

# INSTRUCTIONS MANUAL

**SKYMSSEN**<sup>®</sup>  
METALÚRGICA SIEMSEN LTDA.



BAND SAW FOR BONES, STAINLESS STEEL, WITH MOVABLE TABLE,  
THICKNESS GUIDE

MODELS

**SFL-282HD**

# SUMMARY

<b>1. Introduction</b>	<b>3</b>
<b>1.1 Safety</b>	<b>3</b>
<b>1.2 Main Components</b>	<b>5</b>
<b>1.3 Technical Characteristics</b>	<b>6</b>
<b>2 – Installation and Pre Operation</b>	<b>6</b>
<b>2.1 Installation</b>	<b>6</b>
<b>2.2 Pre Operation</b>	<b>7</b>
<b>3. Opeation</b>	<b>7</b>
<b>3.1 Starting</b>	<b>7</b>
<b>3.2 Operation Procedure</b>	<b>8</b>
<b>3.3 Cleaning and Sanitization</b>	<b>10</b>
<b>3.4 Cautions with Stainless Steel:</b>	<b>11</b>
<b>4 General Safety Practices</b>	<b>12</b>
<b>4.1 Basic Operation Procedures</b>	<b>12</b>
<b>4.2 Safety Procedures and Notes before Switching the Machine ON</b>	<b>13</b>
<b>4.3 Routine Inspection</b>	<b>13</b>
<b>4.4 Operation</b>	<b>14</b>
<b>4.5 After Finishing The Work</b>	<b>14</b>
<b>4.6 Maintenance</b>	<b>14</b>
<b>4.7 Warning</b>	<b>14</b>
<b>5 PROBLEMS ANALYSIS and SOLUTIONS</b>	<b>14</b>
<b>5.1 Problems, Causes and Solutions</b>	<b>14</b>
<b>6 MAINTENANCE</b>	<b>16</b>
<b>7 Electric Diagram</b>	<b>18</b>

# 1. Introduction

## 1.1 Safety

When not properly used this equipment is a potentially dangerous machine. maintenance, servicing, cleaning or any other operation shall be made by trained people. Plug has to be off outlet during any of these operations.

Below instructions shall be respected to avoid accidents :

1.1.1 To avoid to risk electric shocks and damage to the equipment never use it with wet clothes or shoes and/or standing on wet floors. Do not plunge it into water nor any other liquid, do not spray water directly to the equipment.

1.1.2 When the equipment is in operation the operator shall supervise it, principally when children might be near

1.1.4 Unplug the equipment when : It is not in use, before to clean it, before to remove or to place some accessory. before maintenance or any other service .

1.1.6 In case the equipment is not working properly or it was delivered with some damage, take it to a Technical Assistant for a revision and mechanic and electrical adjustment.

1.1.7 The use of accessories not recommended by the manufacturer may cause corporal injures.

1.1.8 Keep the hands or any other object away from moving parts while the equipment is in operation, to avoid injures or damage to the equipment. .

1.1.9 During operation never wear loose clothes with wide sleeves principally around the wrists .

1.1.10 Make sure the equipment voltage and the network voltage are the same, and the equipment has been solidly grounded .

1.1.11 Never adjust the Blade Guide nor the Thickness Guide with the machine running

1.1.12 Keep your hand away from the Blade and use Steel gloves only during installation and removing the blade, Do not use the gloves to operate the machine.

1.1.13 This equipment has been developed for commercial operation, it is used for instance in restaurants, fast foods, hospitals, bakeries, butchers and similar.

It is not recommended to use it

-For continuous industrial production

-A working ambient having a corrosive or explosive atmosphere, or contaminated with water vapour, dust or gas.

**IMPORTANT**

**Make sure the cord is in perfect conditions for use. If it is not, change it for a new one in accordance with the technical specifications and safety rules .  
The substitution shall be made by a qualified professional , and shall respect the local safety norms .**

**IMPORTANT**

**This equipment must not be used by children or any persons with reduced physical or mental aptness, lack of experience or knowledge, unless they are under supervision or have received from the person responsible for safety, proper instructions on how to use the equipment.**

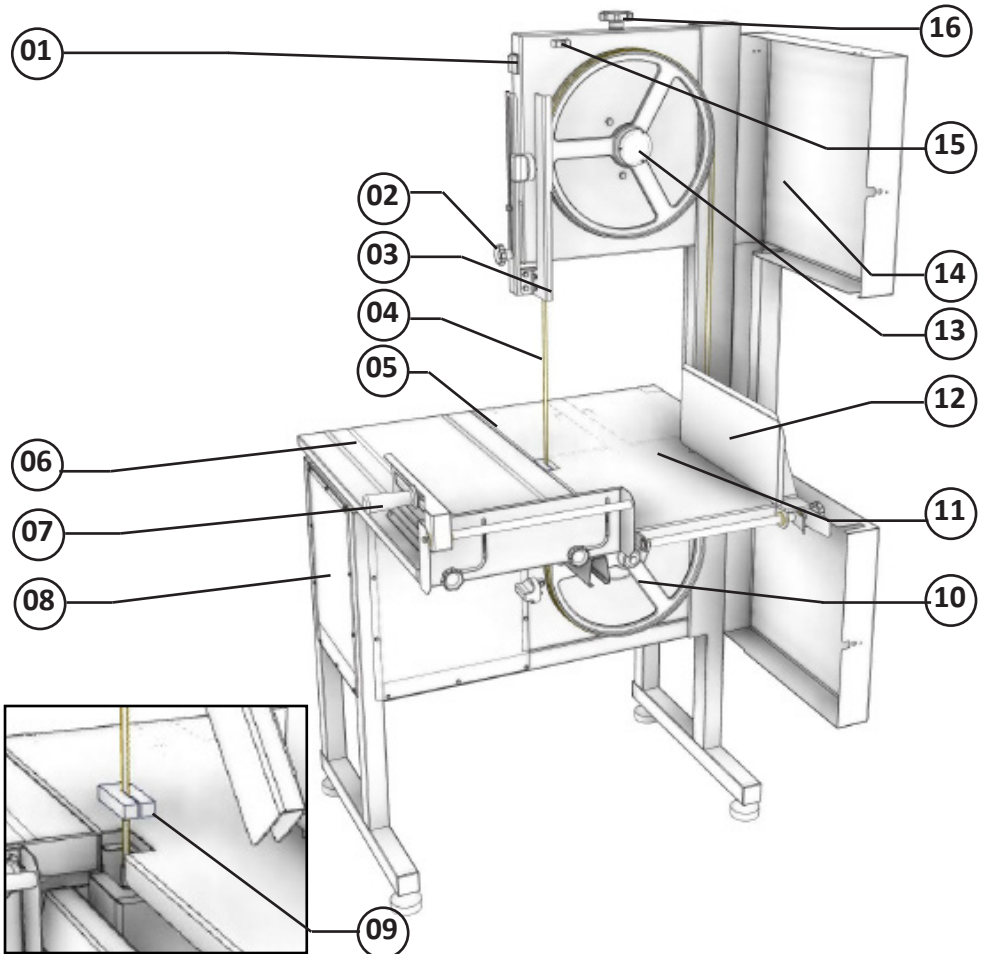
**IMPORTANT**

**Children shall be watched in order to avoid them to play with the equipment.**

## 1.2 Main Components

All components are manufactured with carefully chosen raw materials in accordance with Siemens experience and testing standards.

PICTURE 01



- 01 – ON Button
- 02- Blade Guide Knob
- 03- Blade Guide
- 04- Blade
- 05 - Table Guide
- 06 – Movable Table
- 07 - Side Pusher
- 08 – Structure

- 09 - Table Block
- 10 – Lower Wheel
- 11 - Fixed Table
- 12- Cut Reulator
- 13 - Upper Wheel
- 14- Door
- 15- Safety System
- 16- Blade Knob

## 1.3 Technical Characteristics

CHARACTERISTICS	UNIT	SFL-282HD	SFL-282HD
Blade Length	mm	2.820	2.820
Blade Width	pol.	3/4"	3/4"
Teeth per Inch*	DPP	4 or 6	4 or 6
Rating	CV	2	2
	-	3-Phase	Single Phase
Voltage	V	220 ou 380	220
Frequency	Hz	60	60
Height	m	1,87	1,87
Width	m	0,97	0,97
Depth	m	0,96	0,96
Net weight	kg	115	115
Gross Weight	kg	169	169
Maximum Height Cut	mm	350	350
Maximum Width Cut	mm	330	330

*\*Number of teeth per inch on blade make a difference on blade speed and cut finishing regarding yield (Quantity of residue after work). Different applications/using need different kind of blades, therefore, check the following table to choose the best blade for your application:*

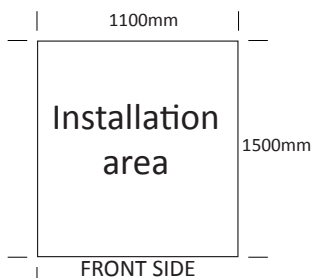
Blade Selection Guide			
4 TPI	Higher Speed Cut	More residues	Indicated for fast cut and frozen meat
6 TPI	Menor Velocidade de Corte	Less residues	Recommended for finishing cut, chilled meat

## 2. Installation and Pre Operation

### 2.1 Installation

#### 2.1.1 Placing the equipment

The equipment must be installed over a firm and level working surface. See below drawing the recommended area.



## 2.1.2 Electric Installation

The equipment is supplied with cable with an industrial plug.

For electrical installation, it must be used an industrial electrical outlet to overlap or to embed, that should be installed according to local rules.

Bellow is mentioned the plugs models and electrical outlet according to the equipment purchased

Model	SFL-282HD	SFL-282HD	SFL-282HD
Power Supply	3 PHASE	3 PHASE	SINGLE PHASE
Voltage	220V	380V	220V
Industrial Plug	3P+T 16A 220V	3P+N+T 32A 380V	2P+T 32A 220V
Overlap Electrical Outlet	3P+T 16A 220V	3P+N+T 32A 380V	2P+T 32A 220V
Embed Electrical Outlet	3P+T 16A 220V	3P+N+T 32A 380V	2P+T 32A 220V

Note: Metalúrgica Siemens uses and recommends for its Equipments industrial plugs and outlets from WEG and STECK.

The Earth for electrical installation is mandatory. Check if all pins are connected properly and correctly before start the equipment

### **IMPORTANT**

**Make sure the network voltage is the same as indicated on the Cord label.**

## 2.2 Pre Operation

Before to use the equipment all the parts which could get into contact with the product to be processed shall be washed with water and neutral soap (see item 3.4 Cleaning and Sanitizing ).

Make sure the equipment is firm on its working position.

## 3. Operation

### 3.1 Starting

To start the equipment follow the below instructions:

- 1 – Make sure all the protections and the door are in due place and the door is closed;
- 2 – Plug the equipment to the electric network;
- 3 – Press the ON Button to Turn On;
- 4 – Press the OFF Button to turn OFF.

## IMPORTANT

Other procedures to operate this machine, not mentioned on this Manual, are unsafe, therefore the Equipment should not be used

### 3.2 Operation Procedure

#### 3.2.1 Door

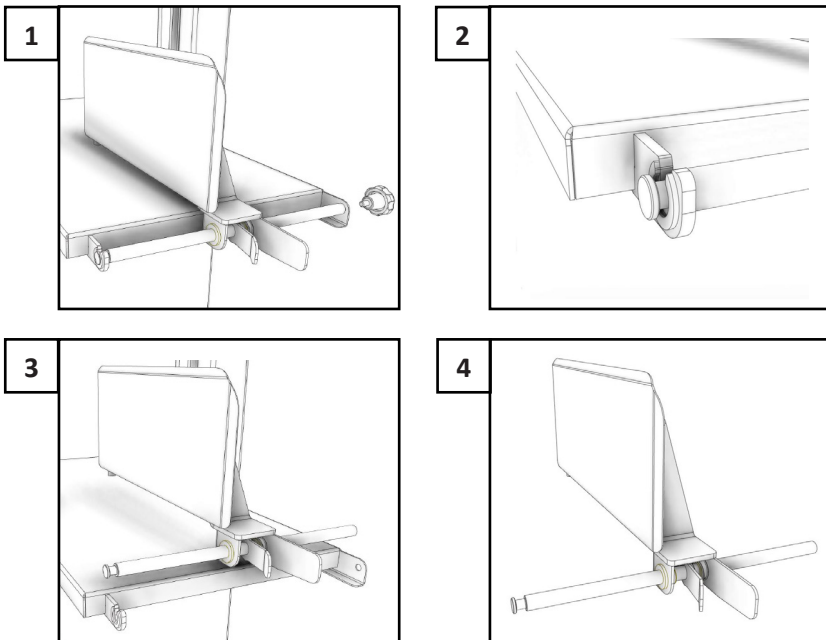
The Door shall be closed as long as the equipment is in use.

#### 3.2.2 Cut regulating

To obtain several same thickness slices adjust the Thickness Guide # 12 (Pic.01) as desired. That for turn the thickness guide handle counter clockwise getting the guide free, then place the Thickness Guide at the desired thickness and tight the Thickness Guide Handle turning it clockwise.

For larger pieces of meat the cut regulator can be removed with the it shaft. Forthis follow the instruction bellow.

**PICTURE 02**



- 1 – Loosen the Cut regulator knob and remove it;
- 2 – Turn the Cut Regulator Shaft to anticlockwise up to it gets loosen.
- 3 – Lift the set (Shaft + Cut regulator) and remove them from the Equipment
- 4 – Don't need to separate the Shaft from the Cut regulator.



### 3.2.3 Blade

The Blade must be installed with the teeth turned towards the front side of the machine and with the points downwards.

To regulate ( stretch ) the Blade # 07 (Pic.01) turn clockwise the Blade Tension Regulator Handle # 01 (Pic.01) until it stops.

### 3.2.4 Blade Guide

The Blade Guide Height has to be adjusted for the cut zone to be a little higher than the meat to be cut, improving the blade stability and the operator safety. With the equipment switched OFF, turn the handle counter clockwise to get free the Blade Guide # 06 (Pic.01). Then adjust the Blade Guide to have it no more than the height of the product to be cut and tight the Handle.

#### **Before starting the machine:**

Pull the movable table to its original position;

Place the product to be processed on top of Movable Table;

Choose the desired slice thickness by adjusting the Cut Regulator;

Lift up the Pusher, placing it over the product to be processed;

Adjust the Blade Guide in order to have Blade exposure area only the same height as the product to be cut;

Stay in front of Band Saw, having a total front view from Blade..

#### **After turn on the machine:**

Hold the Side Pusher Knob with left hand and with right hand the Vertical Pusher Knob, placing the vertical Pusher over the product to be cut.

Slide the movable table against the Blade, cutting the product with a steady and uniform speed;

After cut the slice, use your right hand to remove it.

**IMPORTANT**  
**Never remove the slices by the Blade front side.**

Put and stack the steaks over the Fix Table.

To finalize the last steaks cut, use the Side Pusher dented face.

After the last steak cut, turn off the machine pressing the OFF Button.

### 3.3 Cleaning and Sanitization

When the equipment must go through a complete cleaning and sanitization process:

- Before to be used first time.
- After every day end of operations
- When the saw is not going to be used for a long period.
- Before to start operation after a long period it has not been used. Some components may be removed to clean :

#### -Door

Turn the 2 knobs clockwise to open the door. Open the door, hold firm and lift up until the door gets out from the hinges

#### - Table Block:

Push the Movable Tablet o the end, getting access to the Table Block, move the Vertical Pusher away and pull up the Table Block, holding from bottom side.

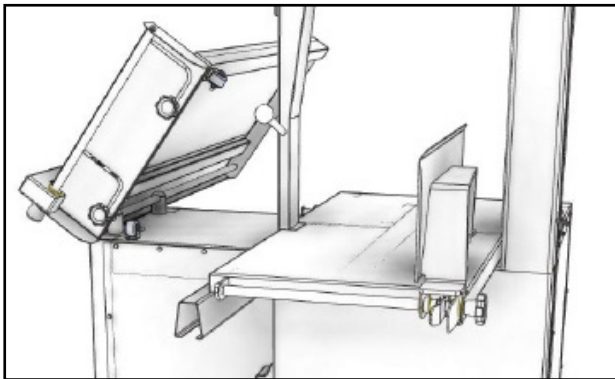
#### -Blade

Turn the Blade Tension Regulator Handle # 02 (Pic 04) counter clockwise to get the Blade # 01 (Pic. 04) free to be removed.

#### -Movable Table

The movabel table can not be removed, but it can ben tilted to facilitate the cleaning. To tilt it, push the movable table up to the end and incline to left side, as per image bellow

**FIGURA 03**



**IMPORTANT**  
**Do not spray water directly on the equipment**

Wash all the components with water and neutral soap.

Use a clean cloth or a soft brush to remove residues. Wash, sanitize, rinse and dry all the components.

Assemble back all the components following the inverse path , and make sure all the components are correctly in place.

### 3.4 Cautions with Stainless Steel

The Stainless Steel may present rust signs, which ARE ALWAYS CAUSED BY EXTERNAL AGENTS, especially when the cleaning or sanitization is not constant and appropriate.

The Stainless Steel resistance towards corrosion is mainly due to the presence of chrome, which in contact with oxygen allows the formation of a very thin protective coat.

This protective coat is formed through the whole surface of the steel, blocking the action of external corrosive agents.

When the protective coat is broken, the corrosion process begins, being possible to avoid it by means of constant and adequate cleaning.

Cleaning must always be done immediately after using the equipment. For such end, use water, neutral soap or detergent, and clean the equipment with a soft cloth or a nylon sponge. Then rinse it with plain running water, and dry immediately with a soft cloth, this way avoiding humidity on surfaces and especially on gaps.

The rinsing and drying processes are extremely important to prevent stains and corrosion from arising.

#### **IMPORTANT**

**Acid solutions, salty solutions, disinfectants and some sterilizing solutions (hypochlorites, tetravalent ammonia salts, iodine compounds, nitric acid and others), must be AVOIDED, once it cannot remain for long in contact with the stainless steel.**

These substances attack the stainless steel due to the CHLORINE on its composition, causing corrosion spots (pitting).

Even detergents used in domestic cleaning must not remain in contact with the stainless steel longer than the necessary, being mandatory to remove it with plain water and then dry the surface completely.

Use of abrasives:

Sponges or steel wool and carbon steel brushes, besides scratching the surface and compromising the stainless steel protection, leave particles that rust and react contaminating the stainless steel. That is why such products must not be used for cleaning and sanitization. Scrapings made with sharp instruments or similar must also be avoided.

Main substances that cause stainless steel corrosion:

Dust, grease, acid solutions such as vinegar, fruit juices, etc., saltern solutions (brine), blood, detergents (except for the neutral ones), common steel particles, residue of sponges or common steel wool, and also other abrasives.

## 4. General Safety Practices

### **IMPORTANT**

**If any recommendation is not applicable to your equipment , please ignore it.**

The following safety instructions are addressed to both the operator of the machine as well as the person in charge of maintenance.

The machine has to be delivered only in perfect conditions of use by the Distributor to the user. The user shall operate the machine only after being well acquainted with the safety procedures described in the present manual. **READ THIS MANUAL WITH ATTENTION.**

### **IMPORTANT**

**Any change in the protection systems and safety devices will during operation, create serious risks to the operator physical integrity.**

### 4.1 Basic Operation Procedures

#### 4.1.1 Dangers

Some areas of the electric device have parts that are connected or have parts connected to high voltage. These parts when touched may cause severe electrical shocks or even be lethal.

Never touch manual commands such as switches, buttons, turning keys and knobs with your hands wearing wet clothes and/or wet shoes. By not following these instructions operator could be exposed to severe electrical shocks or even to a lethal situation.

#### 4.1.2 Warnings

\*The operator has to be well familiar with the position of ON/OFF Switch to make sure the Switch is easy to be reached when necessary.

\*Before any kind of maintenance, physically remove plug from the socket.

\*Provide space for a comfortable operation thus avoiding accidents.

\*Water or oil spilled on the floor will turn it slippery and dangerous. Make sure the floor is clean and dry.

\*Before using any commands (switch, buttons, lever), be sure it is the correct one. In case of doubt, consult this manual.

\*Never touch any manual commands (switch, buttons, lever) unadvisedly.

\*If any work is to be made by two or more persons, coordination signs will have to be given for each operation step. Every step of the operation shall be taken only if a sign has been made and responded.

#### 4.1.3 Advices

\*In case of power shortage, immediately switch the machine off.\* Use recommended or equivalent lubricants, oils or greases.

\*Avoid mechanical shocks, once they may cause damages or bad functioning.

\*Avoid water, dirt or dust contact to the mechanical and electrical components of the machine.

\*DO NOT change the standard characteristics of the machine.

\*DO NOT remove, tear off or maculate any safety or identification labels stuck on the machine. If any labels have been removed or are no longer legible, contact your nearest dealer for replacement.

## 4.2 Safety Procedures and Notes before Switching the Machine ON

### **IMPORTANT**

**Carefully read ALL INSTRUCTIONS of this manual before turning the machine ON. Be sure to well understand all the information contained in this manual. If you have any question contact your supervisor or your nearest Dealer.**

#### 4.2.1 Danger

An electric cable or electric wire with damaged jacket or bad insulation might cause electrical shocks as well as electrical leak. Before use, check the conditions of all wires and cables.

#### 4.2.2 Advices

Be sure to well understand all the information contained in this manual. Every operation function or procedure has to be thoroughly clear.

Before using any commands (switch, buttons, lever), be sure it is the correct one. In case of doubt, consult this manual.

#### 4.2.3 Precautions

The electric cable has to be compatible with the power required by the machine.

Cables touching the floor or close to the machine need to be protected against short circuits.

## 4.3 Routine Inspection

#### 4.3.1 Advice

When checking the tension of the belts or chains, DO NOT insert your fingers between the belts and the pulleys and nor between the chain and the gears.

#### 4.3.2 Precautions

Check the motor and sliding or turning parts of the machine in case of abnormal noises. Check the tension of the belts and chains and replace the set when belts or chains show signs of wearing.

When checking the tension of belts or chains DO NOT insert your fingers between belts and pulleys, nor between the chains and gears.

Check protections and safety devices to make sure they are working properly.

## **4.4 Operation**

### **4.4.1 Warnings**

Do not use the machine with long hair that could touch any part of the machine. This might lead to a serious accident. Tie your hair up well and/or cover it with a scarf.  
Only trained or skilled personnel shall operate this machine. Never touch turning parts with your hands or any other way ,  
NEVER operate the machine without any original safety devices under perfect conditions.

## **4.5 After Finishing The Work**

### **4.5.1 Precautions**

Always TURN THE MACHINE OFF before cleaning by removing the plug from the socket. Never clean the machine unless it has come to a complete stop.  
Put all the components back to their functional positions before turning the machine ON again.  
Check the level of liquids.  
Do NOT insert your fingers in between belts and pulleys nor chains and gears.

## **4.6 Maintenance**

### **4.6.1 Dangers**

Any maintenance with the machine in working situation is dangerous.

TURN IT OFF BY PULLING THE PLUG OFF THE SOCKET DURING MAINTENANCE.

### **4.7 Warning**

Electrical or mechanical maintenance has to be undertaken by qualified personnel.

The person in charge of maintenance has to be sure that the machine is under TOTAL SAFETY conditions when working.

## **5. Problems Analysis and Solutions**

### **5.1 Problems, Causes and Solutions**

This equipment has been designed to require minimum maintenance. However, some performance failures may happen due to natural wearing caused by the use of the equipment.

If any problem arises check the table below, where there are some detailed and recommended possible solutions.

PROBLEMS	CAUSES	SOLUTIONS
- The equipment does not switch on.	<ul style="list-style-type: none"> <li>-Lack of power.</li> <li>-Problem with the internal or external circuits of the equipment.</li> </ul>	<ul style="list-style-type: none"> <li>-Check if there is electric power.</li> <li>-Call Technical Assistance.</li> <li>-Apply item 3.1 instructions.</li> </ul>
-Smoke or burn smell.	-Problem with the internal or external electric circuits	-Call Technical Assistance.
-Machine switch on but when product touches the blade it stops or runs slowly.	<ul style="list-style-type: none"> <li>-Belt slipping on pulleys.</li> <li>-Damaged motor</li> <li>-Blade is not well stretched.</li> </ul>	<ul style="list-style-type: none"> <li>-Call Technical Assistance.</li> <li>-Call Technical Assistance.</li> <li>-Call Technical Assistance.</li> </ul>
-Unusual noises.	-Damaged bearing	-Call Technical Assistance.
-Damaged Cord	-Problem during transportation.	-Call Technical Assistance.

## 6. Maintenance

Maintenance must be considered a set of procedures with the purpose to keep the equipment best operating conditions , therefore increasing the equipment life and safety.

\*Cleaning – check item 3.3 Cleaning

\*Wiring - Check all wires regarding deteriorate conditions as well as all electric contacts (terminals) regarding tightening and corrosion .

\*Contacts – ON/OFF switch, emergency button, reset button , electronic circuits etc , check the equipment in order to assure that all components are correctly working and the equipment operation is normal .

\*Installation – make sure the installation followed item 2.1 instructions.

\*Useful life of the product : 2 years, for a normal working shift. 1 – Each month check :

- Check the electrical installation
- Measure the voltage at the socket
- Measure the working current and match it with the nominal current
- Check the tightening of all electric terminals to avoid bad contacts
- Check electric motor shaft for possible looseness.
- Check the wiring for overheating , insulation failures and mechanical damages.

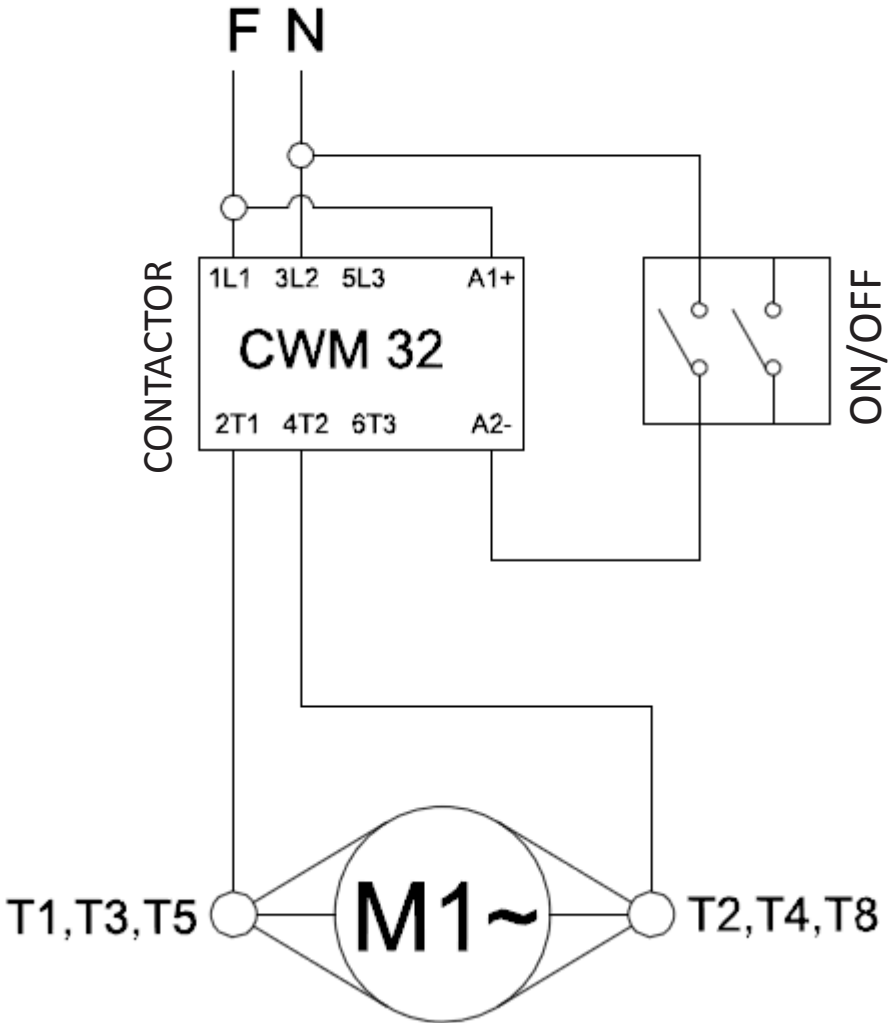
2 - Each three month checks :

- Check electrical components such as ON/OFF switch, emergency button , reset button, electronic electric circuits , overeating, insulation failings, or mechanical damages
- Check cutting units and bearings for possible looseness.
- Check retainers, O’rings, V’rings and other seals.



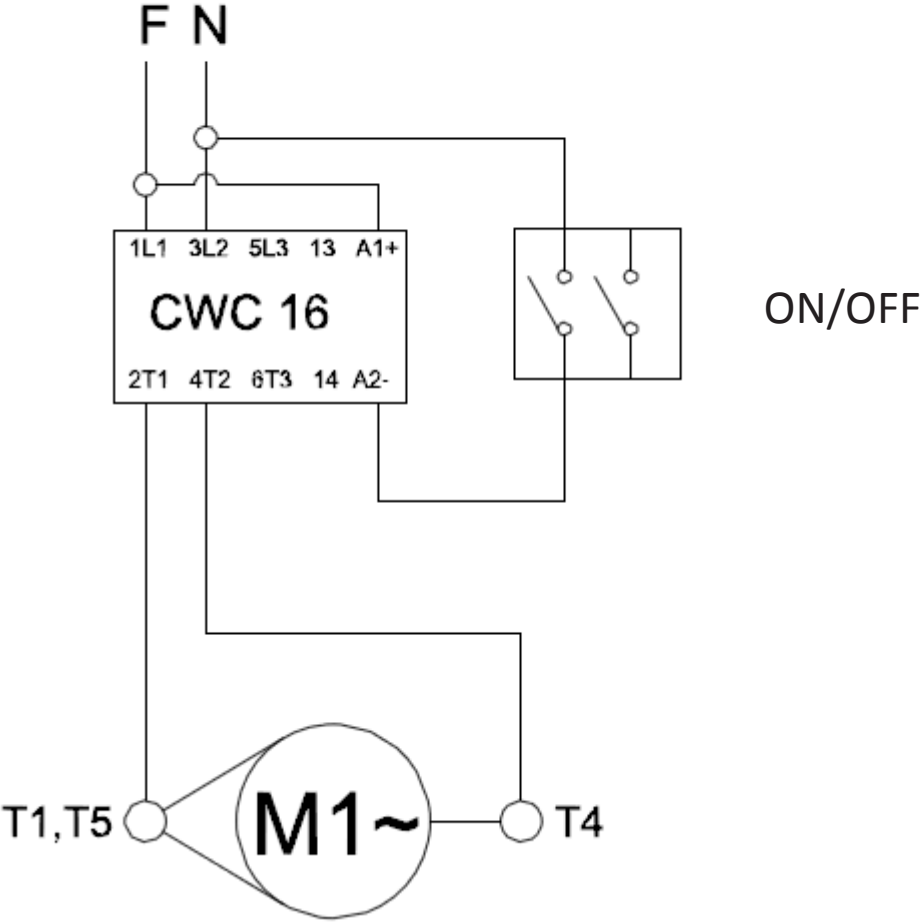
7. Electric Diagram

# ELECTRICAL NETWORK 110V / 60Hz



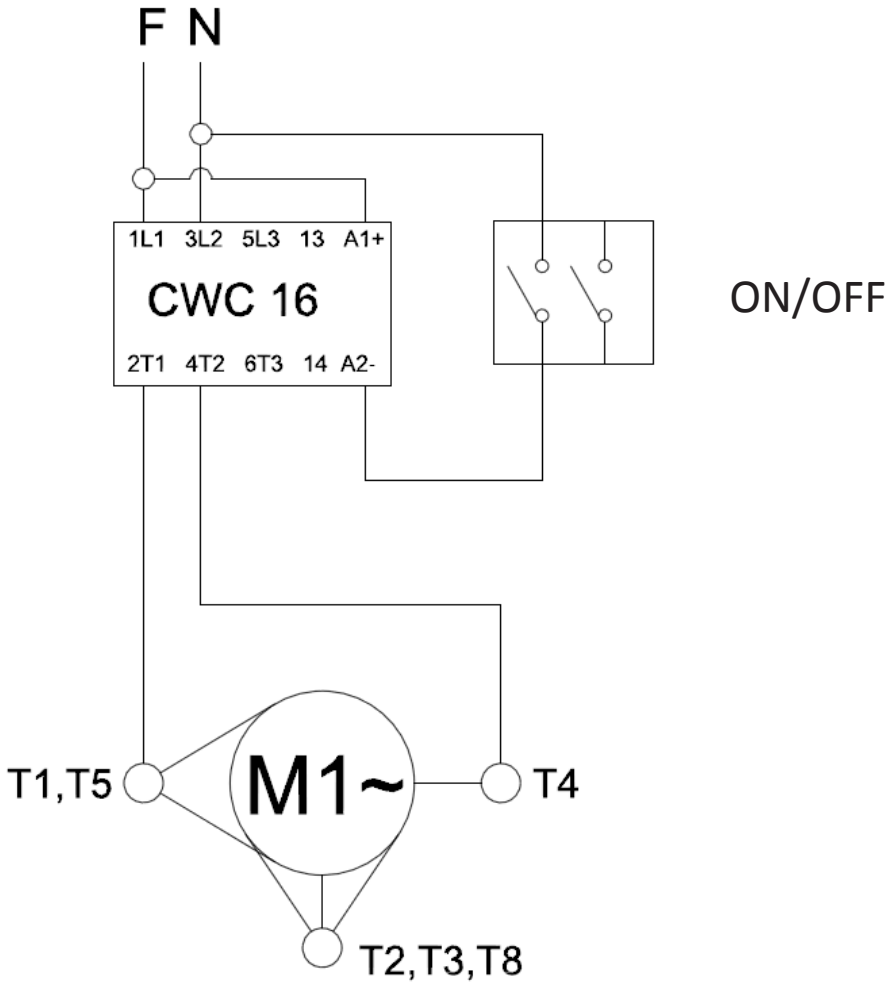
# ELECTRICAL NETWORK

## 220V / 50Hz



# ELECTRICAL NETWORK

## 220V / 60Hz





METALÚRGICA SIEMSEN LTDA.

CNPJ: 82.983.032/0001-19

Rodovia Ivo Silveira - km 12, nº 9525, Galpão 1 - Bairro: Bateas - CEP: 88355-202

Brusque - Santa Catarina - Brasil

Fone: +55 47 3211 6000 - Fax: +55 47 3211 6020

[www.siemsen.com.br](http://www.siemsen.com.br) - [comercial@siemens.com.br](mailto:comercial@siemens.com.br)

65180.0 - INGLÊS

Data de Correção: 01/03/2019

---

- ALÉM DESTAS EQUIPAMENTOS, FABRICAMOS UMA LINHA COMPLETA DE EQUIPAMENTOS. CONSULTE SEU REVENDEDOR.  
- ESTE PRODUTO CONTA COM ASSISTÊNCIA TÉCNICA, REPRESENTANTES E REVENDEDORES EM TODO TERRITÓRIO NACIONAL.  
- DEVIDO À CONSTANTE EVOLUÇÃO DOS NOSSOS PRODUTOS, AS INFORMAÇÕES AQUI CONTIDAS PODEM SER MODIFICADAS SEM AVISO PRÉVIO.

WWW.SIEMSEN.COM.BR