turn the blade nut clockwise, loosen the nut, as shown figure 06 (03);
5) Rotate the wrench B down;
6) Rotate the wrench A up;
7) Remove the nut figure 06 (03);
8) Take the flange off figure 06 (04);
9) You are finally ready to remove the blade, figure 06 (05);

To replace the blade you must follow these steps:

When installing a blade, make sure the blade is clean and free of any protective coating;
When replacing the blade pay attention to the direction of the blade's teeth.
Once you have checked all these points, then you will be able to replace the blade, following the respecting steps:

1) Blade;
2) Flange, figure 036(04);
3) Nut, figure 06 (04) manually tight to the end;
4) Insert wrench A in the region A, figure 06 (06);
5) Then using wrench B turn the blades nut counter clockwise, figure 06 (03);
6) Make sure the blade is well tight;
7) Fit the acrylic blade guard item 02, around the blade and right after that fix the yellow plastic flange with three screws by a Phillips key;
8) Make sure the flanges are clean and properly arranged;
9) Lower the blade into the table slot and verify for any contact with the base;
10) If the blade contacts table, verify all the procedure that you have done, if you still have problem to adjust your machine contact authorized service.

9.2 – INSTALLING THE CLAMPING SYSTEM

Tools needed:
01 8mm Allen wrench (Not included with the machine).

- Insert the Allen bolt 01 into the fence 02 and tighten it fig. 07.
- Make sure the part 03 is leveled with the table. The part 03 must move back and forth easily over the table fig. 08.

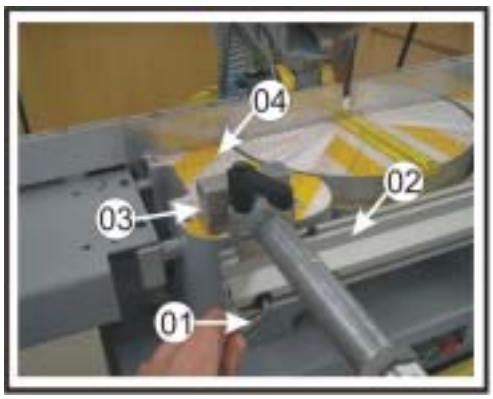


Figure 07

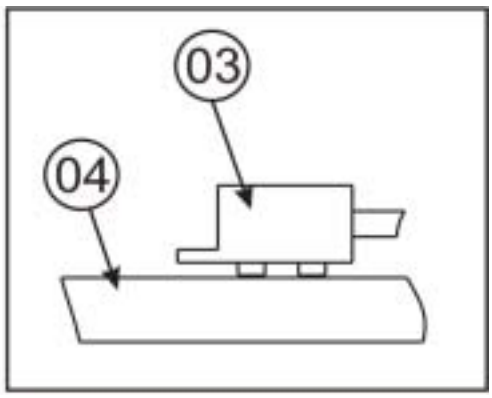


Figure 08

9.3 MOUNTING THE IM-30 SPRING

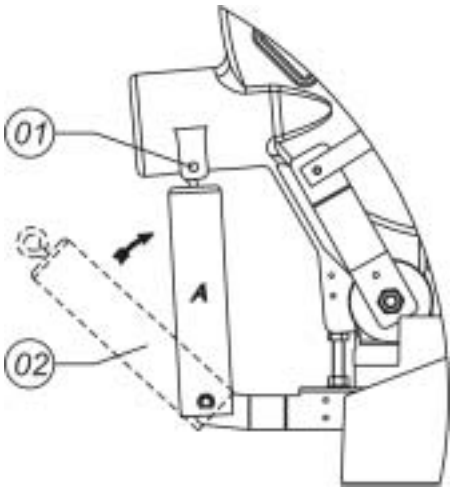


Figure 09

Before beginning working with your IM-30 CE MP Rotating Miter Saw, it's necessary to install the spring, which it is already pre-assembled on the machine.

To mount the spring, remove the bolt fig. 09 (01) using Allen key 6mm that comes with the machine. Lift the top as far as possible, using the handle, place the spring in the direction of the arrow, until you are able to replace bolt in its original hole.

9.4 - INSTALLATION OF EXTENSION TABLES FOR IM-30

To install your Table Extensions for the IM-30 Rotating Saw, begin by attaching the support bars (Fig. 01 Parts 03 and 08), using the screws and washers for this purpose (Fig. 01 Parts 04 and 05). The bars should be inserted into the sides of the exhaust cabinet (Fig. 01 Part 12), taking care that the bar on the operator's left side be placed in front of the right-hand bar—they will slide past each other (Fig. 02).

Next, attach the "Y" supports (Fig. 01 Parts 01 and 10) to the support bars, using screws and washers (Fig. 01 Parts 02 and 11). When finished, the "Y" supports should look like the detailed drawings "B" and "C"-- that is, both have the top "ears" facing to the operator's right, and the left-hand "Y" is set back, attached by the front hole, while the right-hand one is set to the front, attached by the rear hole. (This compensates for the offset caused by the two support bars running past each other.)

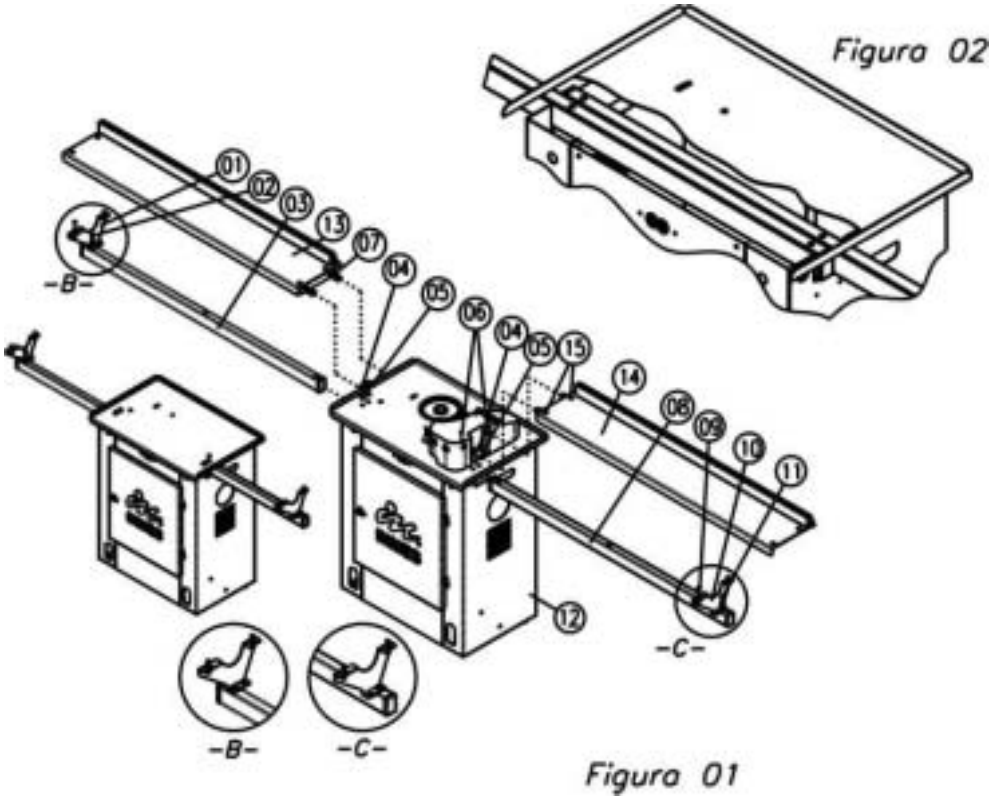


Figura 01

Figura 02

Now you will install the table tops (Fig. 01 Parts 13 and 14). First insert the tables' pins (Fig. 01 Part 07), which project from the ends of the table tops, into the corresponding holes found in the sides of the base of the saw (taking care that the table-top fence, or vertical back, is to the rear.) Then align the tables' calibrated sticker with the on the base, moving them to the right or left, as necessary, until the thick lines of the calibrations are aligned. To get this right, we suggest you use a ruler or straight-edge to make sure they are in alignment.

Note: There will probably be a small gap between the saw diagramed sticker and the table top sticker.

When you have completed this alignment, attach the table tops using the appropriate screws (Fig. 01 Part 06) and the 3mm Allen wrench that came with the Table Extensions Accessory kit.

Adjustments:

1) When you have finished, if you notice that table tops are not level at the outer ends, you can correct this by using the leveling screws (Fig. 01 Part 09) located on the tops of the "Y's". Loosen the lock nuts, and tighten the screws to lower the table, or loosen them (turn to the le1ft) to raise it. Then retighten the lock nuts. NEVER PUT HEAVY OBJECTS NOR LEAN ON THE TABLE EXTENSIONS, SO AS NOT TO DAMAGE THEM.

2) If you need to adjust the extension moving it towards the front or towards the back, just loosen the appropriate screws (Fig. 01 Part 15) with the 3mm Allen wrench that came with the Table Extensions kit, and move the table until the rear fence is aligned with the one on the saw base.

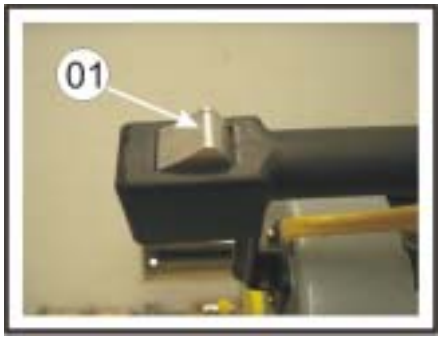
If you do not have the IM-30 Rotating Miter Saw with the Exhaust cabinet (Fig. 01 Part 12), you may set up the extensions using only the "Y" supports (Fig. 01 Parts 01 and 10). You should bolt them to the table you have chosen for this purpose.

These Extension Table add almost 4 feet of work space to each side of the saw. There is also available a second Extension Table Kit, adding another 4 feet to each side, for a total of 8 feet of extension. To set up these Additional Extension Table (Fig. 01 Parts 16 and 17), follow the same procedure used to mount the original Extension Table, inserting the "tongues" (Fig. 01 Part 19) under the first extensions (Fig. 01 Part 13 and 14), lining up the corresponding holes, and screwing them together. These Additional Extensions are supported by legs (Fig. 01 Part 18), which are screwed into the table tops (Fig. 01 Part 16 and 17), from above. The legs may be leveled by means of the bolts and nuts that serve as adjustable feet.

10 – SAFETY DEVICE

The IM-30MP has a safety switch that stops the saw blade within 6to9 seconds after the motor is turned off.

Figure 10



Another safety device is the button 01 fig. 11 the operator has to press this button to descend the saw blade. This device avoids accidents for inattention.

Figure 11

11. OPERATING YOUR IM-30 CE MP ROTATING MITER SAW

CAUTION

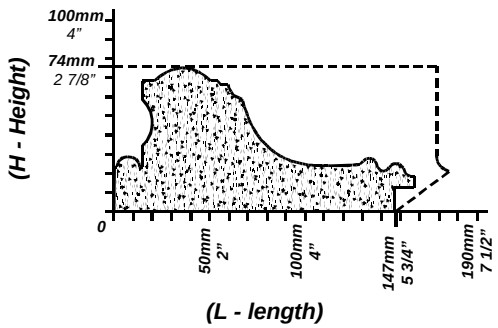
- ✓ Use only saw blades specifically recommended for wood, plastic, or aluminum, according to the material you want to cut.

WARNING

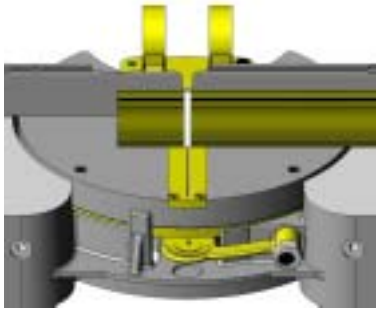
- ✓ As soon as you have done, turn off the saw and unplug the cord power from the out let.

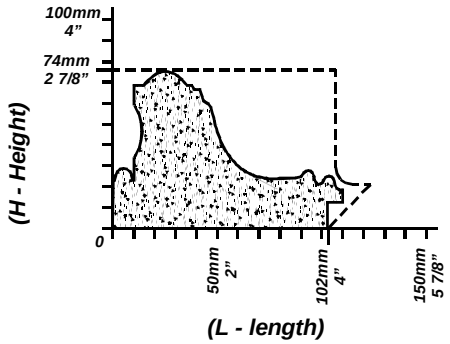
11.1 – Cutting Capacity

This machine has been designed for cutting profiles related in the following drawing below, according to the respective cutting angles.

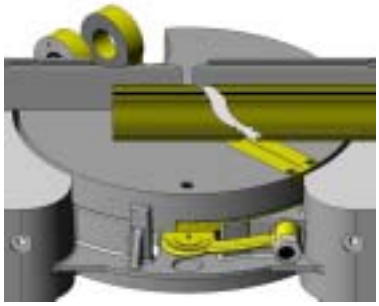


Cut
Rotating Table 0°





Cut
Rotating Table 45°



11.2 - Choosing the right angle you wish to cut

The IM-30 CE MP has a quick adjust rotation feature with precision lock position for the most used angles (45° - 30° - 22,5° - 15° -10°), and respectively for square and rectangles 6-8-12 and 18 sided frames, and manual adjust for the other angles.

There are two ways you can adjust the cutting angle.

First:

The operator may use the “quick adjust rotation” feature, which is operated by squeezing the part that looks like a bicycle brake in the middle the saw handle in order to rotate the table. When the desired angle of position has been reached, just released it to engage again.

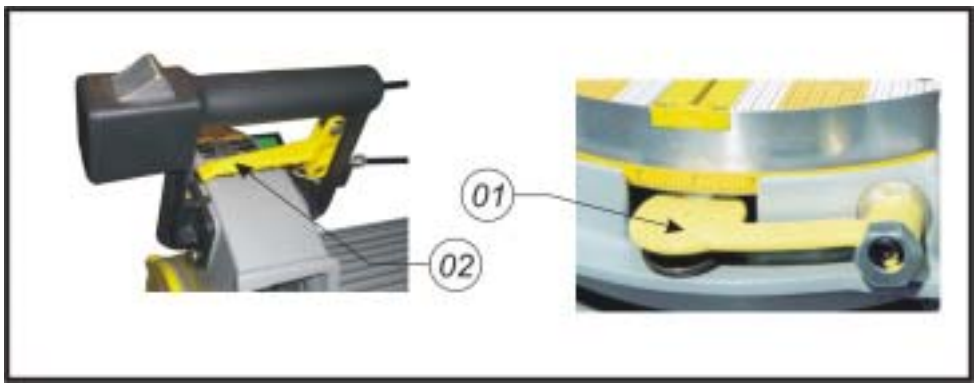


Figure 12

Second:

The operator may press down on the yellow lock disc on the front of the machine to disengage it, then rotate the saw table until it reaches the position desired, then engage the lock again by releasing the disk, taking care to have the position properly aligned, so as not to damage the lock pin.

It is possible to obtain the manual adjustment, as before press down on the yellow disk to disengage the lock, rotate the saw to the angle desired, and then release the yellow disk, then tighten the screw on top of the fence with your 5mm Allen wrench, which locks the rotating table in place.

Depending on type of frame to be made, follow the table below:

Sides	***Angle***
04	*45°*
06	*30°*
08	*22,50°*
12	*15°*
18	*10°*

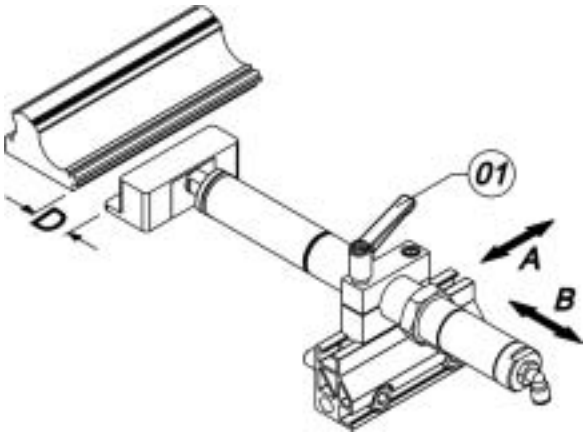


Figure 13

11.3 – Operating the pneumatic clamping

As soon as you choose the profile that you wish to cut, as shown in fig. 13 fit the moulding to be cut onto the table between the fence and the clamping, with the rabbet facing towards you. Make sure to obtain a space of about 3/16" (5mm) between the clamping and the profile, with the clamping air cylinder in the retracted position.

The clamping adjustment is done as shown in fig 13 (01). Loosen the air cylinders so that they can move freely in the direction of arrows “A” and “B” , in this way you will be able to obtain a space of about 3/16" (5mm) between the clamping and the profile.

Note: ***There is a bolt which limits the movement of the clamping apparatus towards the center of the table, to guarantee that the blade cannot cut into it. This bolt should not be removed.***

To regulate the pressure exerted against the profile by the clamping, use a knob “A” shown in fig. 14, remembering that you should not exceed 6 bar (85 psi). The pressure should be sufficient to hod the profile immobile while the cut is made.

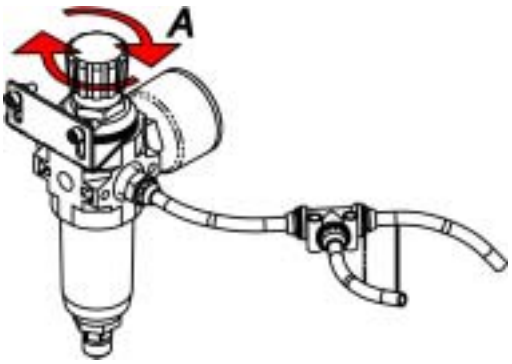


Figure 14

CAUTION

- ✓ This accessory offers more safety to operator, however it’s extremely necessary careful when operating it. Be careful with your hands.

11.4 – Cutting the moulding

- Turn on the dust collector fig. 15.
- Turn on the saw button 01 fig. 16.
- To descend the saw blade press the button 01fig. 17
- Once you have cut the material and finished the work then turn off the saw by pressing the button 02 fig. 16.
- Finally turn off the dust collector as shown by the fig. 18

Remember the saw blade needs about 6to9 seconds to complete stop.

Figure 15

Figure 16

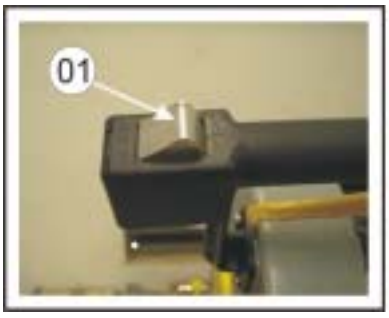


Figure 17

Figure 18

12 – MAINTENANCE

WARNING

✓ For operator safety always turn the saw off and remove the plug from the power source outlet before cleaning or lubricating your equipment. If these instructions are not followed the operator may be injured.

Important

✓ To avoid damage to your equipment, use only original parts.

12.1 - Alignment

To check the blades' alignment, its required 24 x 27 mm wrench, combination square, 6mm Allen wrench.

Correction of the cutting angle

In case the angles are note true, you may start with the saw blade in the 0º position, to adjust the calibration you must use a precision square to guarantee a perfect alignment of the blade. When you have this tool (precision square) in hand, lower the blade, and place the back of the square placed against the fence fig. 19, and the side of the square next to the blade.

After doing this operation, in case the angles are not true, you will notice a very small slot between the square and the blade.

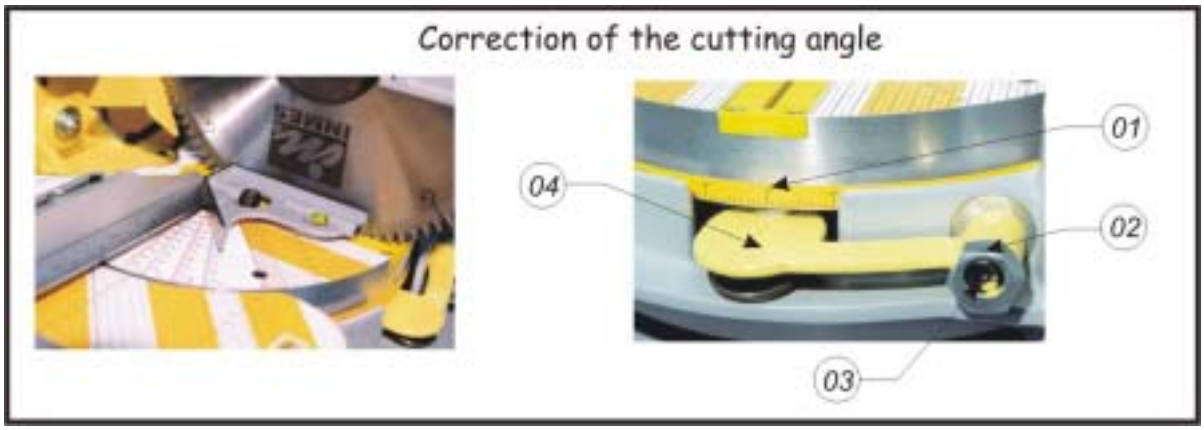


Figure 19

Then use your 06mm Allen, loosen the screw figure 19 (03) then use your 24mm wrench and slowly turn the adjustment screw fig 19 (02) to the left or right, until adjust the angle 90° between the saw blade and the fence of the machine.

After adjusting the angle between the blade and the fence, you must tight the screw again, fig 19 (03), using your Allen 06mm, holding the adjustable screw, figure 19 (02), with your 24mm wrench, make sure the adjustable screw do not move when tightening.

In order to have a perfect adjustment, you may cut 04 pieces and then make the joining.

12.2 Lubrication

- ✓ All the motor bearing in this equipment are lubricated with enough amount of high grade lubricant for the life of the unit under normal operation conditions, therefore, no further lubrication is required;
- ✓ To each eighty (80 hours) working hours it's necessary to lubricate the yellow quick-adjust cable with dust-graphite;
- ✓ It's not required any other type of lubrication for the life of your IM-30 CE MP.

13 – *TROUBLESHOOTING*

WARNING

✓ For your own protection, always switch "Off" and remove plug from power source outlet before troubleshooting.

Problem	Probable cause	Suggested Solution
Motor does not work	Main feed cable not connected	Connect the main feed cable
	Circuit breaker off	Have circuit breaker checked
	ON/OFF switch button damaged	Get authorized service
	defect in the electronic board ('three phase' machines)	Get authorized service
	Motor burned	Get authorized service
Motor rotate to the wrong side	Electric installation	Invert the direction of the motor rotation
Motor does not work fine during cutting	Saw blade not sharpen	Have it sharpen
	Excessive cutting speed	Lower cutting speed
	Model of the saw blade	Use blades with less teeth
		Use anti-kickback blade
Frequent disconnection of the circuit breaker	Motor over-loaded	Descent the blade slowly
		Have the motor bearing checked
	Undersized circuit breaker	Install a circuit breaker with proper amp.
High level of noise	Motor bearing damage	Get authorized service
	Motor problem	Get authorized service
Rough cuts	Saw blade not sharpen	Have it sharpen
	Awkward blade	Replace the blade
	Blade incorrectly mounted	Mount the blade correctly
	Blade missing teeth	Replace the blade
	Motor bearing damage	Get authorized service
	Excessive cutting speed	Lower cutting speed
Angle of cut not accurate	Moulding fence misalignment	Get authorized service
	Saw blade misalignment	Make the alignment
	Awkward profile	Try another cut with a straight profile
	Profile moves during cutting	Secure the profile in place before cutting
	Saw blade not sharpen	Have it sharpen
	Debris between the profile and moulding fence	Clean it up
Hard to pull Back	Mains spring is broken	Replace the spring
	Hex nut from pivot shaft is too tight	Release the nut slowly

14 – PART LIST FOR IM-30 CE MP ROTATING MITER SAW

CODE	DESCRIPTION	CODE	DESCRIPTION
INM03020022	Saw blade shaft nut	INM04050084	Label
INM03060007	Saw assembly shaft	INM04050107	Label
INM03060008	Table lock screw nylon tip	INM04050109	Label
INM03060015	Quick-turn handle	INM04080015	Allen screw m5x25mm
INM03060016	Table lock screw	INM04080016	Allen screw m6x16mm
INM03060018	Rotating table IM-30	INM04080017	Phillips screw M5x08mm
INM03060021	Fan cover	INM04080019	Allen screw m6x25mm
INM03060022	Lever pin	INM04080025	Allen screw m8x16mm
INM03060023	Acrylic blade guard lever	INM04080026	Allen screw m8x20mm
INM03060024	Rotating table lock	INM04080027	Allen screw m8x25mm
INM03060025	Moulding stop Rod-Assembly support	INM04080029	Allen screw m8x35mm
INM03060026	Moulding stop Rod-Assembly stop	INM04080030	Allen screw m8x40mm
INM03060027	Moulding stop Rod-Assembly movable rod	INM04080033	Allen screw m8x60mm
INM03060028	Moulding stop Rod-Assembly fixed rod	INM04080066	Hex nut m5
INM03060029	Rotating table lock shape	INM04080073	Phillips screw M5x20mm
INM03060030	Saw handle	INM04080078	Screw 5X12MM
INM03060031	Plastic flange	INM04080083	Allen screw m5x45mm
INM03060032	Blade insert	INM04080091	Allen screw m5x16mm
INM03060033	Teflon disk	INM04080132	Grease Jet M6
INM03060034	Support for acrylic blade guard mechanism	INM04080143	Allen screw m5x10mm
INM03060035	Blade guard mechanism sheath	INM04080144	Rivet 3,2X10,2MM
INM03060037	Quick turn handle pin	INM04080164	Phillips screw MQP 4x08mm
INM03060039	Cable regulator screw	INM04080166	Phillips screw MQP 5x16mm
INM03060051	Acrylic blade guard	INM04080173	Self-locking nut
INM03060053	Acrylic blade guard support	INM04080177	Hex nut
INM03060059	Internal flange IM-30 CE	INM04080178	Hex bolt
INM03060099	Right moulding fence	INM04080179	Hex nut
INM03060100	Left moulding fence	INM04080181	Rotating table cable screw
INM03060102	Rotating table lock pin	INM04080183	Rotating table cable
INM03060119	Blade guard mechanism bushing	INM04080184	Phillips screw MQP 5x16mm
INM03060198	Spring protector	INM04080191	Phillips screw MQP 4x12mm
INM03060200	Main saw spring support	INM04080200	Washer
INM03060203	Main saw spring support	INM04080201	Washer
INM03060205	Main saw spring pin	INM04080211	Main saw spring shaft
INM03060226	Guide for the cable	INM04080212	Self-locking nut
INM03060245	Locking button IM-30 CE	INM04080218	3/16" washer
INM03060247	Pin for locking button IM-30 CE (Z)	INM04080231	PARAF. MQP FH MT 5X10MM
INM03060252	Support IM-30 CE (Z)	INM04080237	HASTE M6X209MM IM-30
INM03060253	Bushing IM-30 CE	INM04120024	Plastic wire clamp
INM03060255	Fixed lock IM-30 CE (Z)	INM04120051	Rubber gasket
INM03060257	Spacer for rotating lock IM-30 CE (Z)	INM04120282	Capacitor 240V 50Hz
INM03060260	Rotating lock IM-30 CE (Z)	INM04120439	Electric switch 230V 50HZ 10A IP54
INM03060263	Fastener IM-30 CE (Z)	INM04130071	MOT 1HP 208-230V 50HZ
INM03060266	Complement blade protection IM-30 CE (Z)	INM04160017	Rotating table lock spring
INM03060272	Support IM-30 CE (Z)	INM04160018	Acrylic blade guard mechanism spring
INM03060282	Saw assembly support hing IM-30 CE	INM04160034	Spring
INM03060284	Aluminum base IM-30 CE	INM04160038	Spring
INM03060289	Protection pin IM-30 CE (Z)	INM04170008	Flexible pin 04x24mm
INM03060292	Aluminium saw casing CE	INM04170026	Lock-washer
INM03060319	Pin IM-30 CE (Z)	INM04170027	Lock-washer
INM03060347	External flange IM-30 CE	INM04170030	Key
INM03060383	Sheathing IM-30	INM04170031	Saw assembly support hin guide pin
INM03060384	Sheathing IM-30 0,70m	INM04190056	Rotating table base scale
INM03060415	Self locking nut M30 IM-30 (Z)	INM04190062	Left calibrated scale IM-30
INM04050049	Label	INM04190063	Right calibrated scale IM-30
INM04050051	Label	INM04190064	Rotating table scale IM-30
INM04050075	Label	INMP03060019	Connection box

15 – *PART LIST FOR EXHAUST CABINET*

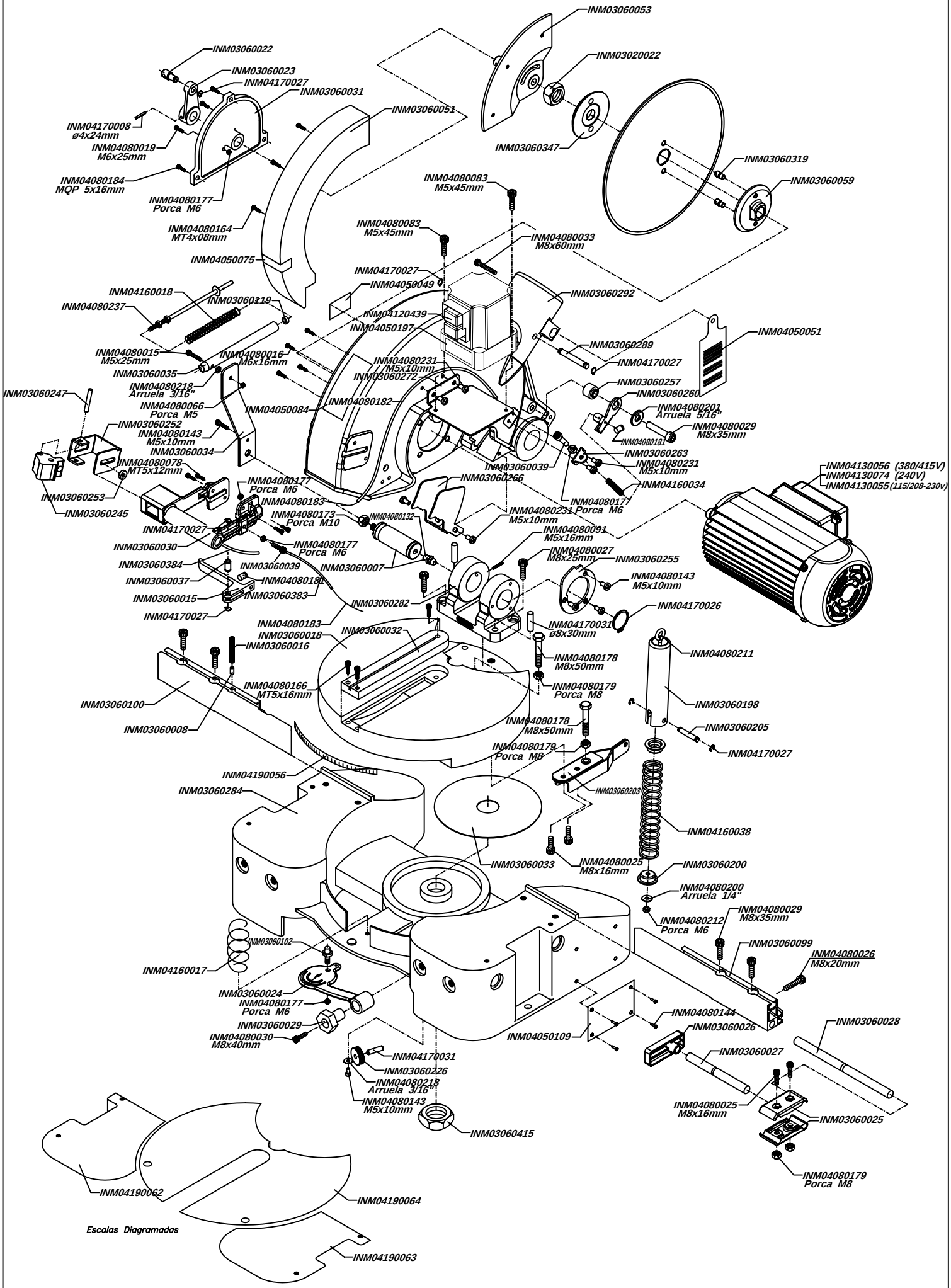
CODE	DESCRIPTION	CODE	DESCRIPTION
INM03020071	Reduction flange	INM04080019	Allen screw M6x25mm
INM03020082	Washer	INM04080026	Allen screw M8x20mm
INM03020282	Body of exhaust EM-075	INM04080038	Allen screw M10x30mm
INM03020294	Rotor EM-075 single phase	INM04080069	Hex nut M10mm
INM03020297	Cover EM-075A	INM04080094	Allen screw M6x20mm
INM03020299	Flange of the cover 075cv (complete)	INM04080100	Hose clamp
INM03020338	Screen protection EM-100A/B EM-075 Z	INM04080101	Hose clamp
INM03060081	Exhaust support	INM04080108	Hex bolt
INM03060082	Door	INM04080119	Hex bolt
INM03060083	Cabinet	INM04080144	Rivet 3,2x10,2mm
INM03060120	Filter IM-30	INM04080157	Screw 4,2x25mm DIN 7971
INM03060215	Curve	INM04080166	Screw 5X16MM
INM03060277	Eletric cable-main feed/ single phase	INM04080177	Hex nut 6mm
INM03060280	Eletric cable-main feed/ single phase	INM04080179	Hex nut 8mm
INM03060283	Eletric cable-main feed/ three phase	INM04080200	Washer
INM03060285	Eletric cable-main feed/ three phase	INM04080201	Washer
INM03060333	Support Isolator Switch	INM04080218	Washer
INM03060391	Motor support cabinet base IM-30	INM04080219	Washer
INM04050056	Label	INM04080260	Allen screw M6x20mm
INM04050066	Label	INM04120024	Plastic wire clamp
INM04050074	Label	INM04120051	Rubber gasket
INM04050107	Label 208-230v 50 Hz	INM04120305	Isolator Switch
INM04050119	Label	INM04130073	MOT 0,75CV 208-230V 50HZ
INM04050195	Label	INM04150006	Cabinet door handle
INM04050196	Label	INM04150007	Cabinet door hinge
INM04070020	MANGUEIRA PVC CONDUTO AR 3POL	INM04170017	Cabinet door gasket
INM04080008	Allen screw M4x16mm		

16 – *PART LIST FOR PNEUMATIC CLAMPING*

CODE	DESCRIPTION	CODE	DESCRIPTION
INM01010205	*Additional support*	*INM03060463*	*Support valve Pin FESTO IM-30 (Z)*
INM03010044	*Bushing*	*INM04050073*	*Label*
INM03010401	*Tube 1/4" AUS*	*INM04070008*	*Tube 4mm*
INM03060095	*Slide lock*	*INM04070055*	*Connection 1/8"x4mm*
INM03060125	*Support*	*INM04070227*	*Tube*
INM03060127	*Clamping*	*INM04070254*	*Connection L 1/8" x4mm*
INM03060130	*Handle*	*INM04070289*	*Connection Union T 4mm*
INM03060142	*Moulding clamp cover*	*INM04070437*	*Valve 3/2 4mm*
INM03060355	*Valve stop IM-30 (Z)*	*INM04070438*	*Filter regulator "1/8*
INM03060359	*Bushing*	*INM04080007*	*Allen screw m4x10mm*
INM03060361	*Spacer*	*INM04080009*	*Allen screw m4x20mm*
INM03060363	*Adjustable tube*	*INM04080013*	*Allen screw m5x16mm*
INM03060365	*Shaft*	*INM04080018*	*Allen screw m6x20mm*
INM03060375	*Valve stop IM-30 SI (Z)*	*INM04080042*	*Allen screw m10x50mm*
INM03060386	*Cylinder support*	*INM04080143*	*Allen screw m5x10mm*
INM03060460	*Cylinder INMES D24xC10mm-SA*	*INM04080200*	*Washer 1/4"*
INM03060462	*Support valve Pin FESTO IM-30 SI (Z)*		

17 - PARTS LIST FOR EXTENSION TABLE FOR IM-30

CODE	DESCRIPTIONS	CODE	DESCRIPTIONS
INM03060075	Table top extension (left/right)	INM04080020	Hex bolt
INM03060078	Support bar	INM04080053	Hex bolt
INM03060079	Table top extension fence	INM04080057	Hex bolt
INM03060084	"Y" Support	INM04080089	Hex bolt
INM03060086	Pin support	INM04080177	Nut
INM03060087	Pin	INM04080200	Washer 1/4"
INM04030003	Support bar cap	INM04190065	Calibrated sticker - left side
INM04080016	Hex bolt	INM04190066	Calibrated sticker - right side


INM03060053
INM03020022
INM03060022
INM03060023
INM04170027
INM03060031
INM03060051
INM04170008 ø4x24mm
INM04080019 M6x25mm
INM04080184 MQP 5x16mm
INM04080177 Porca M6
INM04080164 MT4x08mm
INM03060347
INM03060319
INM03060059
INM04080083 M5x45mm
INM04080083 M5x45mm
INM04080033 M8x60mm
INM04050075
INM04170027
INM04050049
INM03060292
INM04160018
INM04080237
INM03060119
INM04120439
INM04050197
INM04050051
INM03060289
INM04170027
INM04080015 M5x25mm
INM04080016 M6x16mm
INM03060035
INM04080231 M5x10mm
INM03060272
INM03060257
INM03060260
INM04080218 Arruela 3/16"
INM04080066 Porca M5
INM03060247
INM04080182
INM04050084
INM04080201 Arruela 5/16"
INM04080029 M8x35mm
INM04080181
INM03060252
INM04080143 M5x10mm
INM03060034
INM03060263
INM04080231 M5x10mm
INM04080078 MT5x12mm
INM03060039
INM03060266
INM04160034
INM04080177 Porca M6
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INM04080183
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INM04080132
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INM03060039
INM03060007
INM04080143 M5x10mm
INM03060037
INM04080181
INM03060015
INM03060383
INM03060282
INM04170026
INM04170027
INM04080183
INM04170031 ø8x30mm
INM03060018
INM03060032
INM03060016
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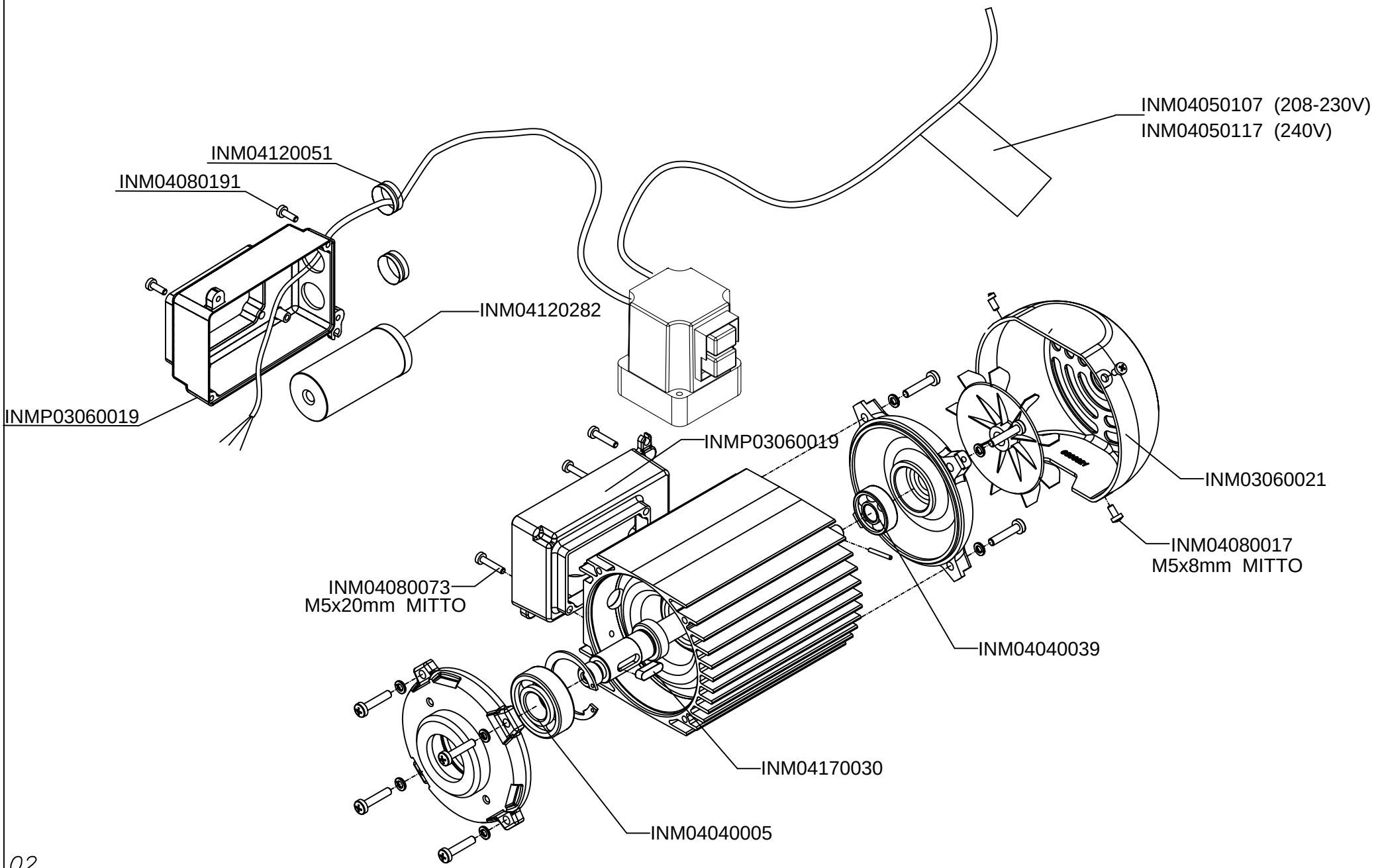
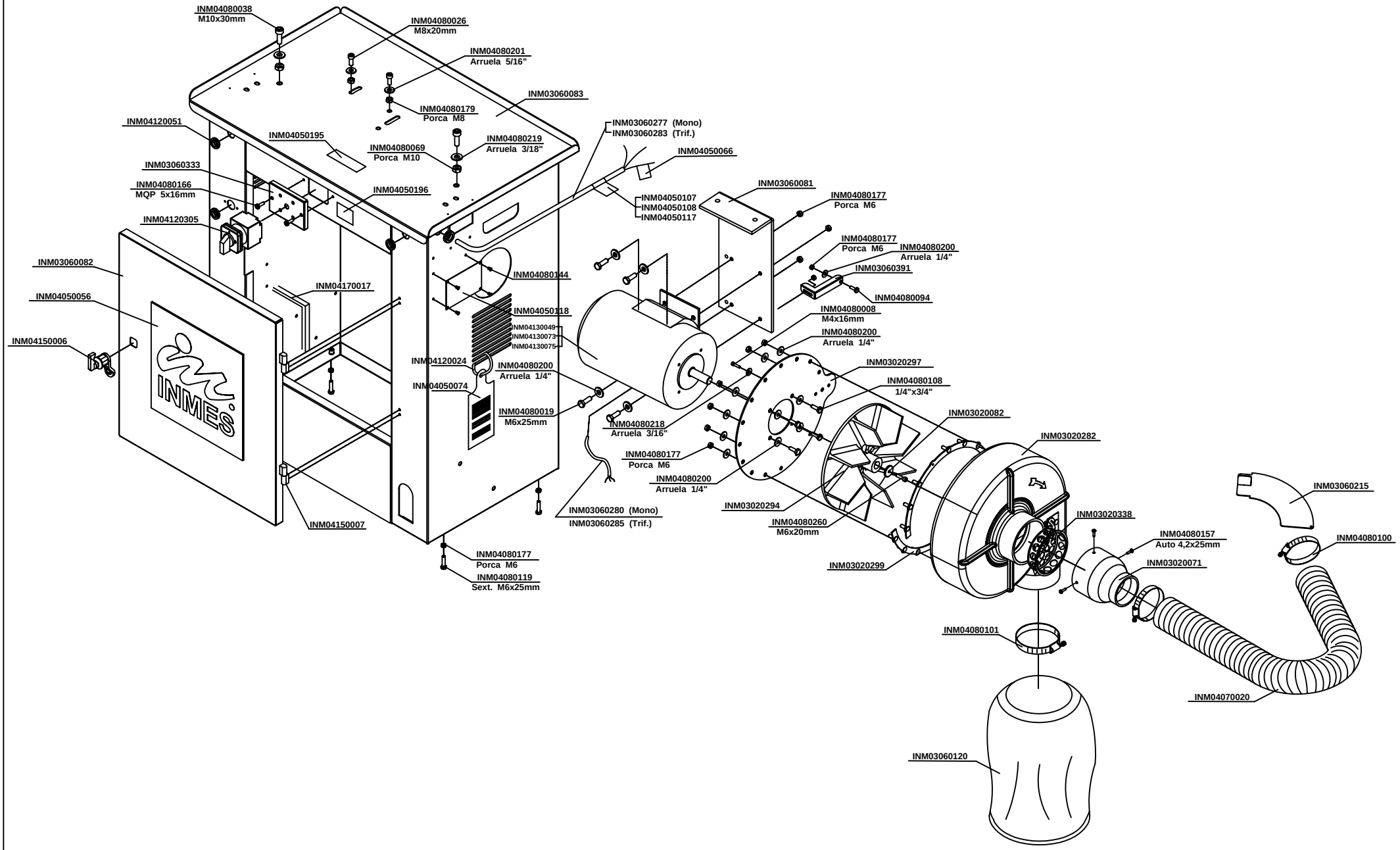
INM03060033
INM04080025 M8x16mm
INM03060200
INM04080200 Arruela 1/4"
INM04080029 M8x35mm
INM04080212 Porca M6
INM03060102
INM03060099
INM04080026 M8x20mm
INM04160017
INM03060024
INM04080177 Porca M6
INM04080144
INM03060028
INM03060029
INM04080030 M8x40mm
INM04050109
INM03060026
INM03060027
INM04170031
INM03060226
INM04080218 Arruela 3/16"
INM04080143 M5x10mm
INM04080025 M8x16mm
INM03060025
INM03060415
INM04080179 Porca M8
INM04130056 (380/415V)
INM04130074 (240V)
INM04130055 (115/208-230v)
INM04190062
INM04190064
Escalas Diagramadas
INM04190063

Motor Single Phase 115/208–230V (0413055) E 240V (0413074)



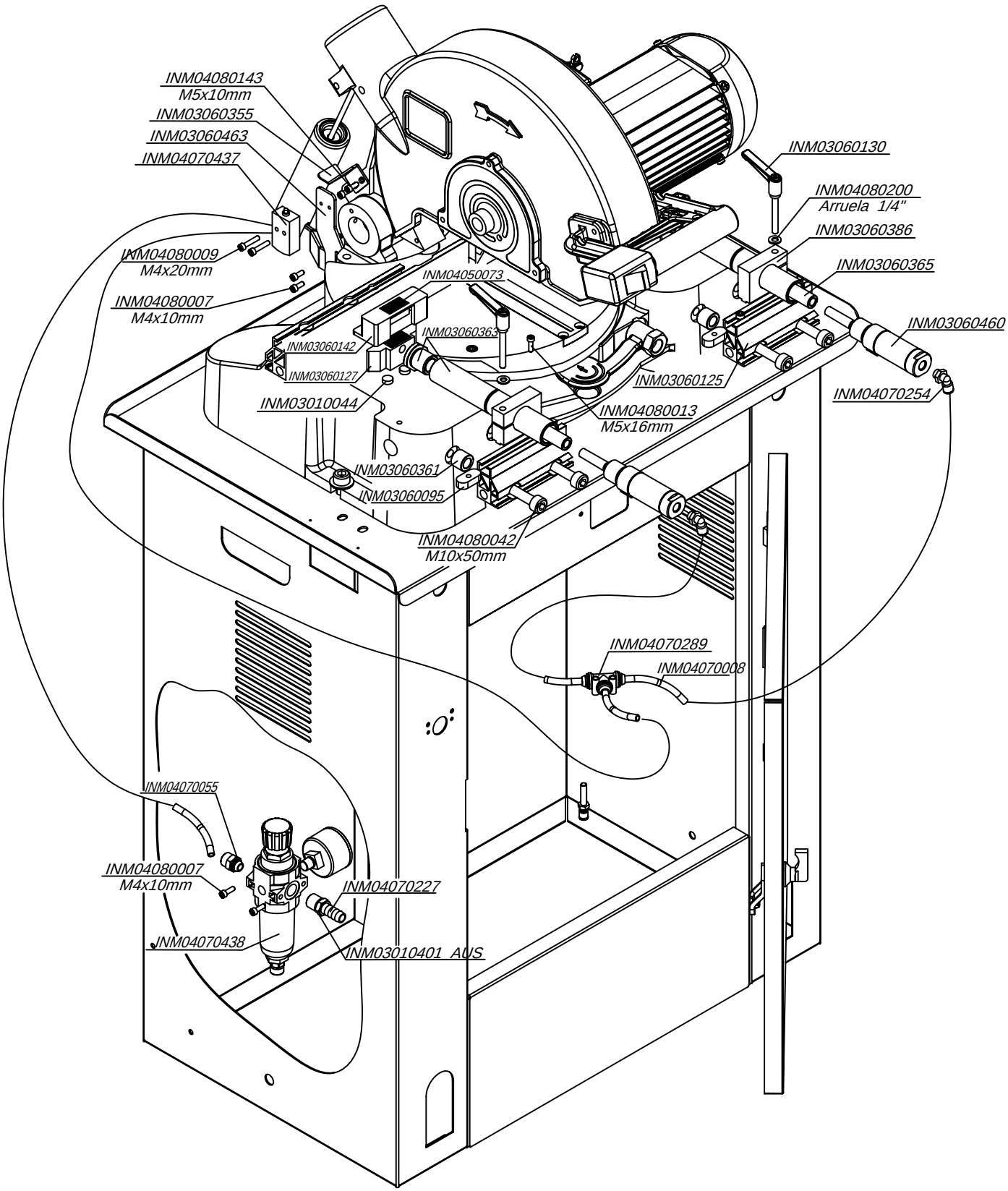
SAP: 131

EXHAUST CABINET IM-30 CE MP

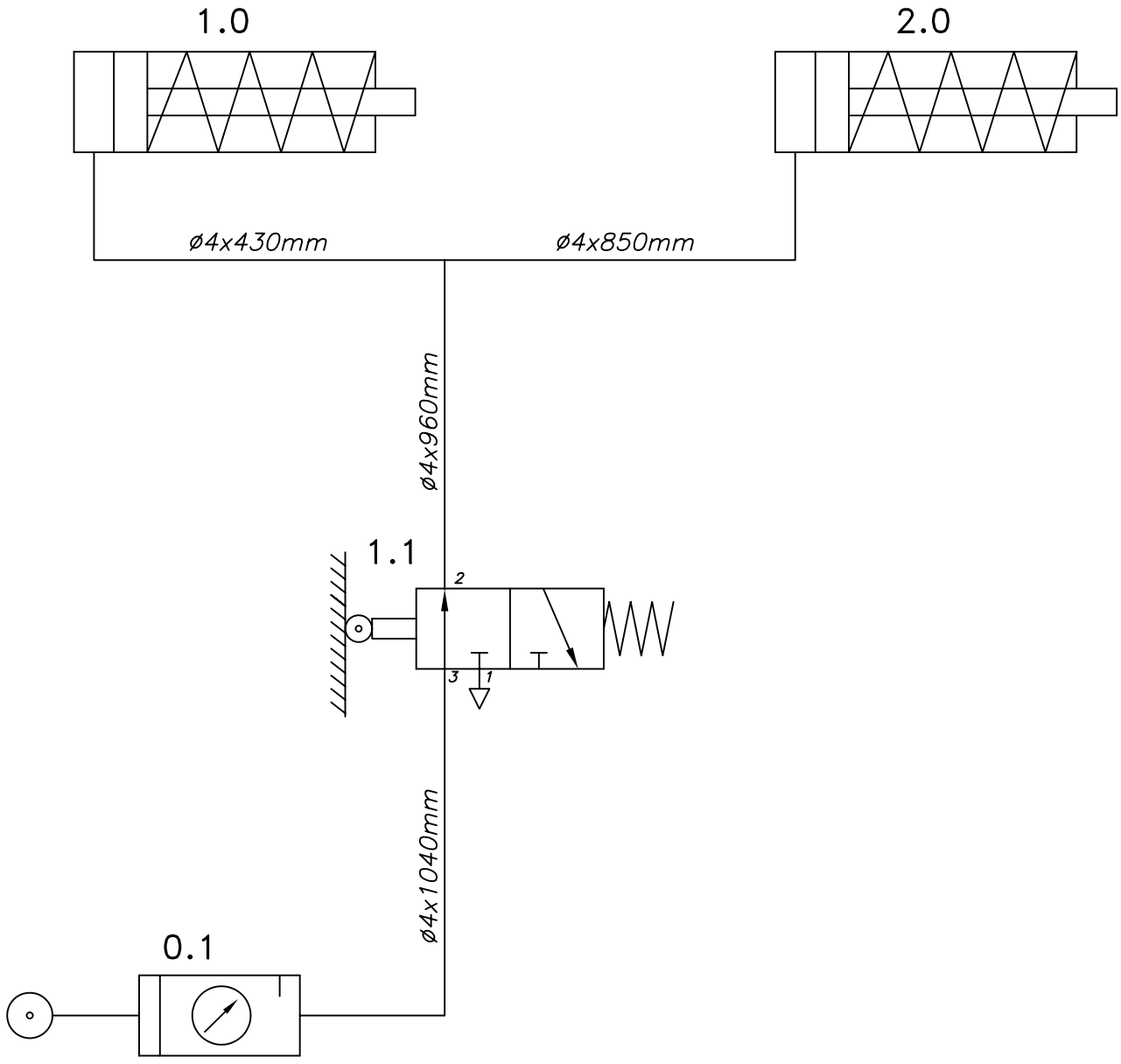


03

PNEUMATIC CLAMPING



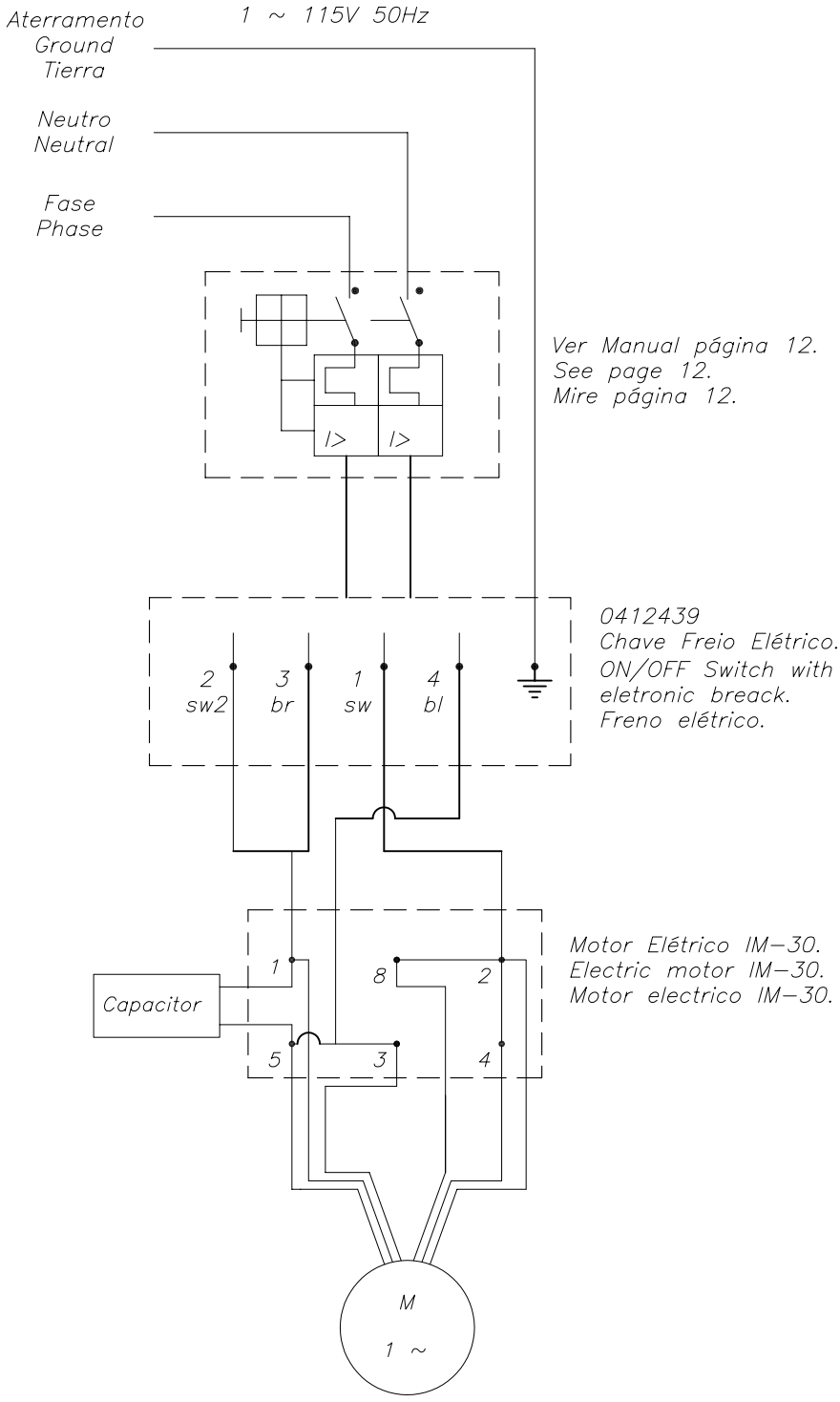
PNEUMATIC CLAMPING SCHEME

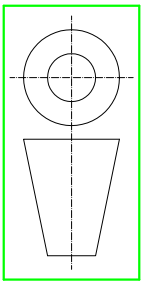


0.1 – Filter Regulator 1/8
1.0 – Cylinder INMES D24xC10MM–SA
2.0 – Cylinder INMES D24xC10MM–SA
1.1 – Valve 3/2 Tube 4mm

Tolerancias nao especificadas sao conforme DIN 7168	FINO	MEDIO	GROSSO
de 0.5 a 6	±0.05	±0.1	±0.2
> 6 a 30	±0.1	±0.2	±0.5
> 30 a 120	±0.15	±0.3	±0.8
> 120 a 315	±0.2	±0.5	±1.2

Quebrar cantos vivos





Bruto	Desbastar	Alisar	Retificar
~	▽	▽▽	▽▽▽

Codigo	Quant./Máq.	Tratamento Térmico/Superficial:		Projeto:	N° Solicitação:
	01			Nome: Eriberto Michels	Nome:
Projeto N°	Peca N°	Escala	Material	Data: 04/12/07	Data:
Aplicação: Serra IM–30 CE					

INMES INDUSTRIAL LTDA

Denominação

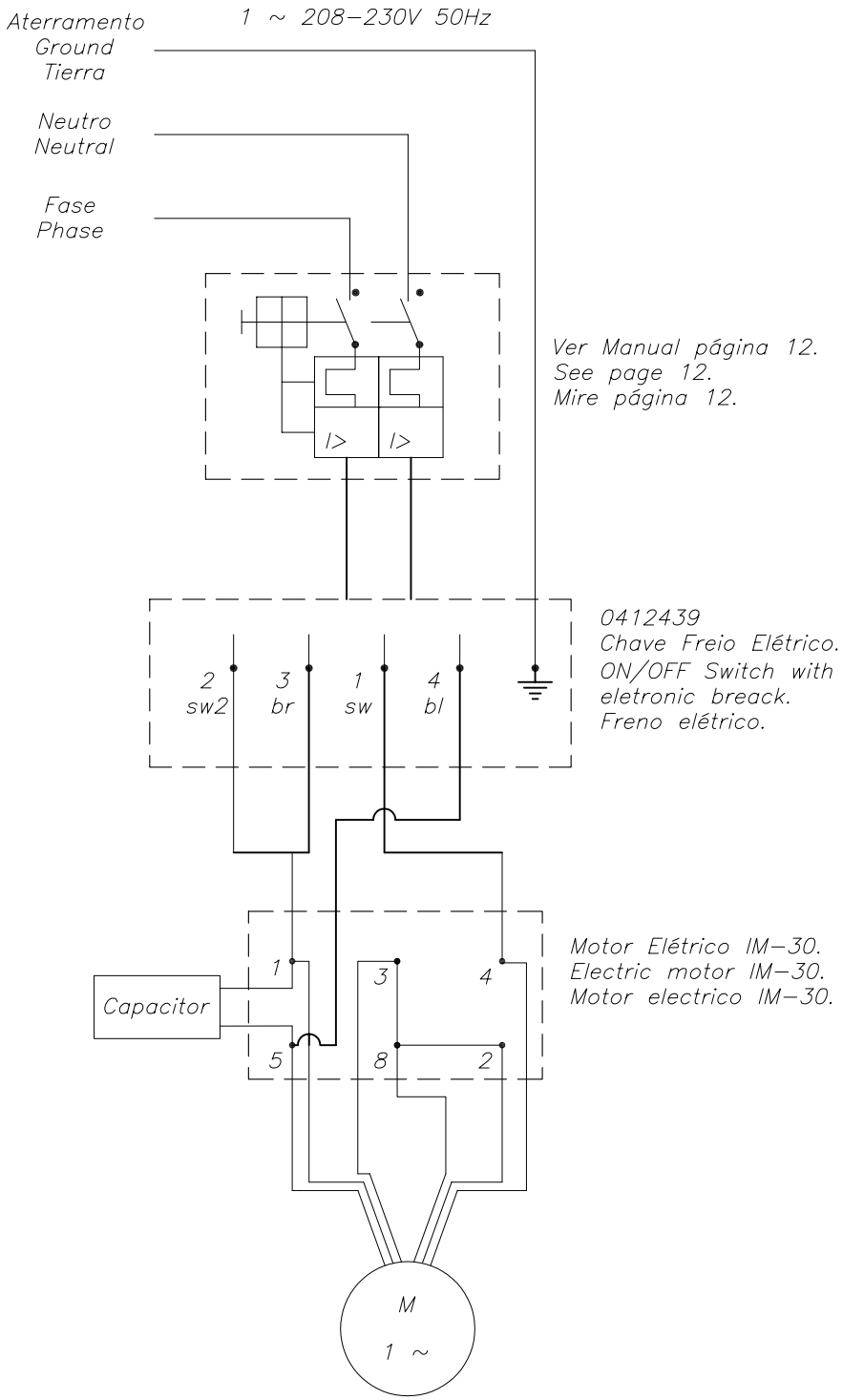
Eletric Diagram Single Phase 115V 50Hz

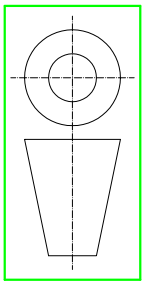
CARIMBO

Tolerancias nao especificadas sao conforme DIN 7168

	FINO	MEDIO	GROSSO
de 0.5 a 6	±0.05	±0.1	±0.2
> 6 a 30	±0.1	±0.2	±0.5
> 30 a 120	±0.15	±0.3	±0.8
> 120 a 315	±0.2	±0.5	±1.2

Quebrar cantos vivos





Bruto	Desbastar	Alisar	Retificar
~	▽	▽▽	▽▽▽

Codigo	Quant./Máq.	Tratamento Térmico/Superficial:		Projeto:	N° Solicitação:
	01			Nome: Eriberto Michels	Nome:
Projeto N°	Peca N°	Escala	Material	Data: 04/12/07	Data:
Aplicação: Serra IM–30 CE					

INMES INDUSTRIAL LTDA

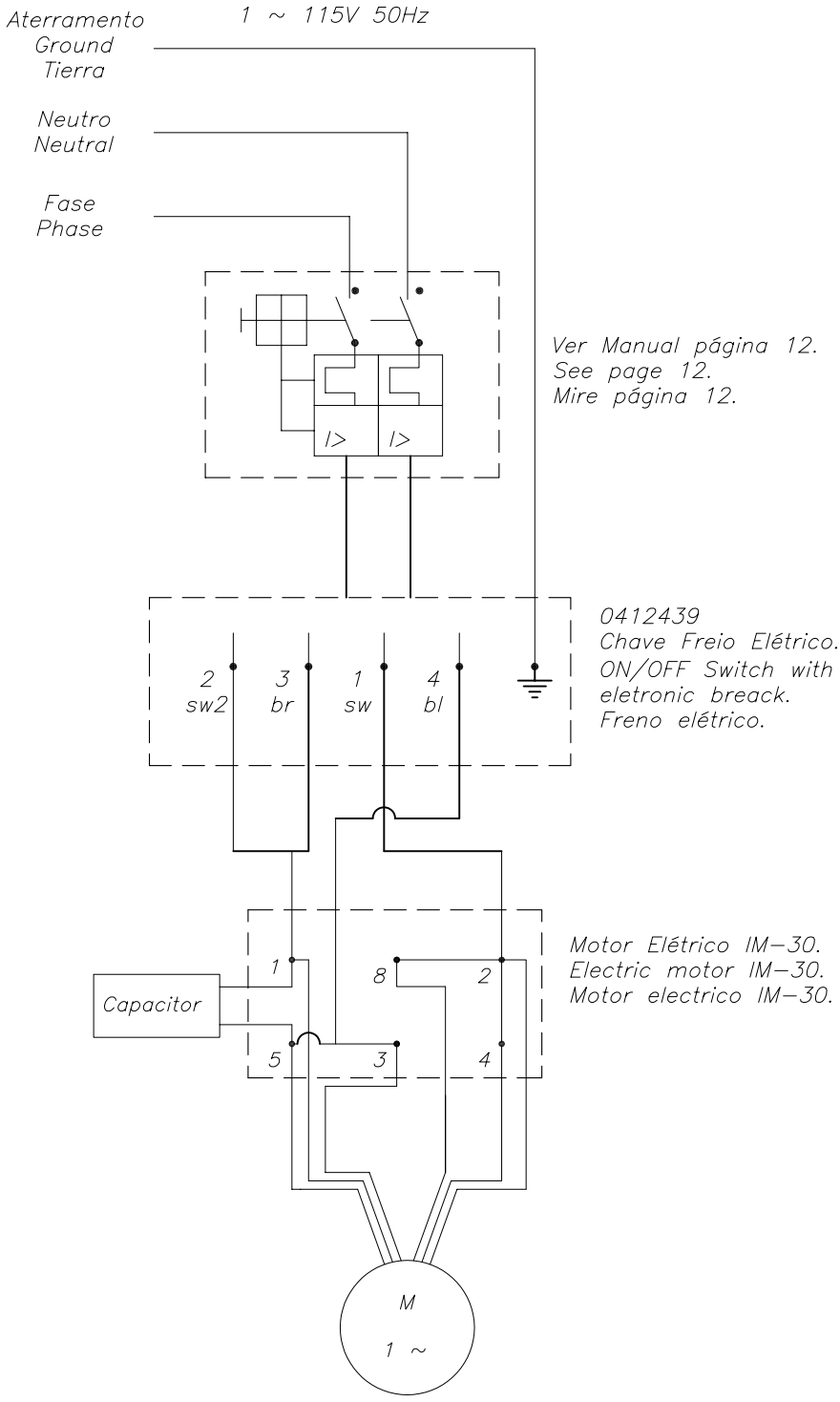
Denominação

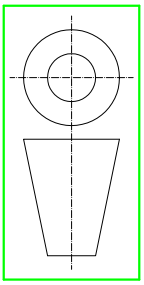
Eletric Diagram Single Phase 208–230V 50Hz

CARIMBO

Tolerancias nao especificadas sao conforme DIN 7168	FINO	MEDIO	GROSSO
de 0.5 a 6	±0.05	±0.1	±0.2
> 6 a 30	±0.1	±0.2	±0.5
> 30 a 120	±0.15	±0.3	±0.8
> 120 a 315	±0.2	±0.5	±1.2

Quebrar cantos vivos





Bruto	Desbastar	Alisar	Retificar
~	▽	▽▽	▽▽▽

Codigo	Quant./Máq.	Tratamento Térmico/Superficial:		Projeto:	N° Solicitação:
	01			Nome: Eriberto Michels	Nome:
Projeto N°	Peca N°	Escala	Material	Data: 04/12/07	Data:
Aplicação: Serra IM–30 CE					

INMES INDUSTRIAL LTDA

Denominação

Eletric Diagram Single Phase 115V 50Hz

CARIMBO

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