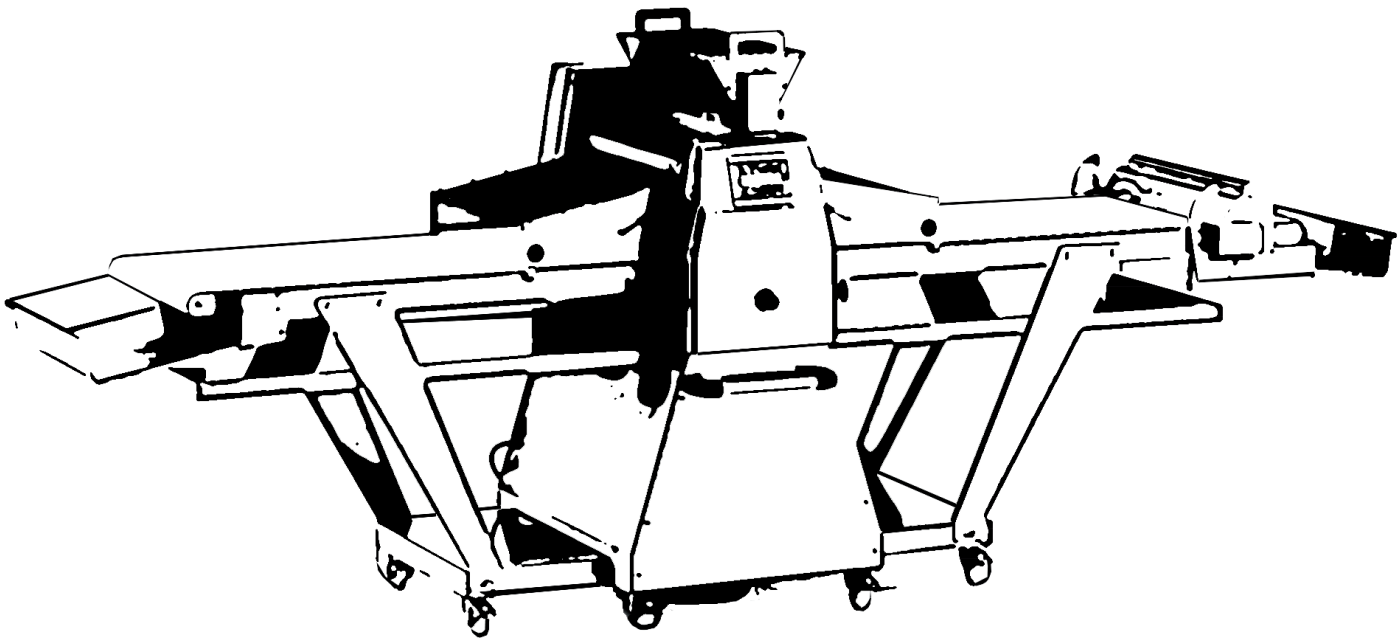


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bakery solutions since 1983

user and maintenance **manual**



CE

Automatic sheeter MK AUT

GENERAL

GENERAL SAFETY INSTRUCTIONS AND INTENDED USE OF THE PRODUCT

The company want this manual to:

- Facilitate the operation of the machine and exploit the full potential of the product;
- Make it possible to perform maintenance more efficiently and help to identify any problems in the shortest time possible;
- Warn against the risks of failure to observe the safety regulations;
- Indicate the limits of use for the preservation of environmental and hygienic conditions for occupational health.

It is necessary that these pages should be read carefully before the installation of the machine.

The instruction manual should be kept near the machine for easy consultation and preserved for the future disposal of the machine.

The manufacturer makes no representation about the suitability of local legal technical installation and support services to the machine while giving in the relevant section of this manual, all indications for a correct installation of the product.

Regarding the provision of necessary services and connections for the correct installation of the machinery, the manufacturer recommends that the intervention of an experienced professional for compliance with any local laws.

INTENDED USE

The machine is made for food preparation and transform a cloth of dough into a sheet of dough, useful for the production of:

1. puff pastry without yeast (cannoli, mille-feuille, etc)
2. leavened pastry (croissants, etc.)
3. dough (pizza etc.)
4. shortbread (basics for cakes etc.)

The machine must be used only for the doughs mentioned above , even up to thin thickness, but not frozen or otherwise.

ATTENTION

In the construction of the machine the following laws have been observed in the CE certificate of conformity.

Is strictly necessary to follow these guidelines:

- Do not intervene in mechanical parts during operation;
- Always keep in mind the instructions for cleaning and maintenance of the machine for maximum safety;
- The operator must be responsible to act safely and the dough sheeter must be used only according to the objectives indicated by the manufacturer;
- Read this manual carefully before using the machine and ensure that it is fully understood by all staff;
- Inform any occasional staff about the operation and use of the machine in particular for the safety.

LABEL DATA:

	
MODELLO MODEL	<input type="text"/>
N° DI SERIE SERIAL No	<input type="text"/>
ANNO YEAR	<input type="text"/>
VOLT - Hz	<input type="text"/> <input type="text"/>
AMPERE	<input type="text"/>
KW	<input type="text"/>
Kg	<input type="text"/>



NOTE:

For any requests for spare parts, it is very important to indicate the serial number of the machine to identify the same, in order to proceed with the order immediately.

TECHNICAL FEATURES

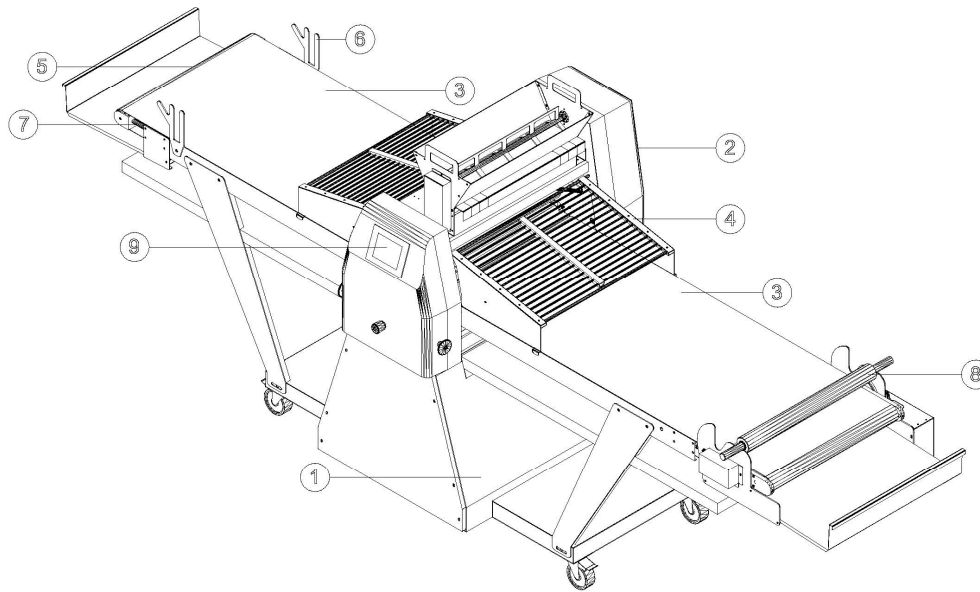
DESCRIPTION OF THE MACHINE

The automatic dough sheeter MODEL MK AUT is available in the following models:

1. MK650/14AUT dough sheeter with decks 650 x 1400 mm
2. MK650/16AUT dough sheeter with decks 650 x 1600 mm
3. MK650/20AUT dough sheeter with decks 650 x 2000 mm

All automatic sheeter models can be supplied in stainless steel aisi 304.

COMPOSITION OF THE MACHINE



- | | |
|---------------------------|--------------------------|
| 1. BASE | 6. ROLLING PIN SUPPORT |
| 2. SIDE PANEL | 7. COLLECTING DOUGH TRAY |
| 3. CONVEYOR BELT | 8. ROLLING PIN |
| 4. GRILL | 9. TOUCH SCREEN PANEL |
| 5. CONVEYOR BELT CYLINDER | |

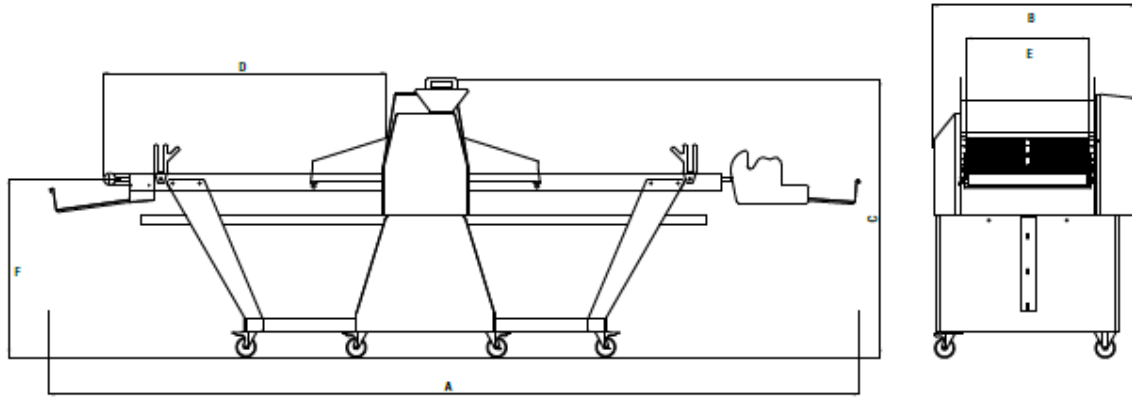
The machine is composed by the painted steel base, supported by fixed tubulars inside, mounted on two fixed and two swivel wheels with brake. In a special case within the base are located the electric system and the engine. The panels are fixed with screws.

The structure of the machine consists of two metal shoulders covered by panels, which argue the two cylinders with chrome plated calibrators, grinded and polished with special hygienic requirements.

The upper roller is adjustable in height with automatic or manual program supplied with the machine. Both cylinders have wipers made of acetylic resin that allow cleaning so that the dough does not stick.

On the both sides of the two cylinders there are two conveyor belts can be disassembled, easy-to-replace, therefore making it possible to bring the dough from side to side of the machine. Cylinders and belts are supported by two legs. The conveyors are suitable for contact with food substances and provided with a roller and idler roller.

At both ends of the deck are situated two trays that collect the dough when it legthen during the lamination. At the end of each deck there are two roller pin with special supports. The machine is equipped with accident protection grids that comply with EC regulations.

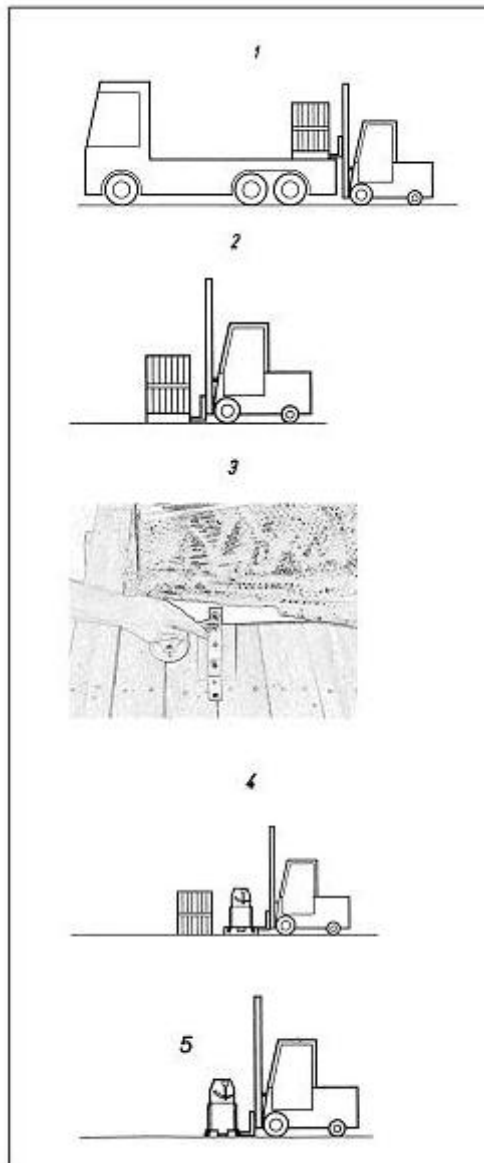


MODEL	MK650/14AUT	MK650/16AUT	MK650/20AUT
Belt width	650	650	650
Cylinders diameter	80	80	80
Cylinders opening	60	60	60
Opening Pos. A	3960	4160	4560
Opening Pos. B	1035	1035	1035
Power Kw	1,1	1,1	1,5
Power Hp	1,5	1,5	2
Weight kg	330	380	480

*Consider -200 mm if your machine doesn't include winder.

INFORMATION ABOUT THE PRODUCT

ISTRUZIONI FOR TRANSPORT AND DOWNLOAD



PACKING

The product is packed with nylon and air bubbles and is placed on one of the following solutions:

PALLET (wooden equipment according to European standard Treaty smoked)

CARTON (cardboard resistant container attached to the pallet with strings)

CAGE (closing system composed of wooden)

CRATE (wooden vessel or other non-transparent material)

Loading and unloading can be made with:

FORK TROLLEY

Transport must be made by taking all precautions to prevent damage to the machine.

It should not be overlapped with other materials, or other materials should be superimposed to the machine is in transport or in storage. The machine must be placed so as not to suffer shock. Prior to discharge, you must check that the packaging is undamaged. We recommend careful laying on the ground. The handling of packaging must be carried out taking into account the following signals.

Do not use metal straps during transport and unloading.

STORING

It is essential to protect the machine from dust and weathering.

UNPACKING

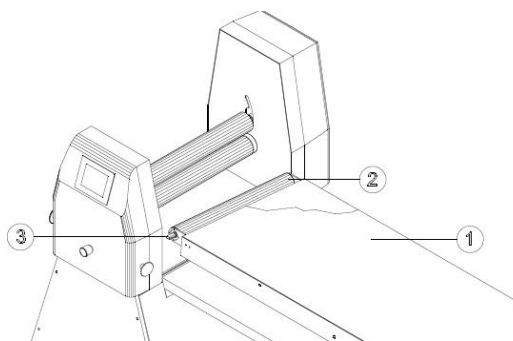
After you loose the packing, ensure the integrity of the machine and in case of doubt, contact your dealer.

The items are placed in the collection, especially if dangerous and polluting.

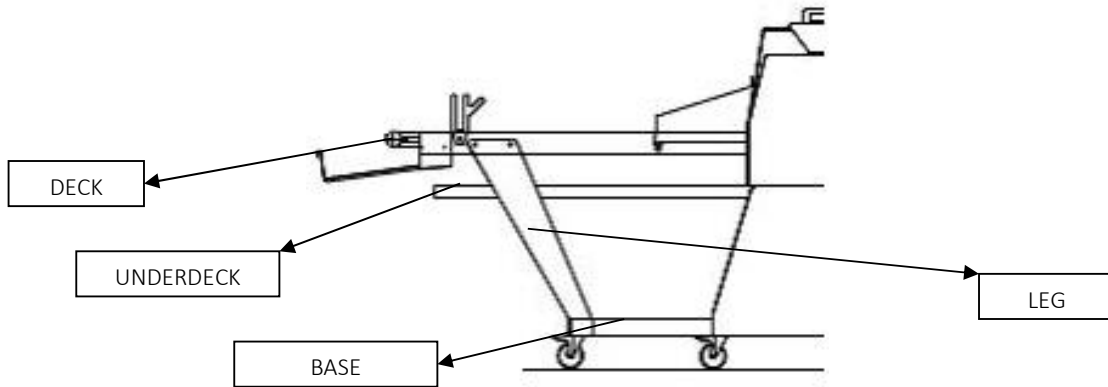
Do not discard accessories and/or any documents.

INSTALLATION: ISTRUCTIONS

- Place the machine in such a way as to make it accessible from each side;
- The machine has wheels, so you can move it to the cleaning and maintenance;
- Lock the machine with the front wheels with brake.
- Make sure the environment is sufficiently illuminated and ventilated;
- Close all protection panels;
- Check that the inputs have the right dimensions for the base and lamination;
- Assembling of decks or conveyor belts:



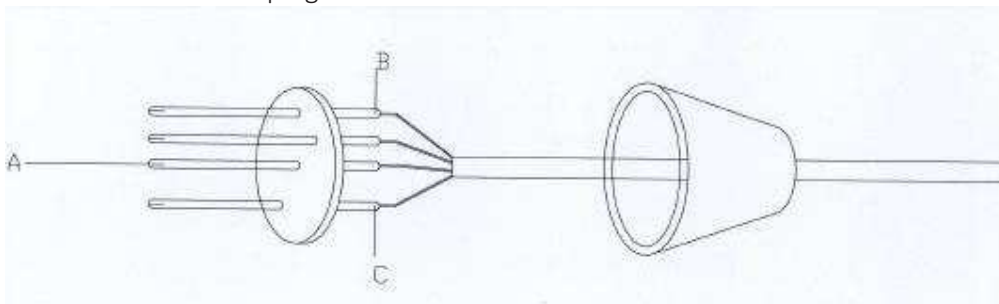
- Place a belt to tailstock supple;
- Push the belt towards the centre until the attack takes place;
- Proceed in the same way for the other belt.



- Screw the leg support in the base
- Screw the leg in the base/leg support
- Put the underdeck in the slot and screw it in the base
- Screw the deck in the leg

ELECTRIC CONNECTION

- The power supply is located at the rear of the machine;
- Note that the voltage corresponds to the voltage available.
- The connection must be made using the connection to an isolating device of voltage or manual command to allow you to separate the electrical equipment of the machine from the mains when necessary.
- For the dimensioning of the cable and its main switch see electrical schema data;
- Apply to the connection cable of the machine a retention plug suitable for isolating device installed and connect to;
- Start the machine and check that the direction of rotation of the carpets complies with pictograms that indicate the direction;
- If this does not occur, you may have been swapped 2-wire position base as shown below, then you may have to intervene on the plug .



Note: a standard for the SAFETY of ELECTRICAL INSTALLATIONS

For Italy electrical systems must meet, in addition to the technical specifications of the CEI, the rules of 5.3.1990 Law No. 46 and its implementing regulation, which is DPR. No. 47 6.12.1991. In particular, it requires that the system is made by entrepreneur holding professional, technical requirements listed on the register. The installer is obliged to grant to the customer a declaration of conformity. It is suggested to check the old installation in order to adapt them to the latest safety standards and State-of-the-art.

CHECKS AND INSPECTIONS

Panels and protections must be closed and locked by screws so that the panel does not move. Make sure that the protection grids are in the resting position for the operation of the machine.

MAINTENANCE AND CLEANING

The manufacturer recommends a thorough cleaning on a daily, weekly and twice a year.

Before any operation, disconnect the power plug from the electrical panel.

DAILY: it is necessary to clean the entire machine surface from powdery.

It is also good to remove the scrapers from its mountings and clean them with a damp cloth.

They may also be washed in the dishwasher.

WEEKLY: it is necessary to clean the conveyor belts on top with a brush. You can also clean under the carpets with a damp cloth, loosening the draw bar of the roller at the end of the plan. If stains are visible on the tape, use a mild detergent suitable for food contact.

To clean the cylinders calibrators (reels), you must remove the scrapers and dusting with a damp cloth. It is advisable to clean the machine surface with a cloth. The photocells must be cleaned for a correct use of the machine.

SEMI-ANNUALLY: it is recommended to clean the inside of the machine. To do this, consult a competent operator.

ATTENTION!

It is strictly forbidden to:

- use compressed air
- clean with harsh chemical detergents (solvents, thinners, etc.)
- clean with the machine switched on or running.

It is advisable to:

- use a vacuum cleaner to the dust/excess flour.

ORDINARY MAINTENANCE

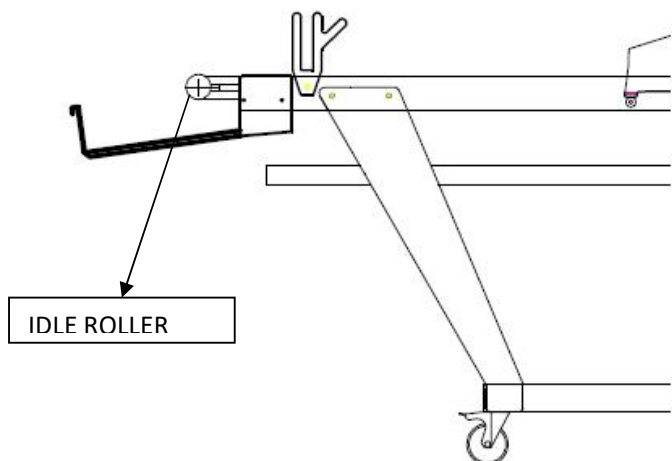
The removal of the panel involves the use of keys or special tools and must be carried out by authorised and specialised personnel, with the machine at a standstill and electric plug disconnected.

The machine must be checked periodically to ensure proper operation of all protections.

Then do a startup and try all the shells. If the sensors are properly stopping the machine means that it is all legit. If this does not happen, immediately contact the service centre of the manufacturer/dealer.

MECHANICAL MAINTENANCE

Adjust the tension of the conveyor belts when slip or move sideways.



Lubrication: the machine does not require lubrication. It is not recommended to oil the chains, because oil particles could soak the clutch compromising operation.

ELECTRIC MAINTENANCE

It is good to clean out the parts that are most exposed to infarinamento and check each week microswitches of the guards.

Any work on electrical parts must be done by authorised personnel and with the machine turned off.

DAILY CLEANING

Clean all soiled surfaces: wash out the panels with a damp cloth with products suitable for stainless steel and dry.

Close the protections left open, plug it in, turn on the machine and let it run for a few moments.

Do not use jets of water or compressed air as this could affect the operation of the machine and the health of employees. Indicates the use of a vacuum cleaner.

Flour cleaning must be carried out as frequently as possible, as it may cause an explosion.

SPECIFIC CLEANING OF THE MACHINE

-At the end of each work is necessary to clean the cylinders, conveyors, scrapers, photocells and protections. All machinery must be to prevent dusting of leftovers go to integrate with the dough.

-For cleaning just use household detergent and copious amounts of water for rinsing.

-If there are incrustations, use a plastic scraper.

-The scrapers are removable without tools.



The upper scrapers can be dismantled dropping the springs and extracting scrapers from housing. Those of the lower cylinder dismantling dropping the springs and turning the seats around the hub.

To clean the belts, do not use water temperature above 60° or caustic soda, hydrochloric acid, sulphuric acid, since the tape could be damaged.

INTERNAL HANDLING

Handling must be carried out with the right precautions to prevent damage to the machine.

Rest position only in model SMK650/14AUT without winder:

When the machine is not used, it can be put to rest. Just lift the decks and slide the leg and hold the inner threaded bar in the way it engages in the slot. So it reduces the extension.

The operation involves lifting effort and a risk of falling, it is mandatory to carry out two operations.

RETIRE

- In the case of storage, the machine must be protected against dust and located indoors.
- In the case of disuse for a long time, the machine should be protected with a coating.
- It is not necessary to use special precautions for the motor or the electrical system.
- If the machine is moved to a place unattended, you have to make sure is not subjected to knocks or tampering.

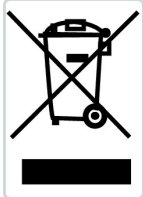
At reactivation it is necessary to make a careful examination of his integrity.

USER INFORMATION

Pursuant to art. 13 of Legislative Decree n. 151 July 25, 2005 "implementation of directives 2002/95/CE, 2002/96/CE and 2003/108/Ce, regarding the reduction of use of hazardous substances

in electrical and electronic equipment and waste disposal," the dustbin symbol reported on the equipment or on the packaging indicates that this product at the end of their life must be collected separately from other waste.

Recycling of end-of-life machine is managed by the manufacturer. The user who wants to get rid of this must therefore contact the manufacturer and follow the system it has adopted. The adequate differentiated collection for the next startup of the equipment helps to avoid negative effects on the environment and health and favours the recycling of materials. Abusive disposal entails administrative penalties.

<p>If the good falls into the category A.E.E. (electrical and electronic equipment) as required by the Decree leg. 151/2005, on the marking plate of the product there is reproduced the symbol.</p>	
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DEMOLITION

- Remove the power cord.
- Remove moving parts that may be a source of danger.
- Scrap iron collection centers.
- The remaining parts must be disposed of according to the regulations in force, using specialized companies.

ACTIVATION

When the machine is installed and all connections have been made it is necessary to provide for a general check before starting using the appropriate command.

You should follow the manual carefully.

The verification must be carried out on:

- the proper placement of all connectors and power outlets
- the correct positioning of the defenders
- the correct locking of the wheels to avoid the movements caused by the operation of the machine
- the correct closure of the panels on the interior parts
- the existence of pictographs and warning in the positions indicated in the manual

FIRST ACTIVATION

After having carried out the checks indicated in the previous paragraph, you can proceed to start up the machine.

Switch on the machine and make sure there are no irregular mechanical noise: if in doubt, stop the machine and report the incident to the technical assistance of the manufacturer or reseller.

Make sure the carpet from moving in the correct direction; If this does not happen it means that

the phases are wrongly connected.

Before starting the machine, ensure that the manual has been read and understood by all personnel involved.

GENERAL INFORMATION

Do not carry out maintenance operations with the machine voltage.

Do not open the electrical cabinet unless authorized.

Connect the machine in compliance with the laws in force.

Connect the machine to the ground.

MACHINE WORKING

Dough sheeting occurs between overlapping and reducing the dough thickness to each pass through the cylinders. Two conveyor belts simplify these steps.

The alternative movement happens with electrical switching of the motor controlled by a computer program, while the approach of the cylinders is done by computer-controlled motor.

If you have applied the pulverizer, the same allows using the program not pulverise electric pasta anytime.

In the case where the winder is applied, you sheet the dough at the desired thickness and at the last pass the winder belt make the pin falling down and the dough will be rolled up on it.

SAFETY DEVICES

The machines, in compliance with Directive 98/37/EC, must be adequately protected against potential risks for employees to work.

For this purpose the company has conducted a series of evaluations of the risks and it has set up a procedure of reduction according to criteria dictated by reference technical standards and the practice of building the protections and shelters.

The risks are shown in pictographs and in the manual.






There are also safety devices that make it safer to work in all the operations that it performs.

The safety devices on the machine are:

- emergency button
- protection grids
- plc cycle reset

SAFETY AND IDENTIFICATIO LABELS

In case of loss or illegible plates on the machine, please enquire at the firm and apply to the position indicated in the figure.

1		Danger of electric type	3		Danger of electric type
2		Danger of electric type	4		Danger of hand squashing
5			<p>Danger of electric type</p> <p>Do not remove safety devices</p> <p>Do not clean, grease or repair the machine when it is in action</p> <p>Read the manual</p>		

PROHIBITIONS AND OBLIGATIONS FOR THE PREVENTION OF ACCIDENTS

Never tamper with the safety devices.

Do not operate the machine with conveyor belts unhooked.

Periodically inspect and maintain effective security devices.

Do not install accessories that are not complying with safety standards.

In case of dangerous situations, stop the machine functions with the emergency device and remove the power supply by editing the line selector.

In case of protections dismantling, for maintenance or intervention, reassemble the protections in their original location.

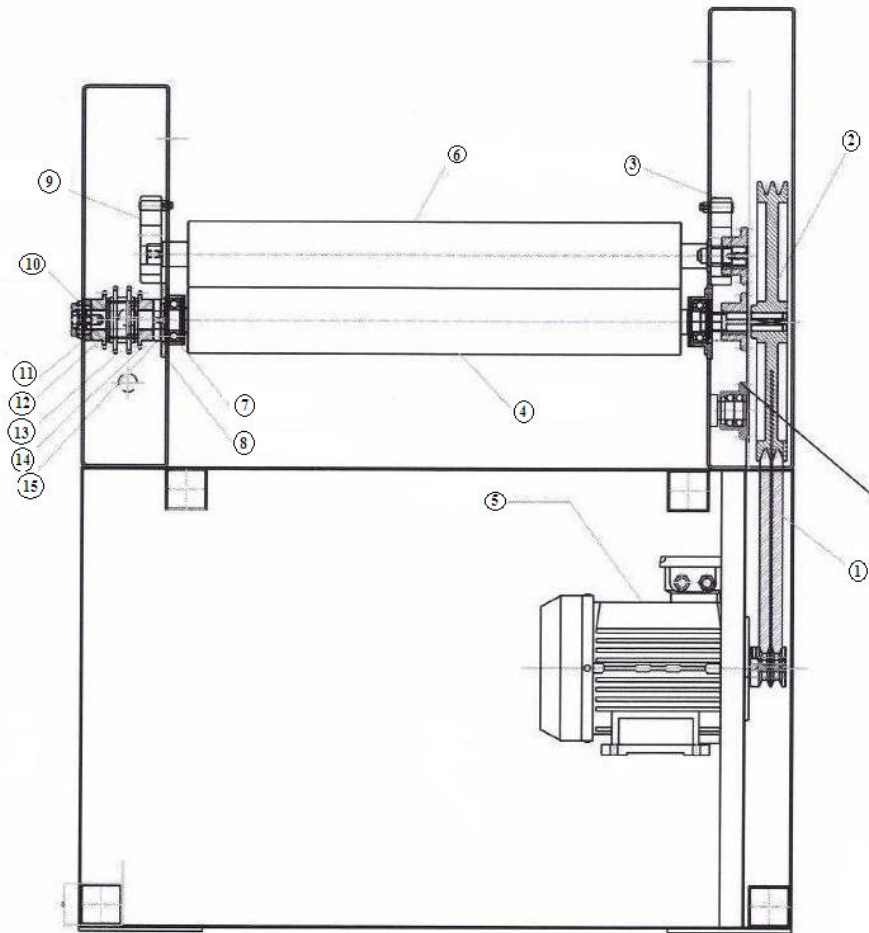
ATTENTION

The machine works in an environment at risk of bursting due to the presence of finely chopped organic powders, so it is forbidden to smoke while working.

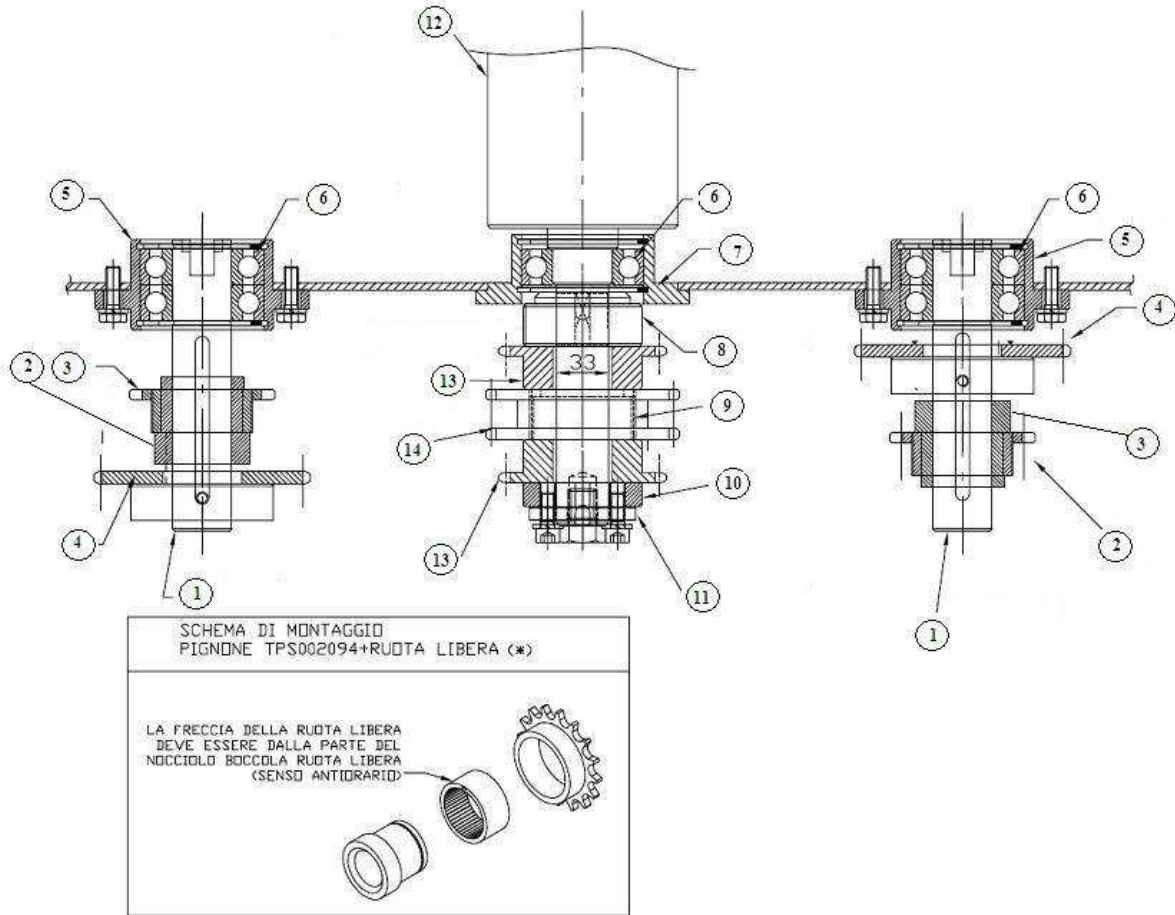
The panels for access to internal parts must not be tampered with or removed/opened unless in case of real need and only by qualified personnel.

To avoid inhalation of dust and the shedding of the same in the environment it is advisable to carry out the first tests of dough at minimum speed.

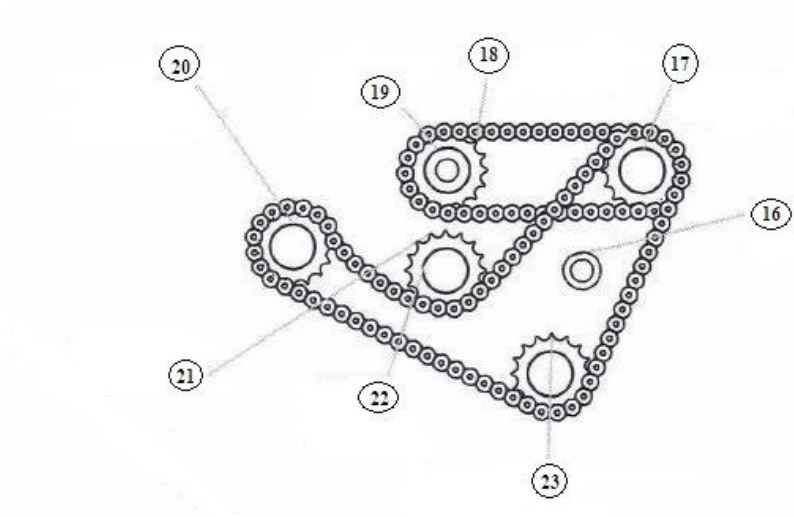
SPARE PARTS LIST



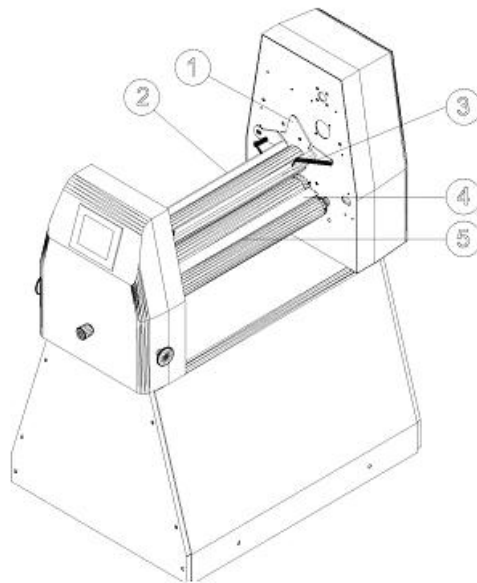
<u>POS.</u>	<u>CODE</u>	<u>DESCRIPTION</u>
1	ZTCS602136	BELT
2	ZTPS602037	PULLEY
3	ZLLS001018B	UPPER CYLINDER LEVER
4	ZSF650TC068	LOWER CYLINDER CALIBRATOR
5	ZSF650A088	MOTOR
6	ZSF650TC066	UPPER CYLINDER CALIBRATOR
7	ZTCS602130	BALL BEARING
8	ZTSS001080	LOWER CYLINDER
9	ZLLS001018B	UPPER CYLINDER LEVER
10	ZTRS001055	CLUTCH WASHER LID
11	ZTDS001082	REAR CLUTCH SPACER
12	ZTPS002094	CLUTCH PINION
13	ZTAS001097+ZTAS001098	PINION
14	ZTPS002094	CLUTCH PINION
15	ZTDS001052	FRONT CLUTCH SPACER



<u>POS.</u>	<u>CODE</u>	<u>DESCRIPTION</u>
1	ZTPS001062	PULL CYLINDER PIN
2	ZTPS002094A	PINION
3	ZTPS002096	FREEWHEEL
4	ZTPS002091	PINION
5	ZTSS001069	DRIVE SHAFT SUPPORT
6	ZTCS602130	BALL BEARING
7	ZTSS001080	SUPPORT
8	ZTDS001052	FRONT CLUTCH SPACER
9	ZTAS001098	THREADED ROD
10	ZTDS001082	REAR CLUTCH SPACER
11	ZTRS001055	CLUTCH WASHER LID
12	ZSF650TC068	LOWER CYLINDER CALIBRATOR
13	ZTPS002094	PINION
14	ZTAS001097	PINION

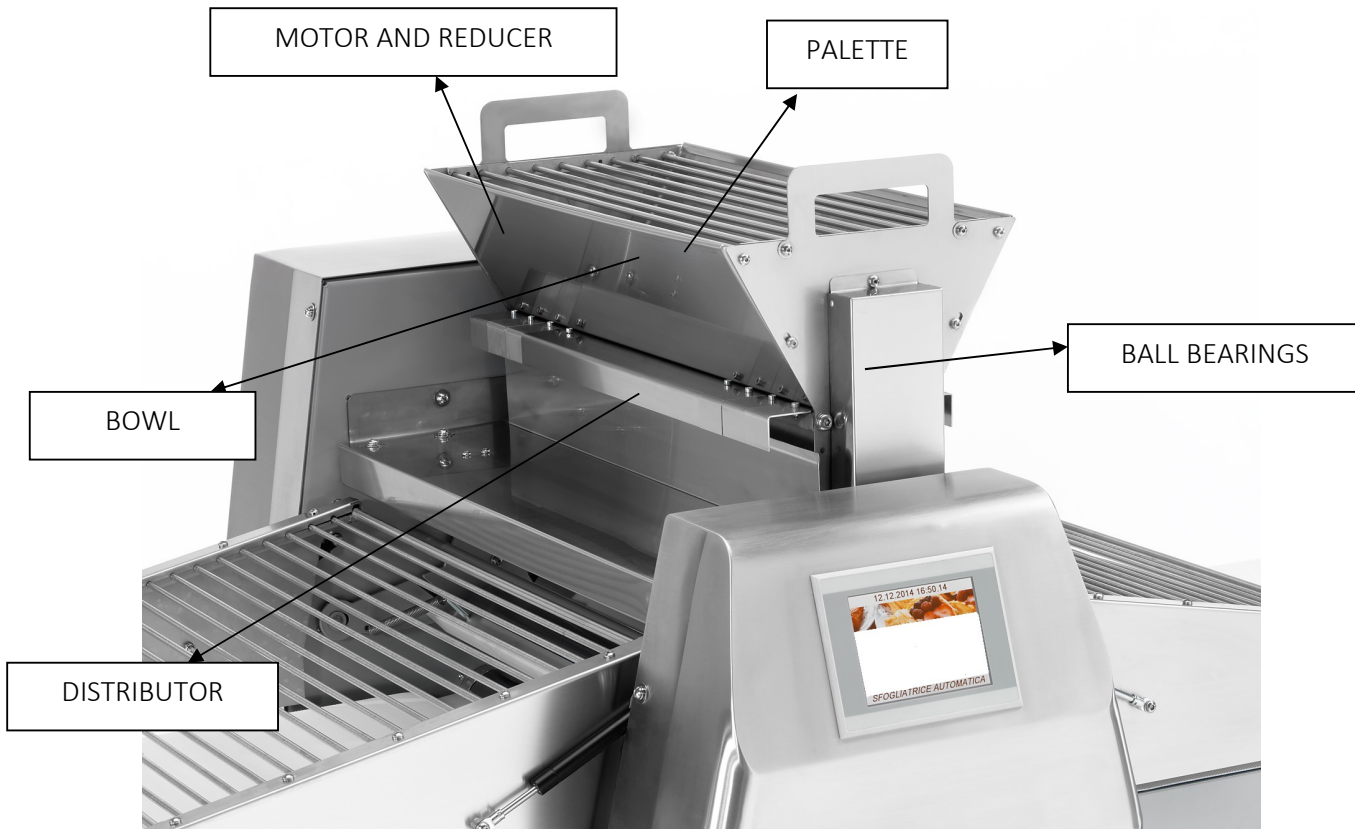


<u>POS.</u>	<u>CODE</u>	<u>DESCRIPTION</u>
16	ZTSS001073	SUPPORT
17	ZSF650A053	PINION
18	ZSF650A056	UPPER CYLINDER PINION SPACER
19	ZSF650TC066	UPPER CYLINDER CALIBRATOR
20	ZSF650A054	PINION
21	ZSF650A055	PINION
22	ZSF650TC068	LOWER CYLINDER CALIBRATOR
23	ZSF650A054	PINION



<u>POS.</u>	<u>CODE</u>	<u>DESCRIPTION</u>
1	SF650A039P	CLUMP FOR SCRAPER SUPPORT
2	SF650A039P	UPPER SCRAPER
3	ZTMS002165	SCRAPER SPRING
4	SF650A038P	LOWER SCRAPER
5	SF650A6720	DRIVING CYLINDER

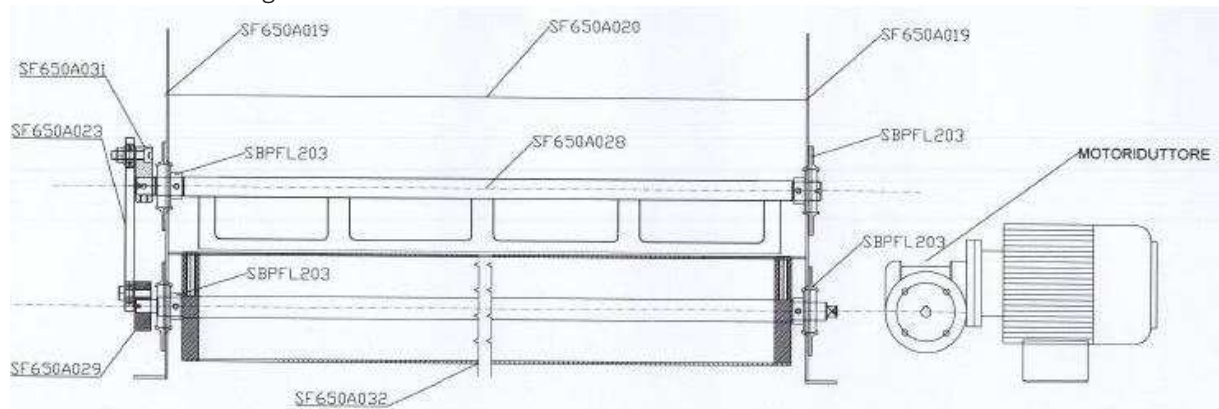
AUTOMATIC FLOUR SPREADER



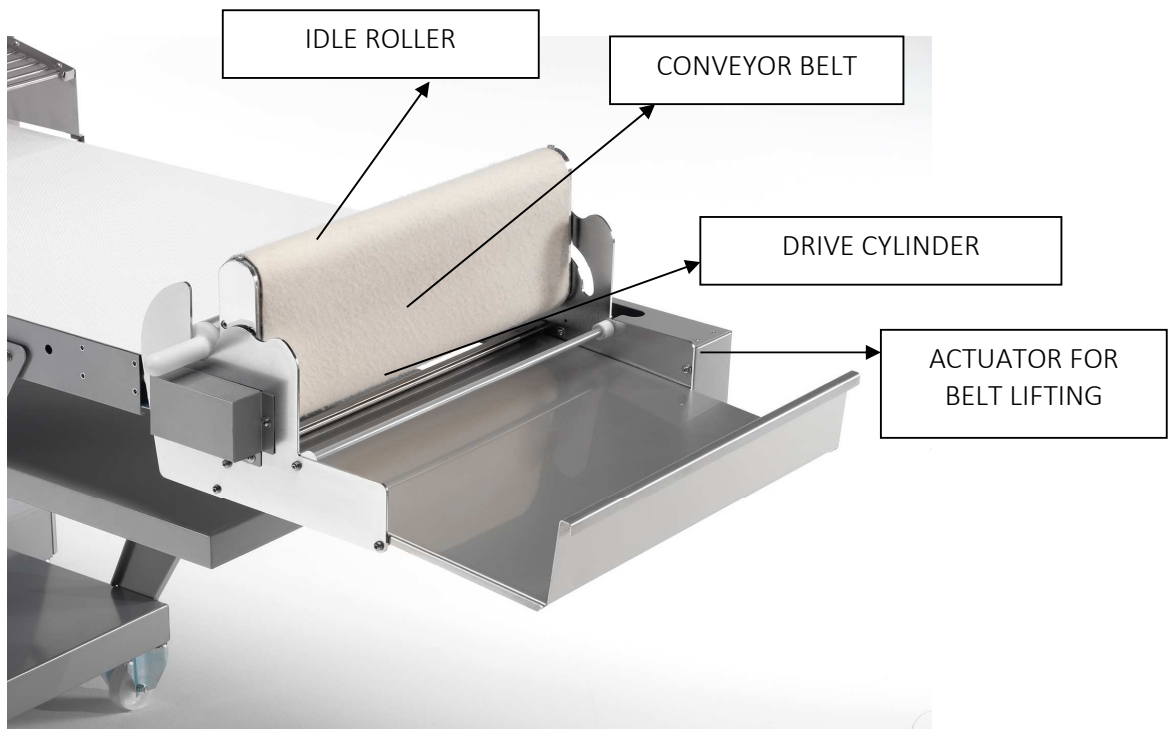
The working of the automatic flour spreader is programmable. Dusting of flour is manually adjustable in width and quantity with special drawers located in the same. With this system the flour consumption is considerably reduced and the quality of the product is better.

The object is composed of:

- stainless steel bowl
- palette for the descent of the flour
- distributor for dosing



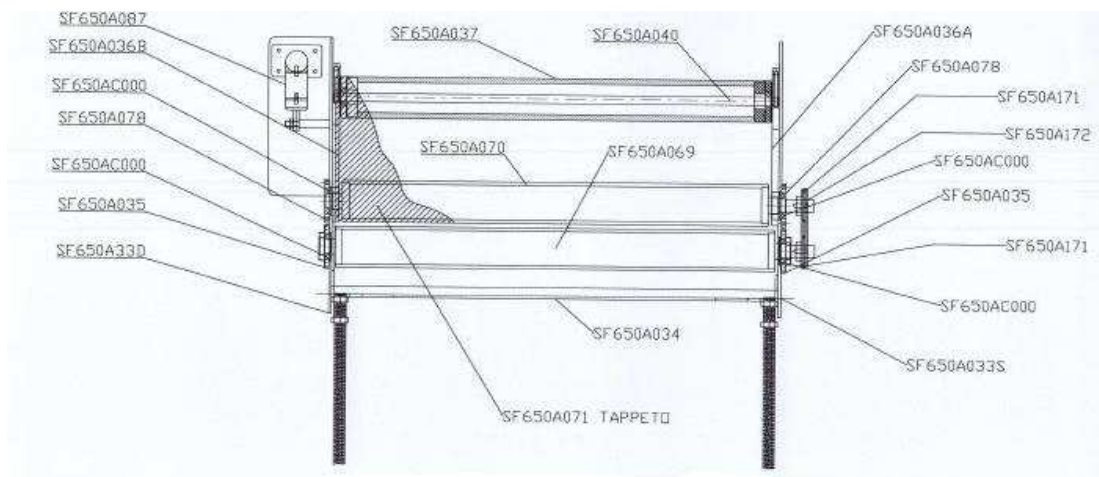
AUTOMATIC WINDER



The winder is positioned at the end of the conveyor belt, to the right. This tool allows you to roll the dough gently when it reaches the desired thickness.

The winder is composed of:

- rolling pin
- actuator for the ascent and descent of the belt
- belt
- idle roller
- drive cylinder



MADE IN ITALY

Home page

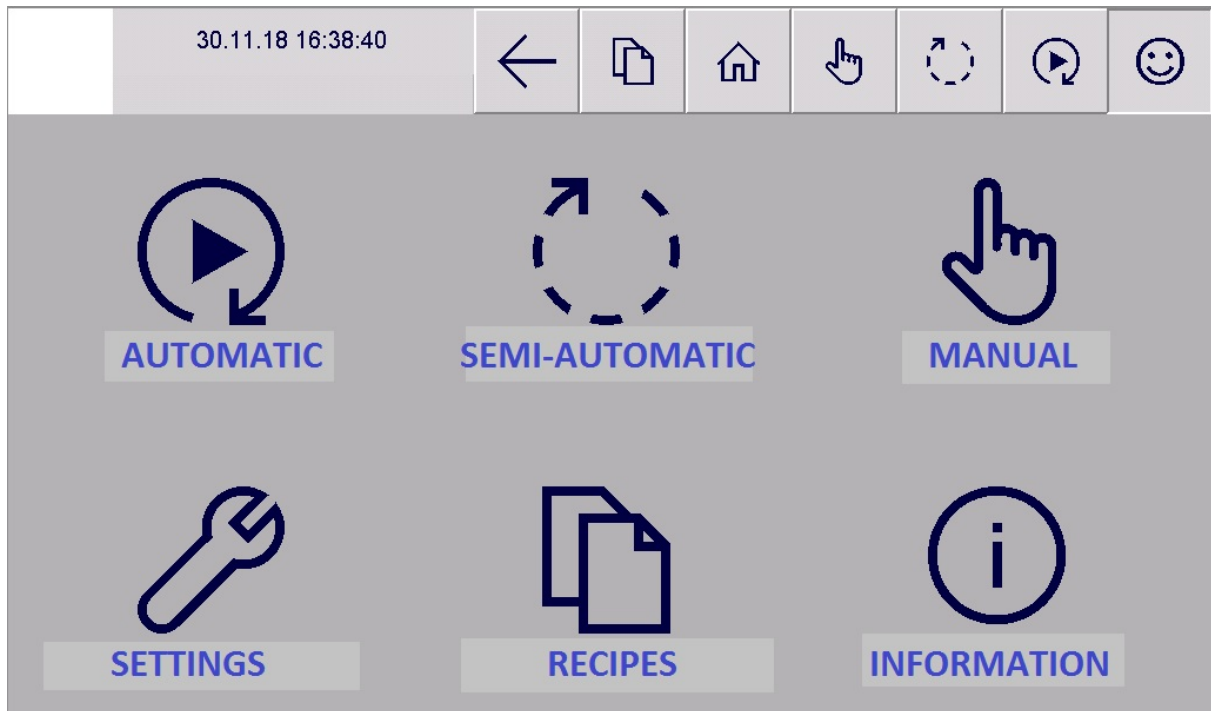
In the starting phase the operator panel is as follows:











Clicking anywhere on the screen, you enter the menu page.

Menu page

Menu page is as follows:



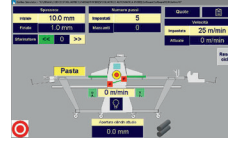
The icons have the features explained below:

Icon	Function	Destination / description
 	The icon reveals warnings.	 is present if there are not alarms, but if there are alerts, you see  the icon
	Clicking it you enter in the home page.	Clicking the icon you come back to the home page: 
	Clicking it you enter in the automatic functions page.	The icon redirects to the page:  This is the working page if you use the function recipes.



Clicking it you enter in the semi automatic functions page.

The icon redirects to the page:

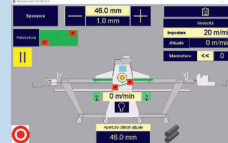


This is the page for the semi automatic working system.



Clicking it you enter in the manual functions page.

The icon redirects to the page:



This is the page for the semi manual working system.



Clicking it you enter in the settings page.

The icon redirects to the page:

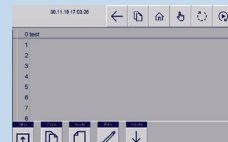


In this page you find a list of settings and parameters.



Clicking it you enter in the recipes page.

The icon redirects to the page:



In this page you can set a new recipe or select one for the production.



Clicking it you enter in the information page.

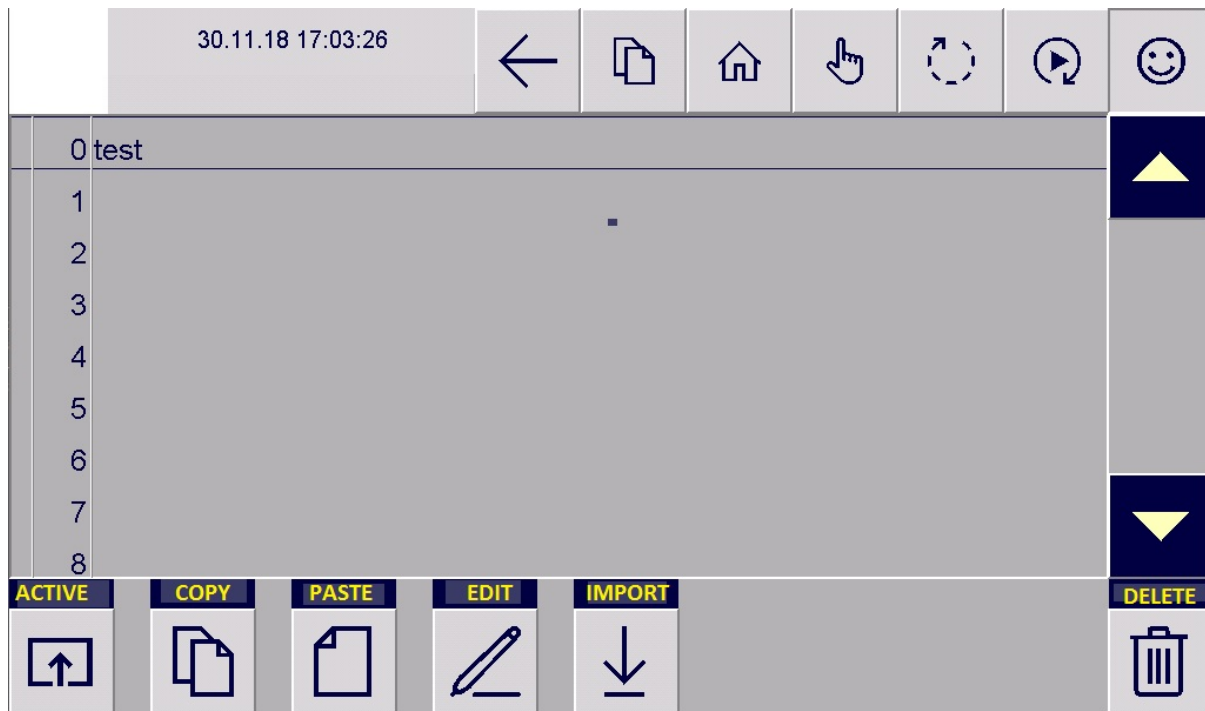
The icon redirects to the page:

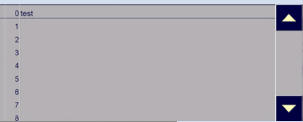














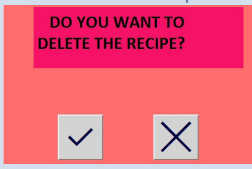
There are Manufacturer contact details.

Recipes settings page

Recipe settings page is as follows:



Icon	Function	Destination / description
	Select the recipe to modify or choose.	With the arrows on the right you select the recipe to open, activate, delete, copy or paste.
	Clicking it you enter in the home page.	Clicking the icon you come back to the home page: 
	Clicking it you enter in the manual functions page.	This icon redirects you to the page of manual working system.
	Clicking it you enter in the automatic functions page.	This icon redirects you to the page of automatic working system.

		<p>The icon reveals the warnings.</p>	<p>The icon  is present if there are not alarms, but if there are alerts,</p>
<p>Active</p>		<p>Active recipe.</p>	<p>Questo pulsante ha la funzionalità di mandare in lavorazione la ricetta attiva, in sostanza copia i parametri della ricetta a monitor nel plc. Tali parametri saranno i dati salienti del ciclo di lavorazione. Deve essere premuto dopo aver selezionato e aperto una ricetta.</p>
			
<p>Copy</p>		<p>Copy recipe.</p>	<p>It copies the selected recipe and opens it in a temporary memory, then it is pasted and modified or renamed.</p>
			
<p>Paste</p>		<p>Paste recipe.</p>	<p>It pastes the la test content in the selected recipe.</p>
			
<p>Delete</p>		<p>Delete recipe.</p>	<p>This button deletes the selected recipe: before you will see the confirmation request:</p>
			
	<p>You confirm the cancellation of the recipe.</p>		<p>This frame appears when you you want to delete a recipe.</p>

Activate a recipe

1. If you want to open a saved recipe, proceed as follows:



2. Move the focus on the recipe with the arrows



3. Then press

Copy and paste a recipe

If you want to copy a recipe, it is enough:



1. Move the focus on the recipe with the arrows



2. press button



3. the selection becomes



4. push



Save a recipe



If you want to save a recipe after the change of parameters, press the button

Save a recipe with name

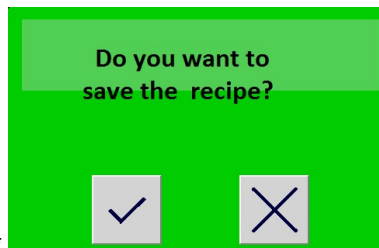
If you want to save a recipe with name after the changes of parameters:



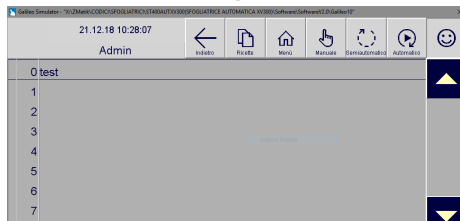
- press the icon



- it appears
- write the new name (ex. TEST) and press RET;

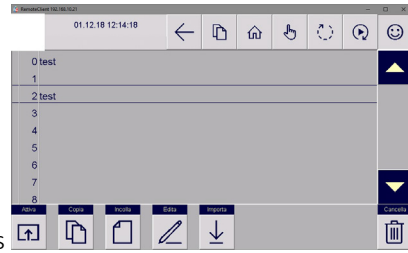


- it ask you to confirm the salving, press V;



Delete a recipe

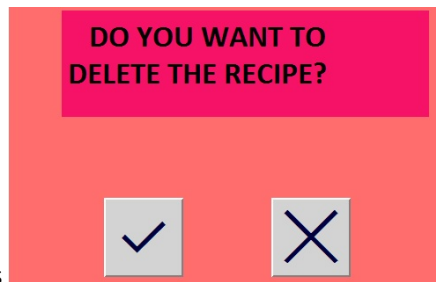
If you want to delete a recipe:



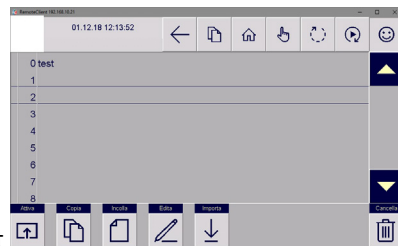
1. Move the focus on the recipe with the arrows



2. Then press



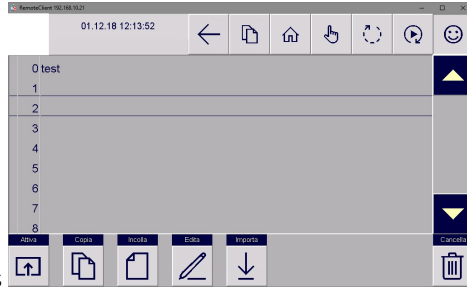
3. It appears
4. Press the confirmation;



5. In this part the recipe has been deleted.

Create a new recipe

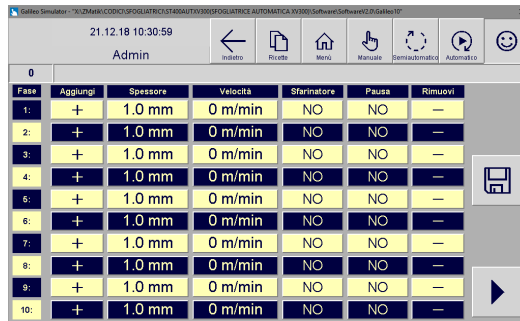
If you want to create a recipe, proceed as follows:



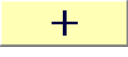

1. Move the focus on the recipe with the arrows



2. Then press



3. You see this frame where there are the parameters of the open recipe (at 0 because it is new);
4. The adjustable parameters are:
 - a. Belt speed phase 1..50;
 - b. Thickness phase 1..50;
 - c. Pause at end phase 1..50;
 - d. Flour duster start phase 1..50.

5. It is also possible to add or remove a phase, clicking on button  so the whole phase of the same button will be moved forward leaving a phase to be set again; instead pressing  the phase of the same button will be canceled and the next one will be inserted in its place;

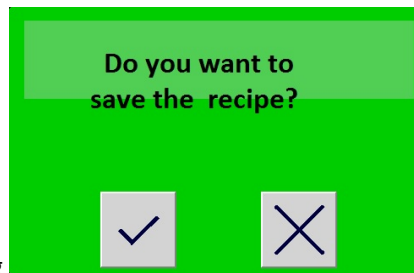


6. Put all the phases you prefer, then press the button

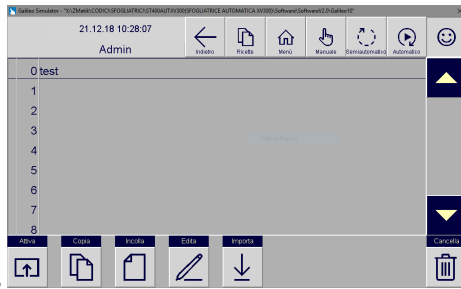


7. It appears

8. Write the name, ex TEST, and press RET;



9. You'll asked to confirm the saving, Press V;



10. It appears and the recipe's name has been changed.

Automatic system

Automatic page is as follows:

0	test				RECIPE	
TICKNESS		NUMBER OF PASSES		SPEED		
INITIAL	10.0 mm	SET UP	10	SET UP	34 m/min	
Attuale	10.0 mm	MISSING	10	ACTUAL	0 m/min	
FINAL	1.0 mm					

In this page you can see the machine condition and the progress of the selected recipe.

TICKNESS	
INITIAL	10.0 mm
Attuale	10.0 mm
FINAL	1.0 mm

In this part you see info about initial thickness of the dough, actual thickness in production, final thickness set up in the recipe.

In this part

0	test	RECIPE	
---	------	--------	--

you see the number and the name of the recipe.

NUMBER OF PASSES	
SET UP	10
MISSING	10

In this part the total number of phases and the missing phases.



In this part you see the belt speed and the inverter speed feedback.



In the upper right corner the icon redirects you to the frame for the recipes choice.



Below there is the button, you need it to restart production from 0.



In the lowest left corner there is the button, which stops the production, without resetting the condition.



The button turns on the light in the working area: if you click it, the icon becomes because the light is turned on.



The button redirects to the menu page.



This box shows in which side put the dough for the first start.



In case of alarm, you see the signal and near there is the button to reset.

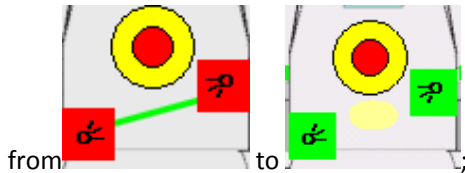
Signals are:

1. buttons pressure:



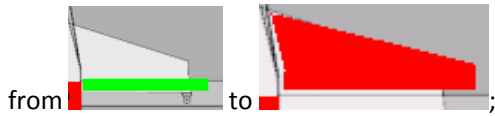
from to . The color is brighter when the buttons are pressed;

2. photocell pause:

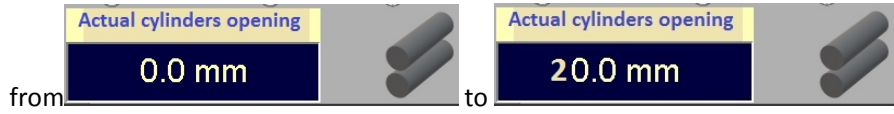


from to ;

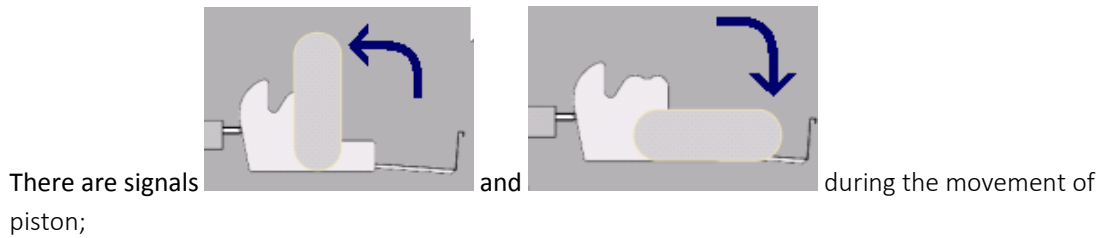
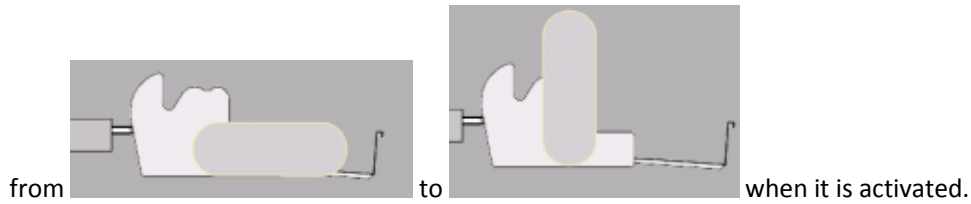
3. limit switch of the grills:



4. rollers opening:



5. winder:



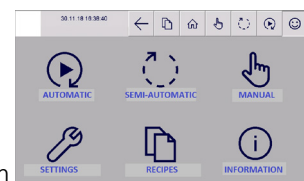
6. during the belt rotation, arrows indicate the direction



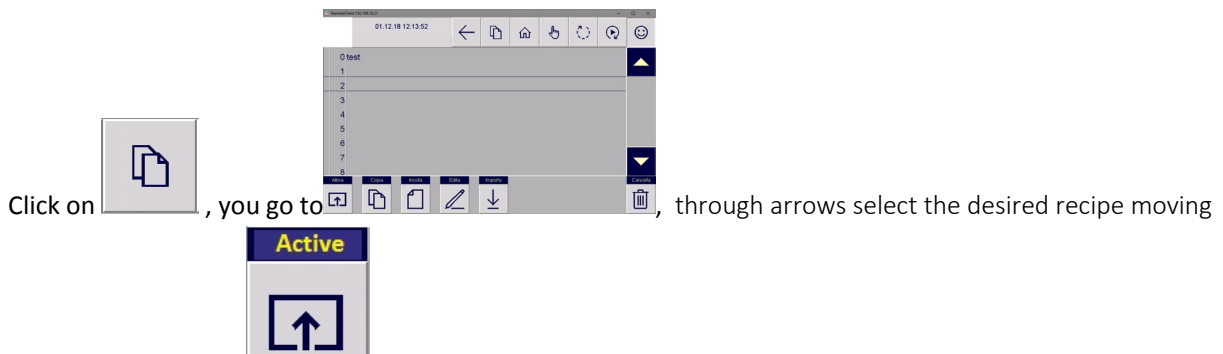
How to work in automatic system

To perform automatic processing simply follow these steps:

Turn on the machine using the general switch.

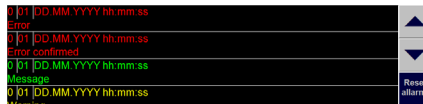


You see the frame  click on the monitor, you enter in



Click on , you go to , through arrows select the desired recipe moving

The page “automatic” will be open automatically.



Now reset alarms with reset button and position the dough where



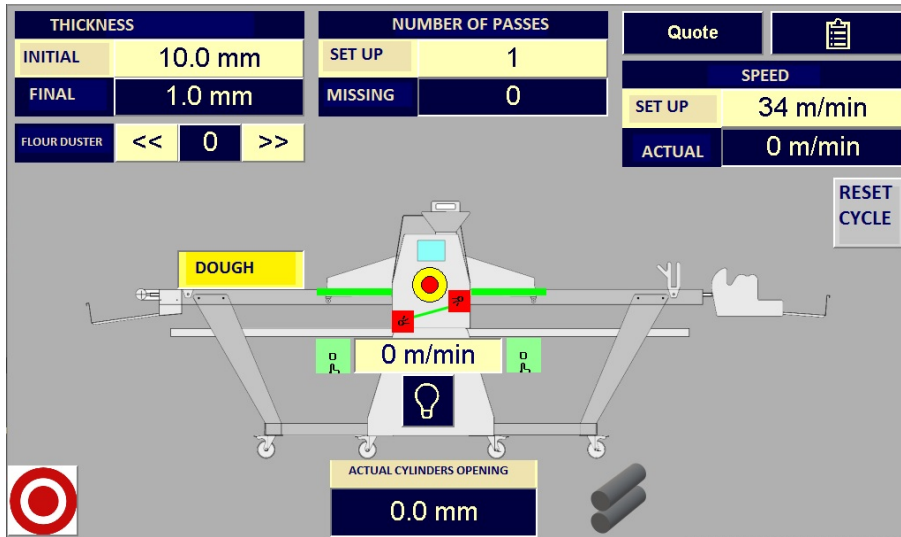
indicated with then press any green push button situated to the both sides of touch screen.

Both buttons, automatically, have the function to pause the working cycle, the status is indicated by



Semi automatic system

Semi automatic page is as follows:



In this page you can see the machine condition and the progress of the selected recipe.

THICKNESS	
INITIAL	10.0 mm
FINAL	1.0 mm

On your left you see the case you see info about initial thickness of the dough and the desired final thickness.

NUMBER OF PASSES	
SET UP	10
MISSING	10

In the central part, in the clear box you set the number of passes you desire to do to reach the final thickness, in the darkest box you see the missing passes (countdown).

SPEED	
SET UP	34 m/min
ACTUAL	0 m/min


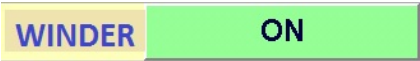


On your right you see the case where you find the set belt speed and the inverter speed feedback.

FLOUR DUSTER	<<	0	>>
--------------	----	---	----


On the left you find where you set the flour duster: clicking on the arrows, they change the color to green. When the belt turns to the selected direction, the arrows will

FLOUR DUSTER	<<	0	>>
--------------	----	---	----

active the flour duster. It's possible to activate the flour spreader to the both senses. Press "0" to reset the setting.



On the right you see winder settings , when it is activated, the icon changes to  and the writing from  to .




Below you see , it lets you begin production from 0.




In the lowest left corner the button , stops the production, without resetting the condition.

The button  turns on the light in the working area: if you click it, the icon becomes  because the light is turned on.

The icon  redirects you to the menu page.

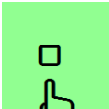
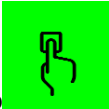
The case  shows in which side put the dough for the first start.



In case of alarm, you see the signal  and near there is the button to reset.

Signals are:

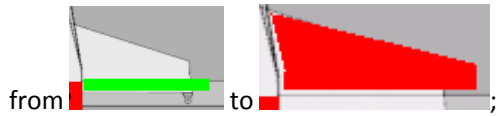
1. buttons pressure:

from  to . The color is brighter when buttons are pressed;

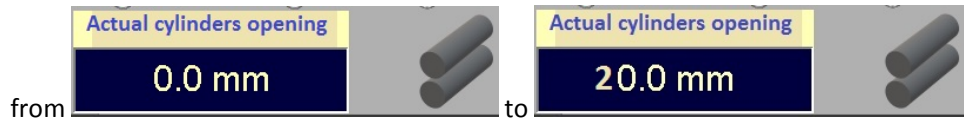
2. photocell pause:

from  to .

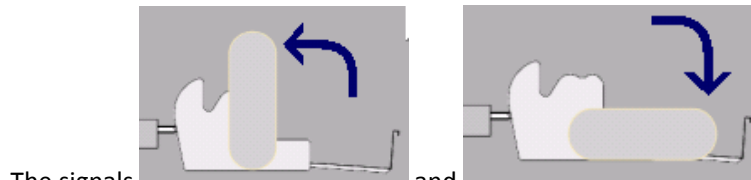
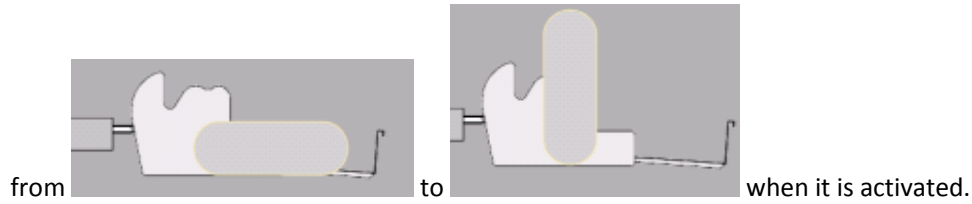
3. limit switched of grids:



4. rollers opening:



5. winder:



The signals  and  appear during the movement of the piston;

6. During belt rotation, arrows indicate the direction  or .

How to work in semi automatic system

To perform semi automatic processing simply follow these steps:

Turn on the machine using the general switch.



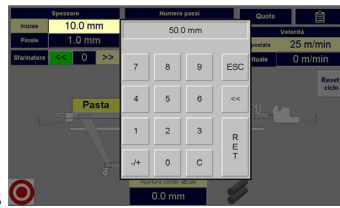
You see the frame  click on the monitor, you enter in a



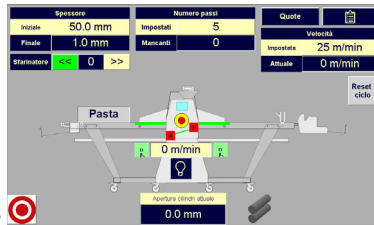
Click on , you go to .



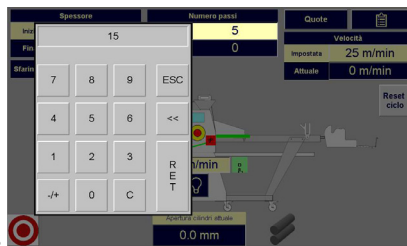
Now reset alarms with reset button



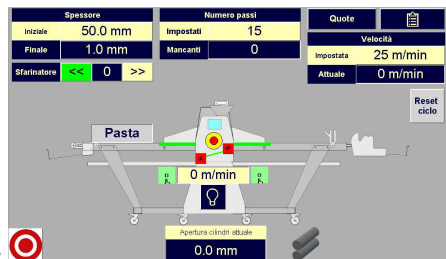
Click on initial thickness and it appears , write the number you desire (ex. 50)



then press RET, you see 

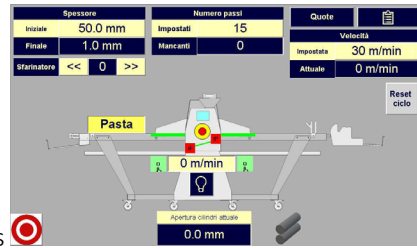


Click on the number of passes  and put the number you want (es. 15)



and press RET, you see 

The system will calculate a decrease (higher at the beginning, lower in the end) at each pass.

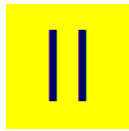


Push on SPEED and use the same procedure 30 m/min, it appears



Position the dough where it is indicated and push any of the green buttons to both sides of the touch screen.

Both buttons, automatically, have the function to pause the working cycle, the status is indicated by



. It is enough to press one to restart the cycle.

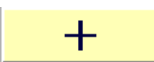
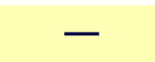
After the setting up initial thickness, final thickness, number of passes and speed, you can push



and see all the quotes that have been calculated by machine.

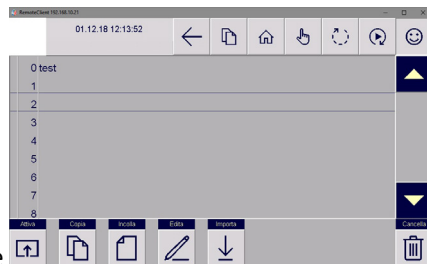
Fase	Aggiungi	Spessore	Rimuovi	Fase	Aggiungi	Spessore	Rimuovi
1:		39.0 mm		11:	+	20.3 mm	-
2:	+	36.7 mm	-	12:	+	19.0 mm	-
3:	+	34.5 mm	-	13:	+	17.7 mm	-
4:	+	32.4 mm	-	14:	+	16.6 mm	-
5:	+	30.4 mm	-	15:	+	15.5 mm	-
6:	+	28.5 mm	-	16:	+	14.5 mm	-
7:	+	26.7 mm	-	17:	+	13.6 mm	-
8:	+	24.9 mm	-	18:	+	12.9 mm	-
9:	+	23.3 mm	-	19:	+	12.2 mm	-
10:	+	21.8 mm	-	20:	+	11.6 mm	-

In fact pushing that button, you see the window where you


can add or remove one phase using  or . Using the plus, a new intermediate phase will be added between the previous thickness and the next; that value can be changed.



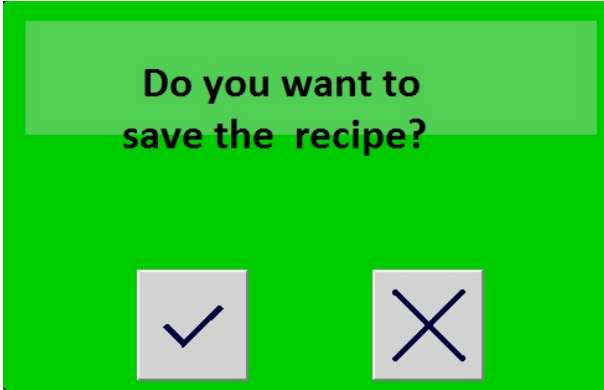
It is possible to save the values pushing ; it redirects you to the recipes page, where it is necessary:



- Select an empty recipe

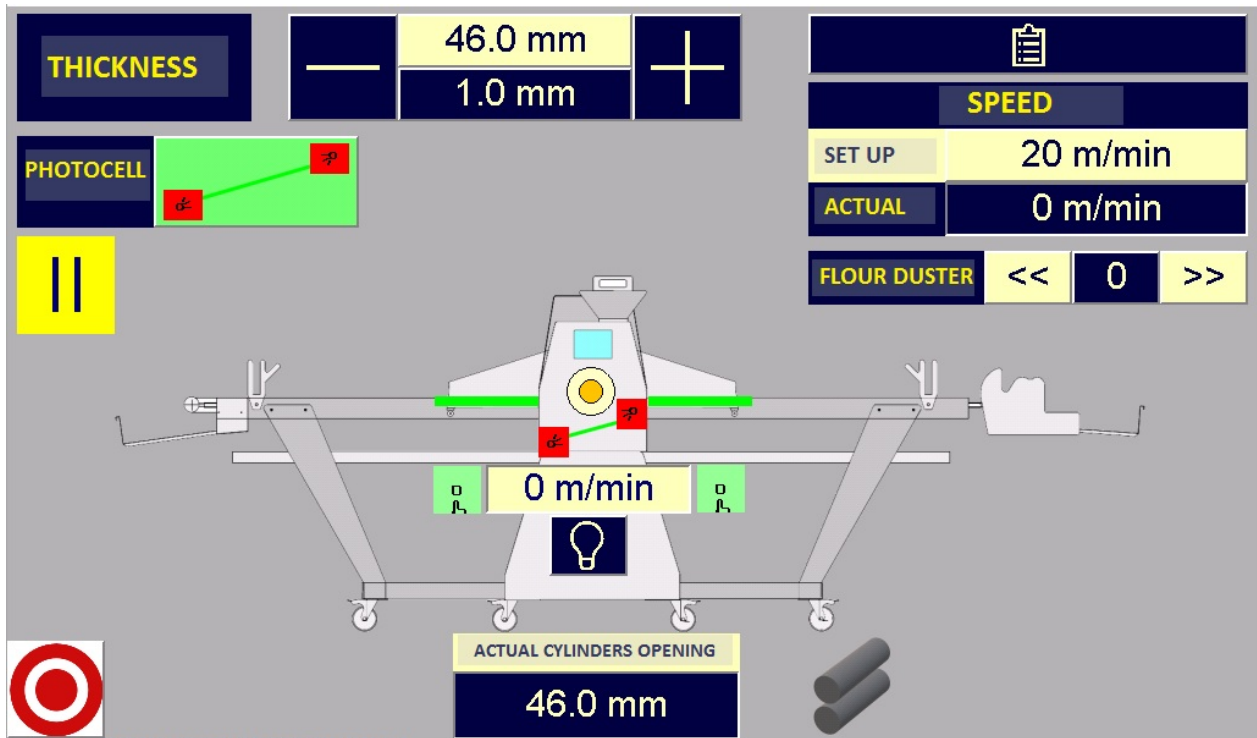
- Press the button ,

- Press again ,

- Confirm when you see .

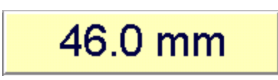

Manual system



Manual page is as follows:

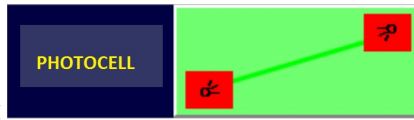


In this page you can active many functions, only for the manual system.

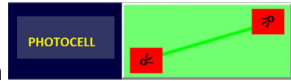
In the higher left corner you find the thickness settings .

In this case it is possible write a thickness , or push buttons – and + to decrease/increase the value .

Pushing  you increase the thickness; pushing  you decrease the thickness.



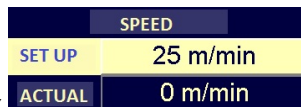
Under this frame, you see setting PHOTOCELL, here it is possible to set the belt stop function when it oversteps the photocell.



If you activate it, the icon changes in



Near you have the winder manual order WINDER, with the green arrow the winder goes up, with the red the winder goes down.



On the right you see the box SPEED where you find the set belt speed and the inverter speed feedback.



On the left you see FLOUR DUSTER where you set the flour duster: clicking on the arrows, they change the color to green. When the belt turns to the selected direction, the arrows will activate



the flour duster. It's possible to activate the flour spreader to the both senses. Press "0" to reset the setting.



In the upper part you find the setting for winder WINDER, it is activated and



the button becomes WINDER ON and the writing from WINDER ON to



In the bottom you find the button Reset CYCLE; it lets you begin with your work from 0.



In the lower left part you see the target icon; it stops the work, but it doesn't reset the status.



You use the lightbulb icon to turn on the light in the work zone, if it is activated, the icon changes in the lightbulb icon because the light is on.



The button with the clipboard icon redirects you to the menu page.



This case DOUGH shows in which side put the dough for the first start.

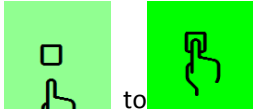
In case of alarm, you see the signal:

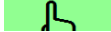



and near there is the button to reset.

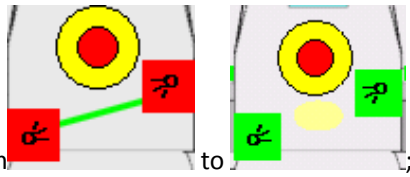
Signals are:

- Buttons pressure:

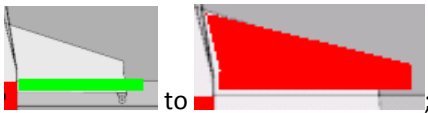


- from  to . The color is brighter when the buttons are pressed;

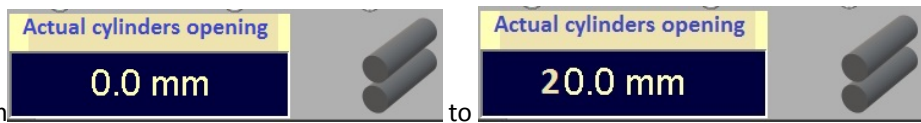
- Photocell pause:



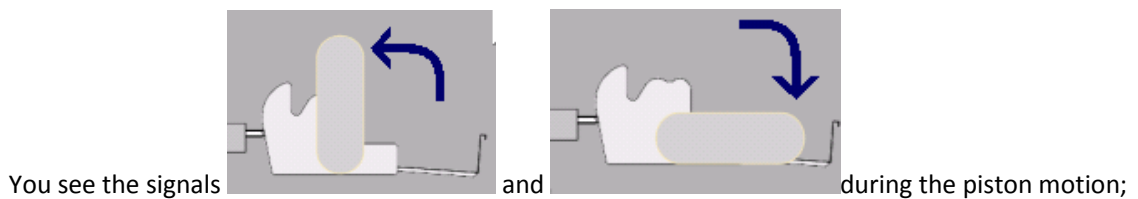
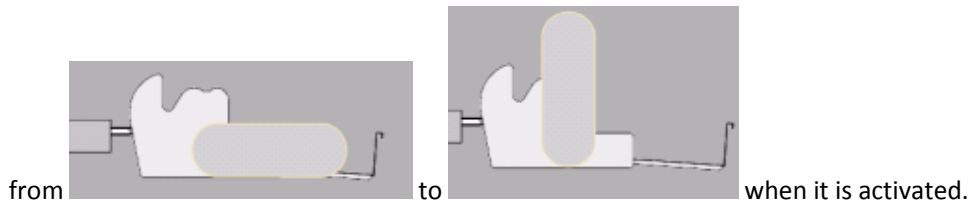
- limit switches of the grills:



- Cylinders opening:



- Winder:



- During belt rotation, arrows indicate the direction



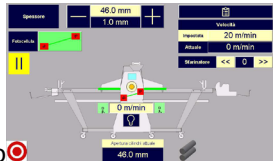
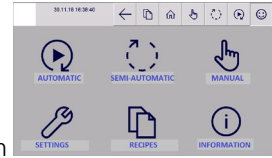
How to work in manual system

To perform manual processing simply follow these steps:

Turn on the machine using the general switch.



You see the frame  click on the monitor, you enter in



Click on  , you go to 



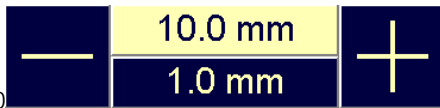
Now reset alarms with reset button

In the manual system, the buttons are situated in the both sides of the screen: they control the belt of the opposite part of the button you push. If the belt is working in any direction and you press the button, the belt stops. Pushing again one of the buttons, you restart the process or in the same direction or in the opposite, depending on the pushed button.

For example if you desire to start with a thickness of 10,0 mm and arrive to 1,0 mm with 6 passes, you can procede in this way:



Activate the photocell  and set up the thickness at 10,0 mm and the



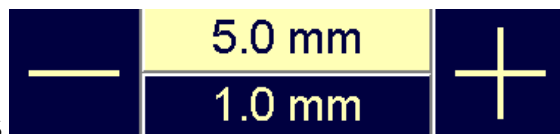
e l'increase at 1,0. Later set up the speed for ex. at 25 m/min



. If desired, you set up the flour duster, for ex.to the left

Now you position the dough in a belt side and you push the green button in the same side.

The belt will move to the sheeting rollers and it will stop when it exits in the opposite protection grill.



Now you modify the thickness for ex. at 5  and push the green button situated in the same side of the dough.

The belt will move toward rolling rollers and stops just out from the protective grill from the opposite side.



Now you can for example press the button , the measure changes from 5,0 mm to 4 ,0 mm.

Press the green button on the side where is placed the dough, the belt will move toward rolling rollers and stops just out from the protective grid from the opposite side.

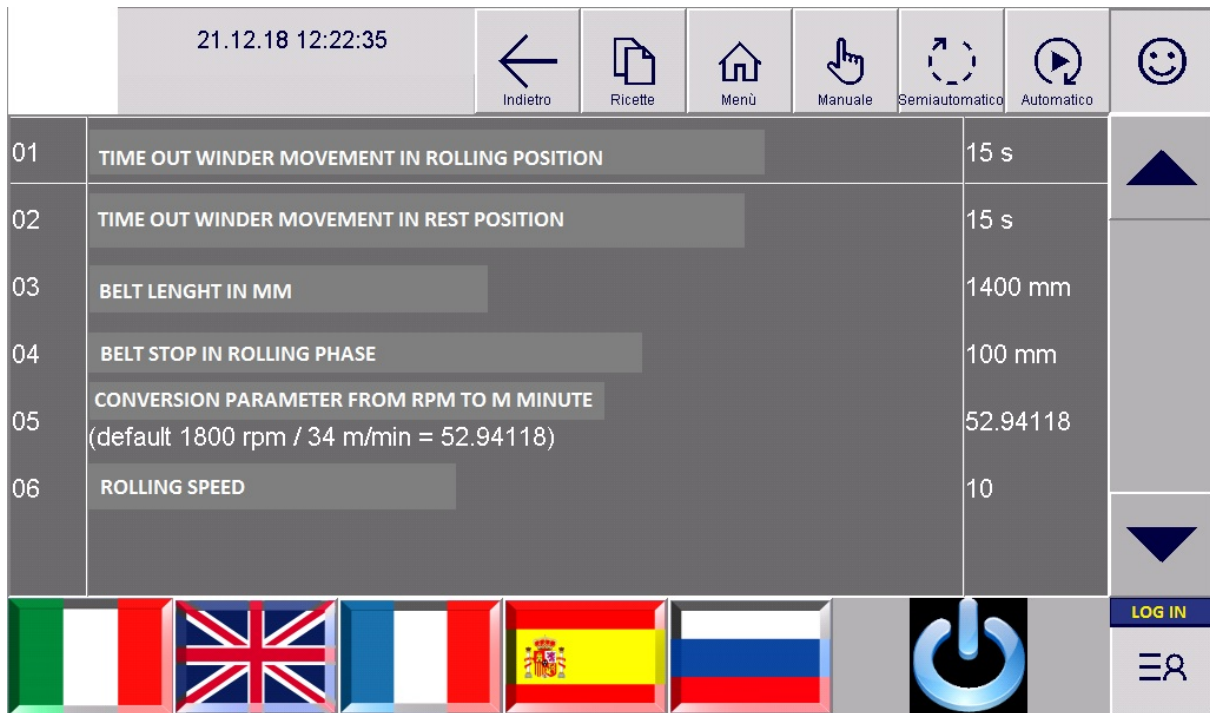
Repeat the operation until the desired thickness is reached.




If you desire to roll, position the pin in his location, action the green arrow and make the belt rotate in the direction of the winder.

Settings page

Settings page is as follows:

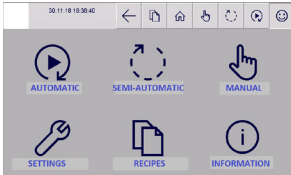


To modify the value, click on the interested line, it appears  you put the value and press RET.

The description of the parameter is extended and, therefore not explain it here are the description because it can be implemented or deducted at the discretion of the manufacturer.

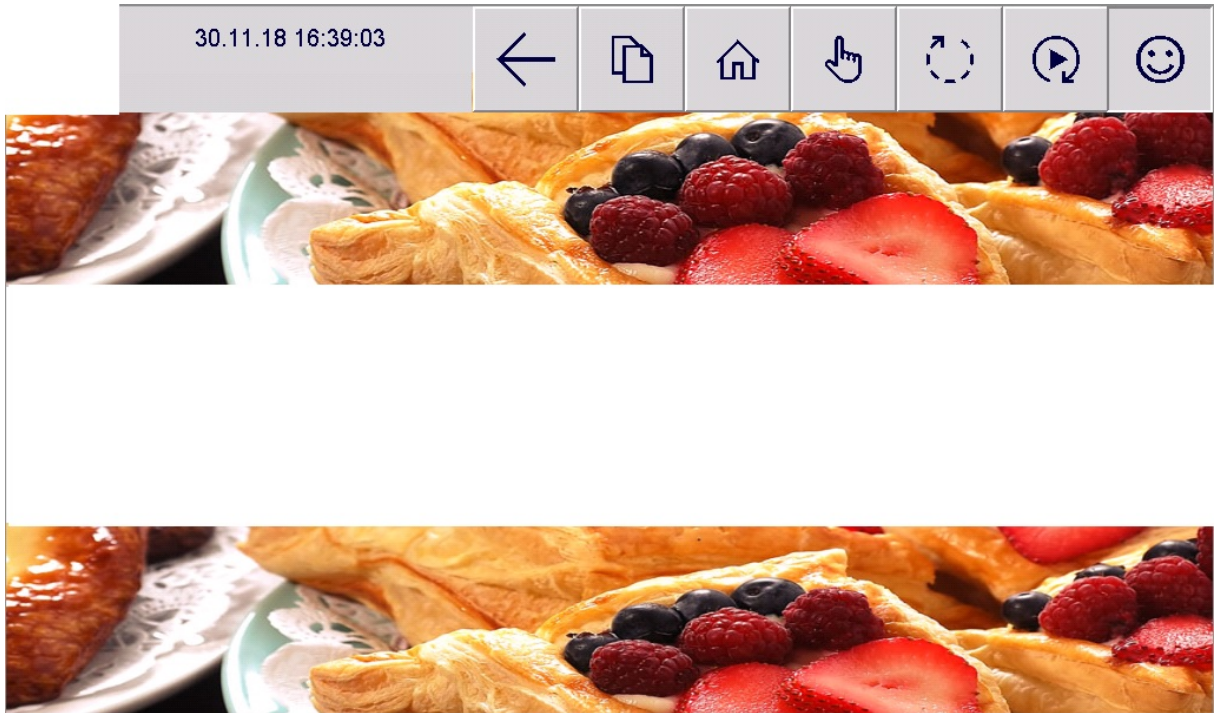
Below are a series of flags for the language setting .

All the other icons are explained below:

Icon	Function	Destination / description
	Clicking it you enter in the home page.	Clicking the icon you come back to the home page: 
	Clicking it you enter in the manual function page.	Clicking the icon you go directly to the manual function page.
	Clicking it you enter in the automatic function page.	Clicking the icon you go directly to the automatic function page.
	Clicking it you enter in the semi automatic function page.	Clicking the icon you go directly to the semi automatic function page.
	The icon reveals warnings.	The icon  is present if there are not alarms, but if there are alerts, you see the icon  .
	Clicking it you enter in the menu page.	This icon redirects you to the menu page. 
	Clicking it you turn off the application.	Clicking this button will turn off the application and you are in an environment similar to a classic windows PC:  If you want to come back to the application, make double click on the icon  .

Information page

The page is as follows:



In this page there are references and contact details of Manufacturer.

WIRING DIAGRAM

Working voltage: 400 Vac

Auxiliary voltage: 24 Vdc

Frequency: 50 Hz

Nominal current: 10 A

Total power: 23 kW

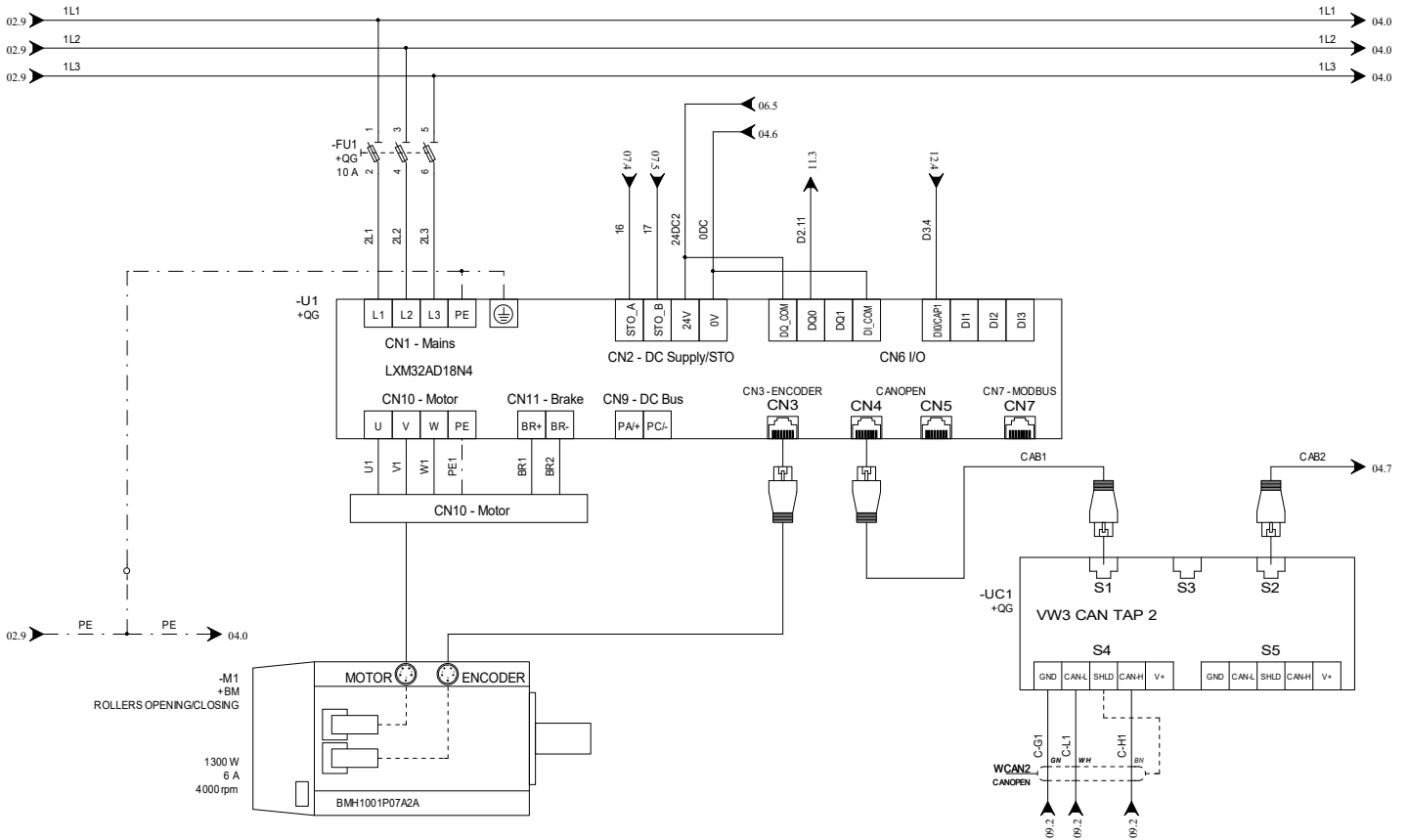
Protection level: IP 54

WIRING DIAGRAM



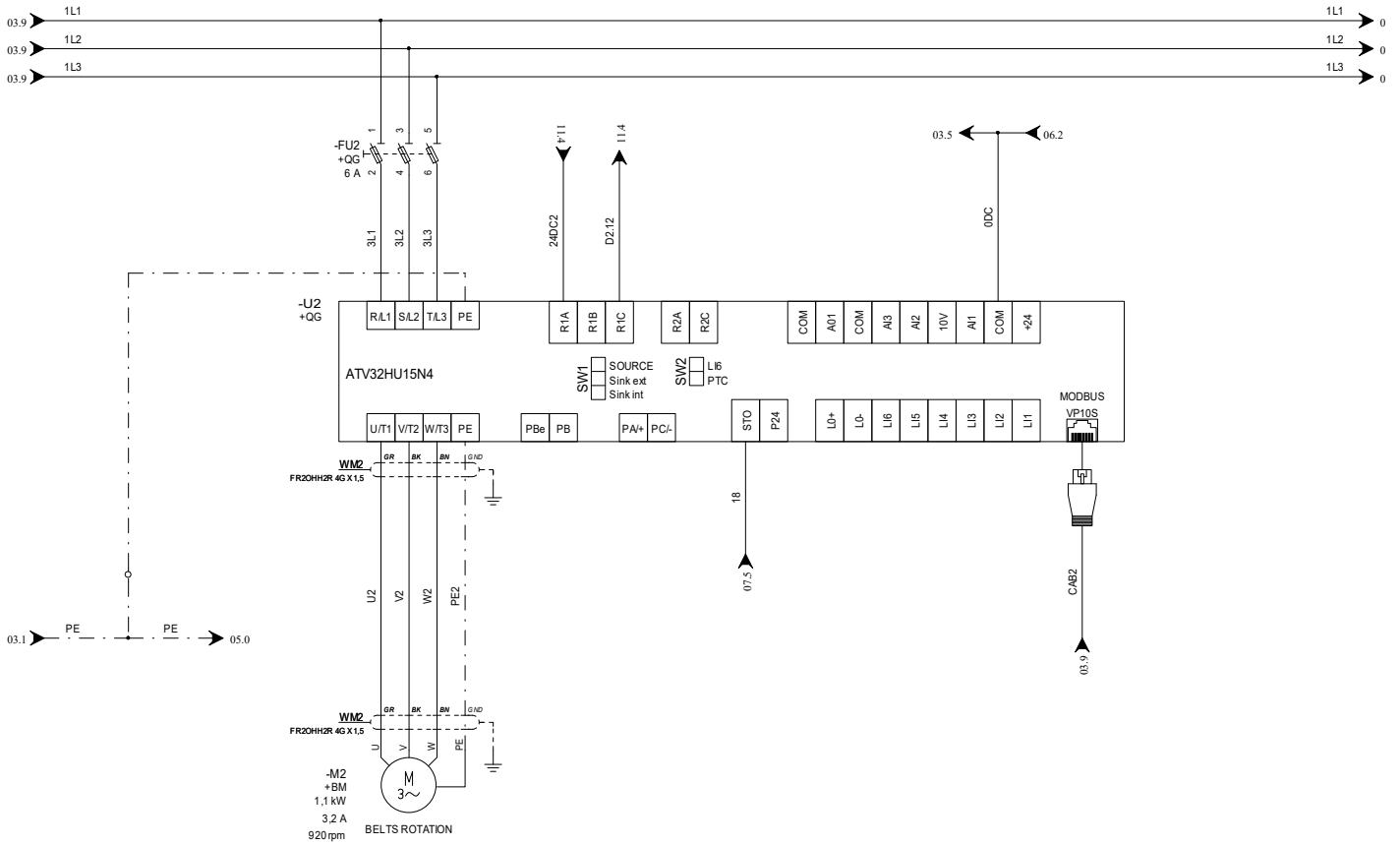
Power diagram

WIRING DIAGRAM



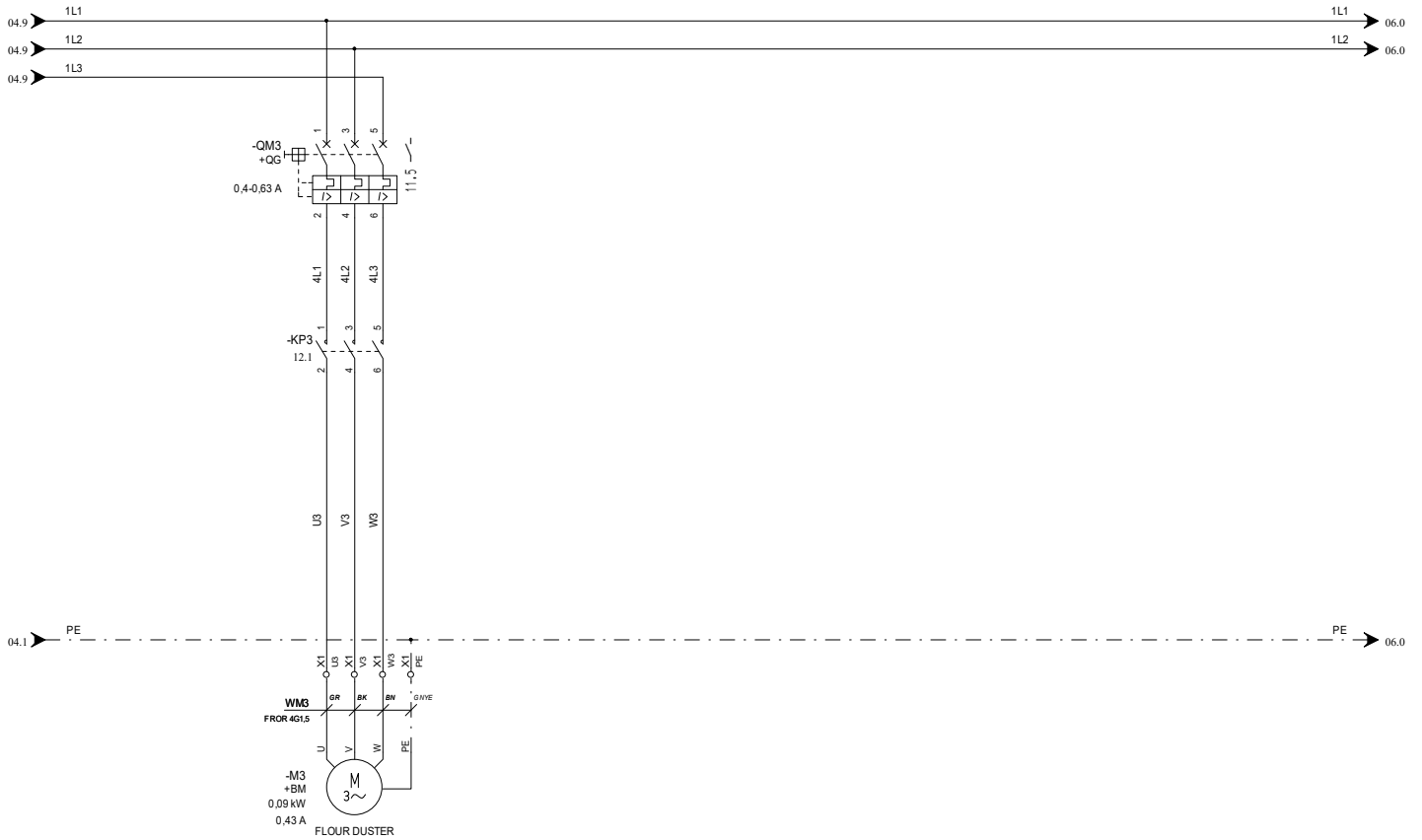
Power diagram

WIRING DIAGRAM



Power diagram

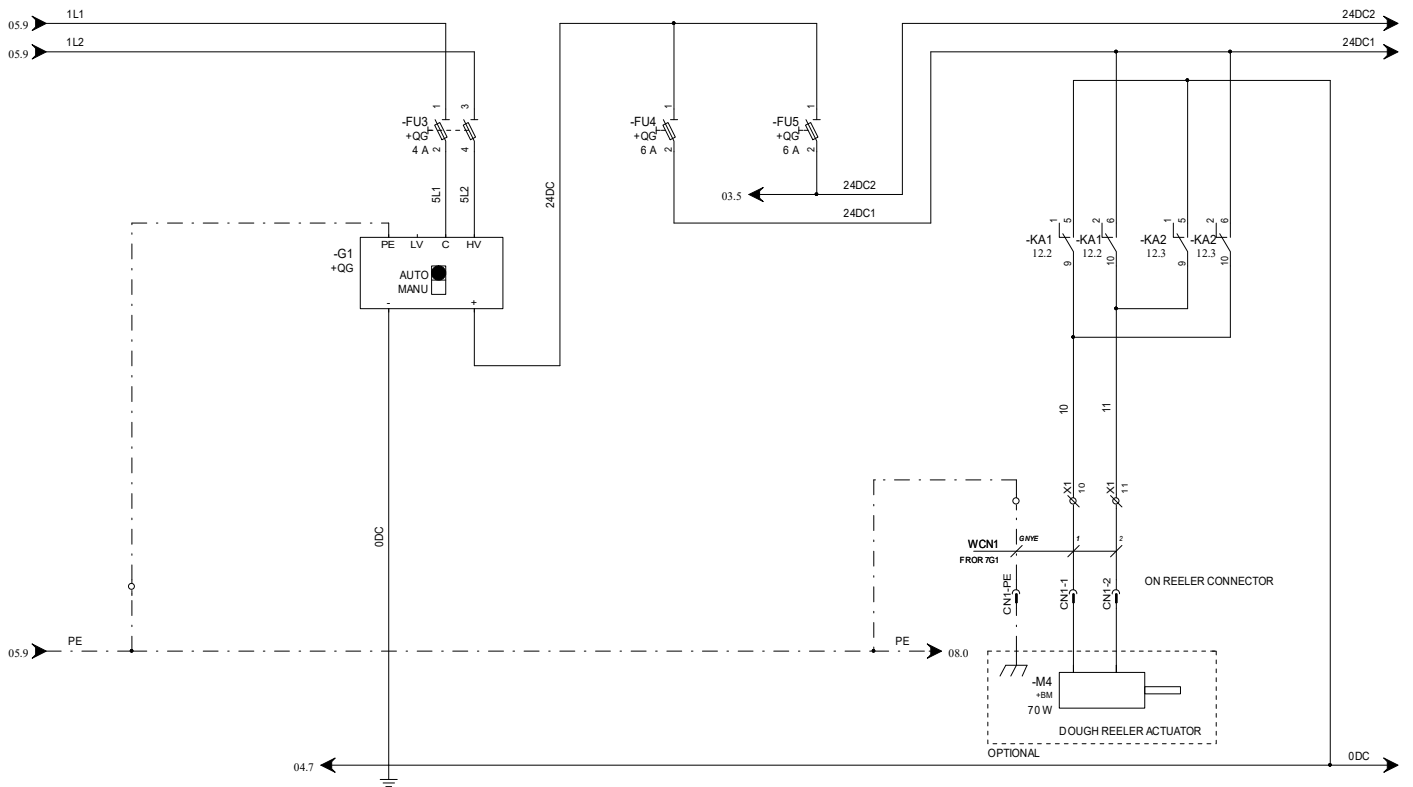
WIRING DIAGRAM



MADE IN ITALY

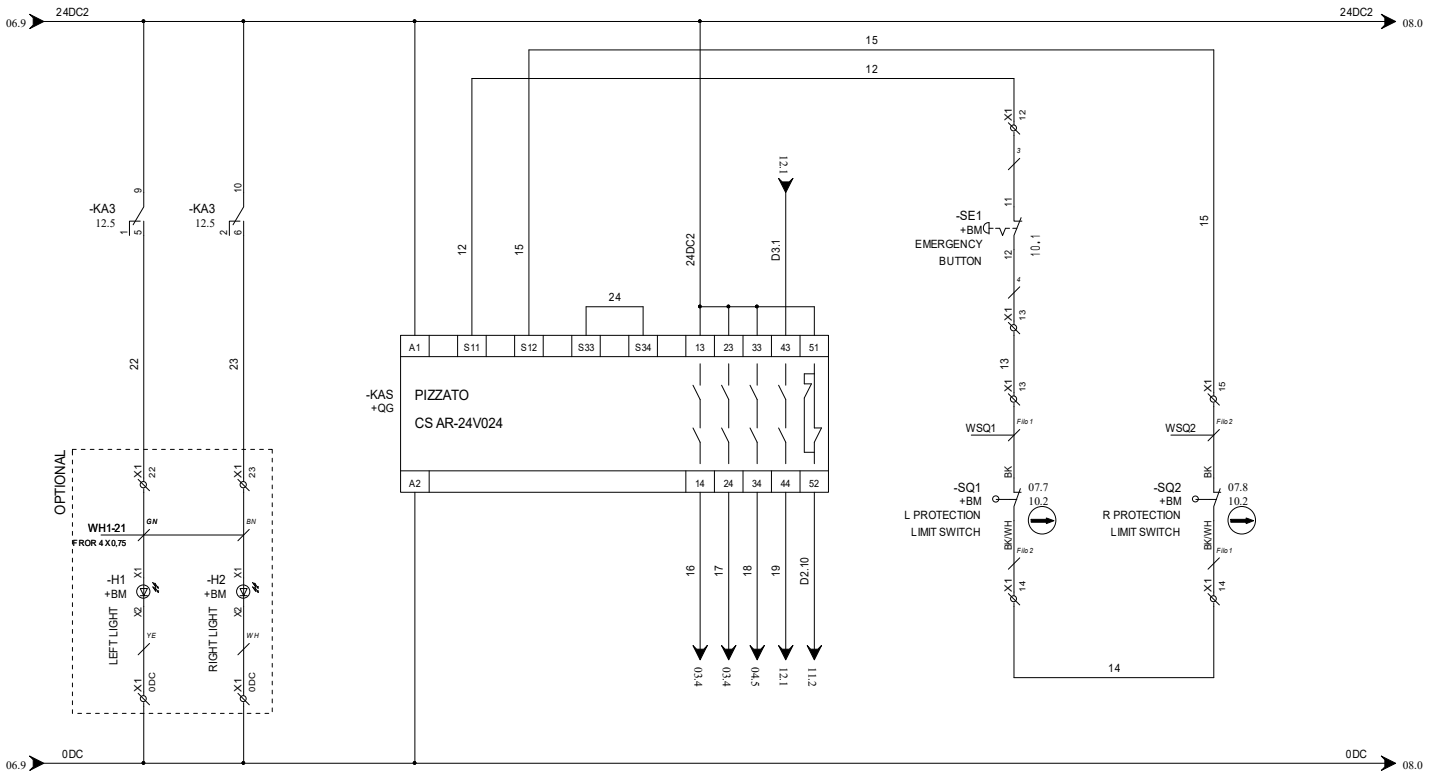
Power diagram

WIRING DIAGRAM



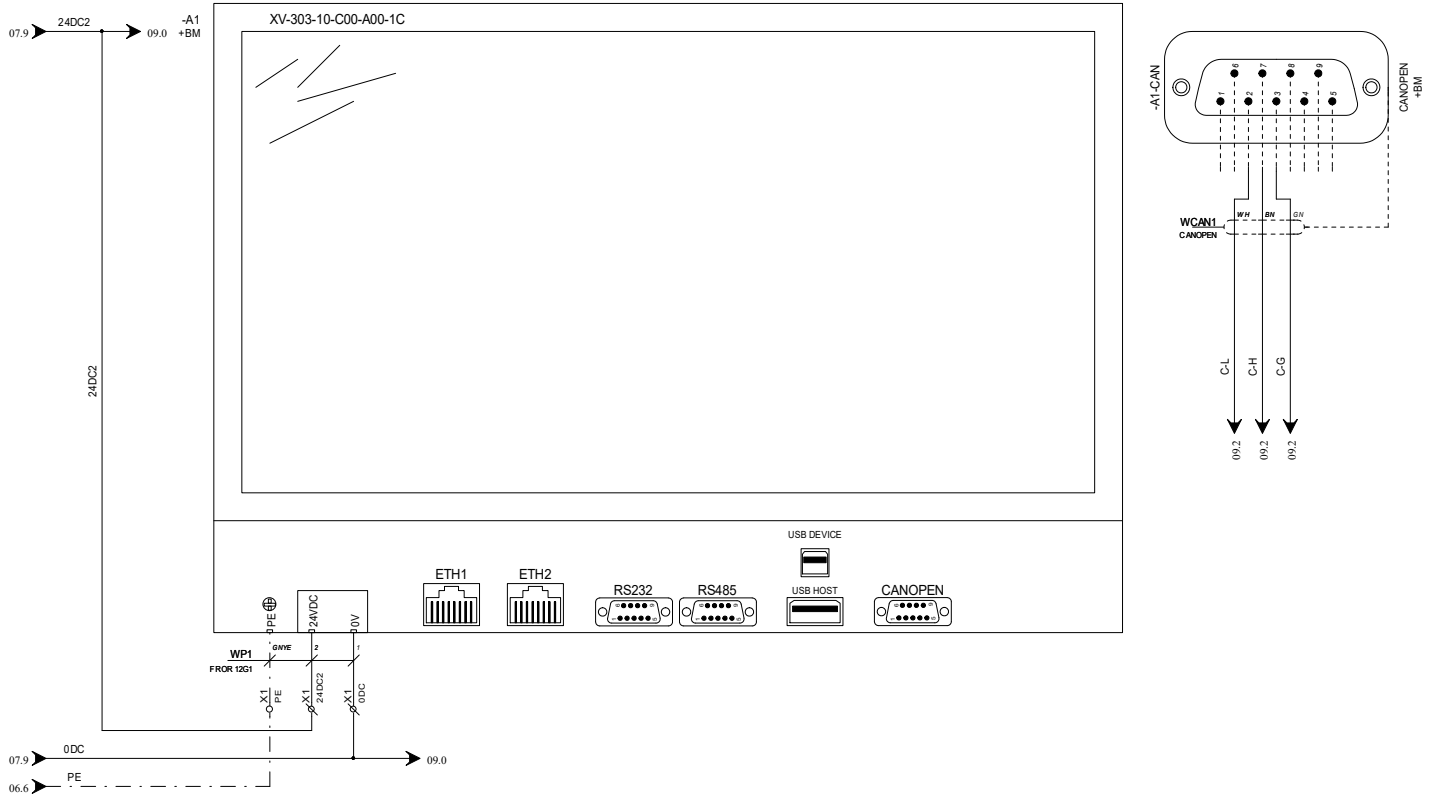
Power supply unit

WIRING DIAGRAM



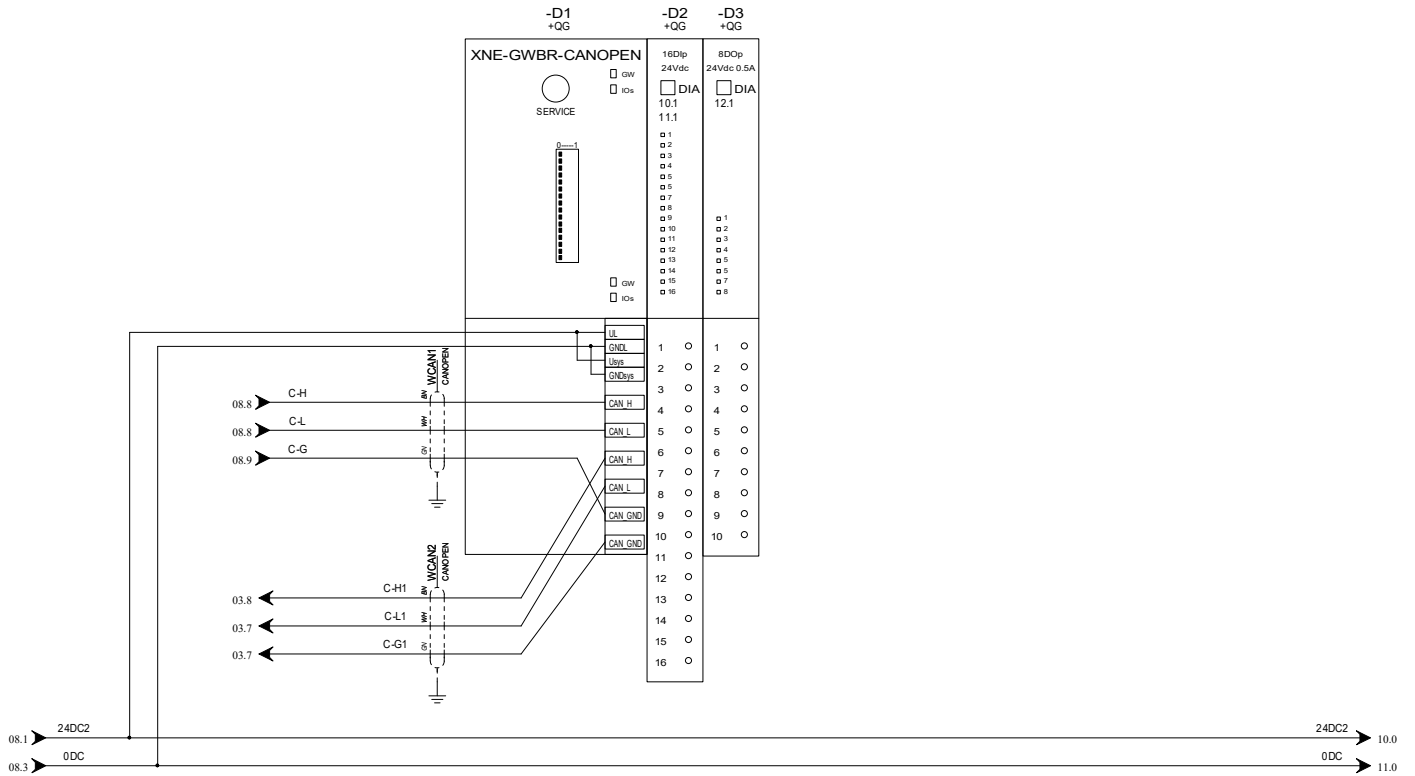
Emergency circuit

WIRING DIAGRAM



Touch screen

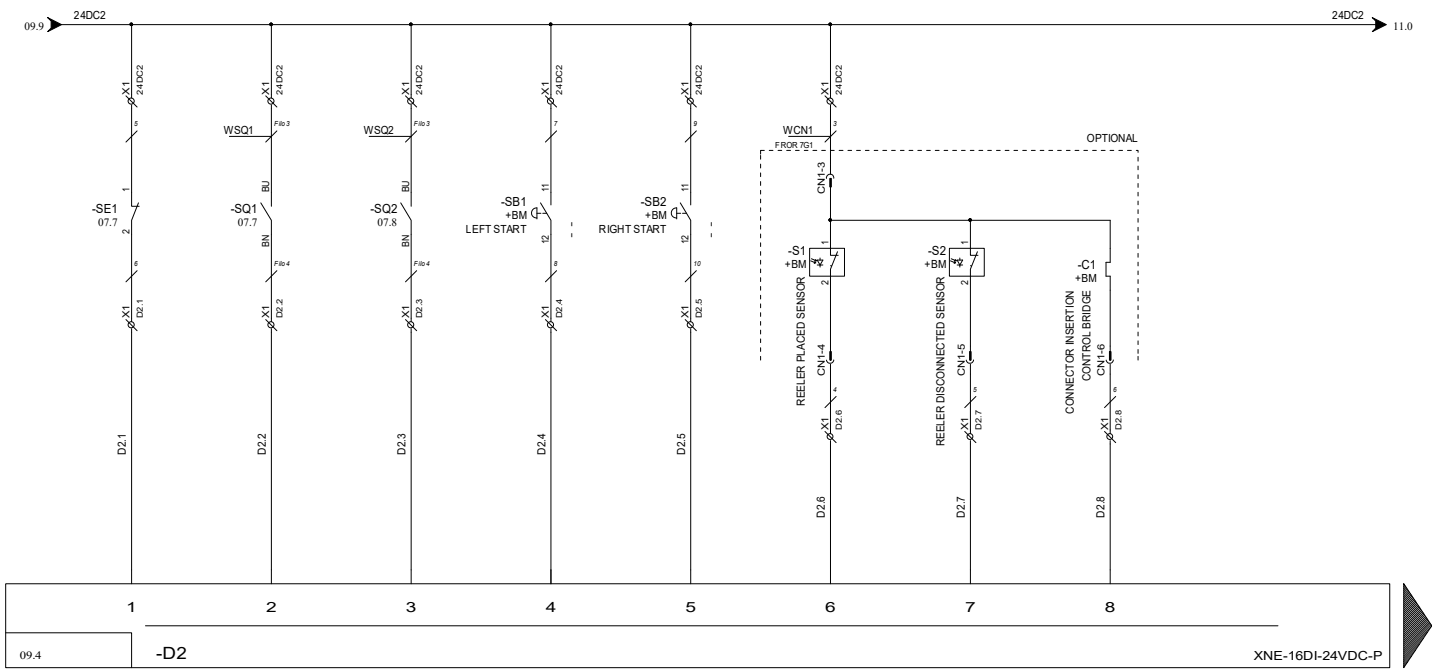
WIRING DIAGRAM



MADE IN ITALY

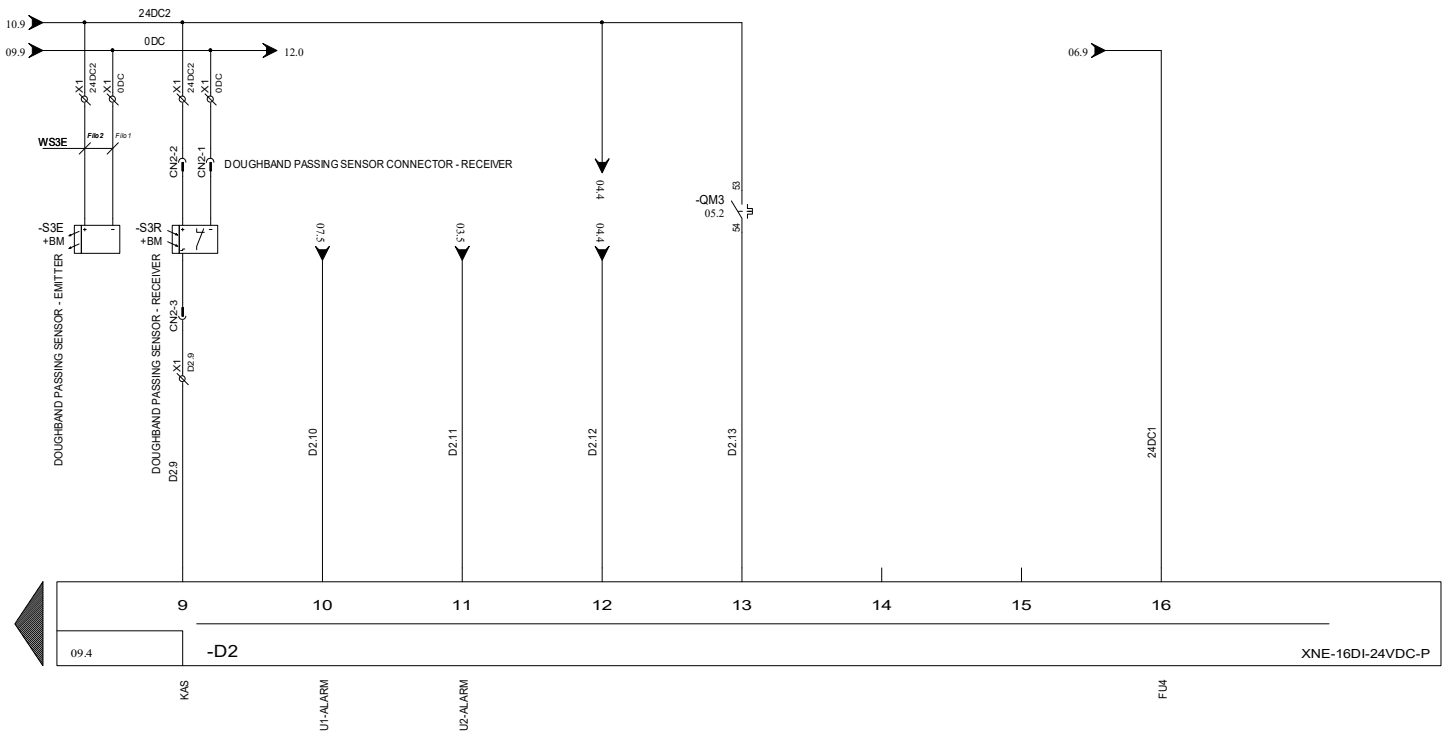
PLC planimetry

WIRING DIAGRAM



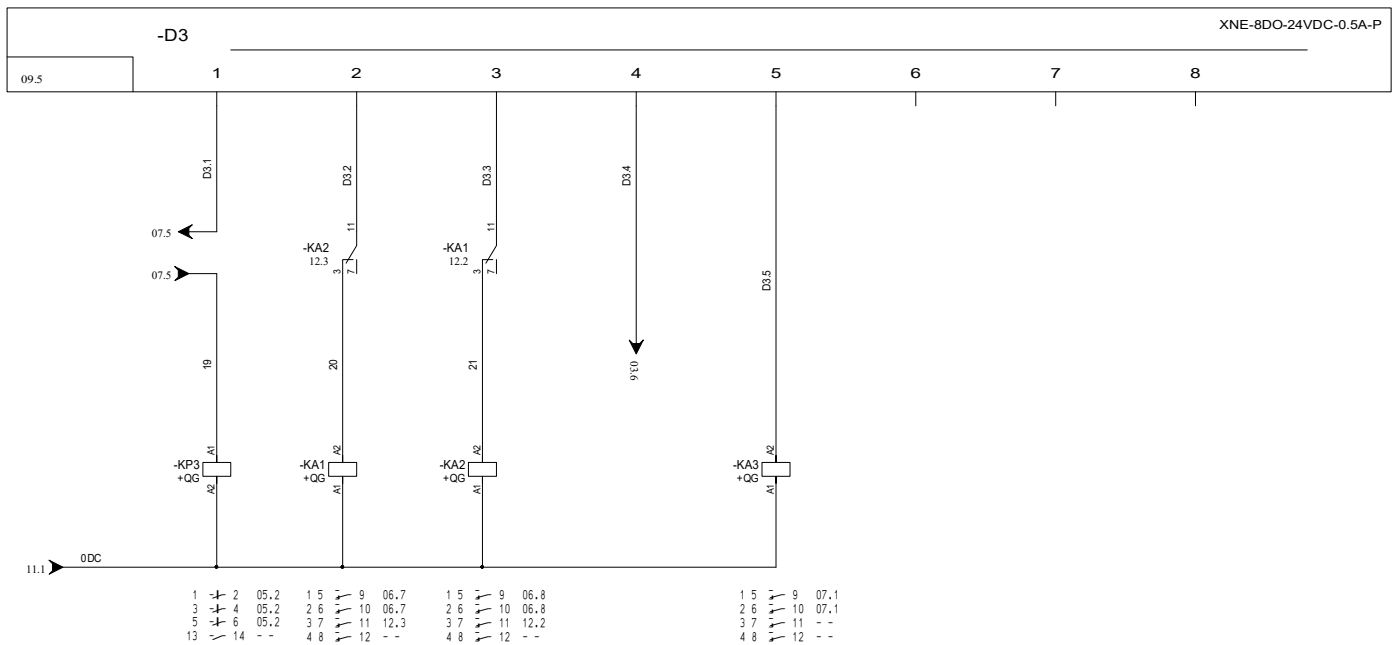
Digital inputs

WIRING DIAGRAM



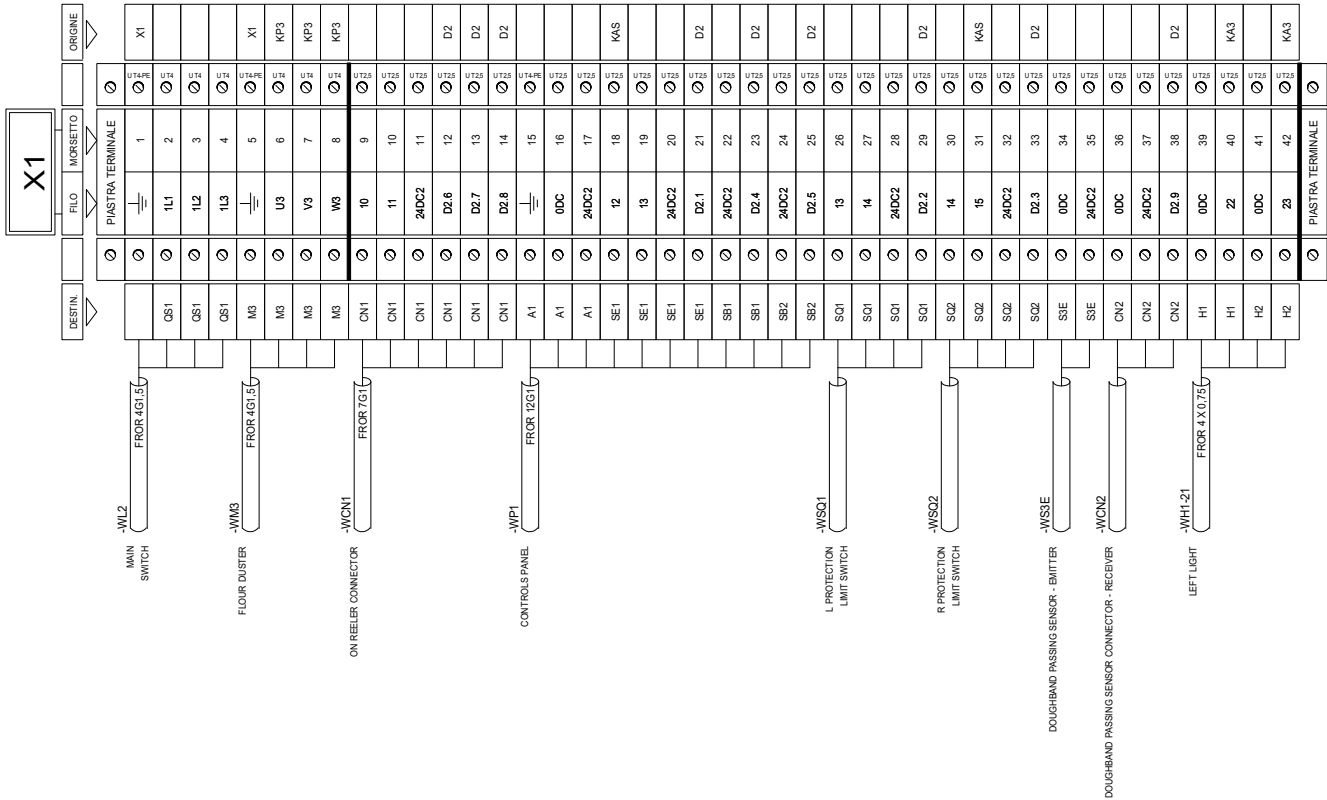
Digital inputs

WIRING DIAGRAM



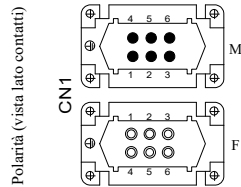
Digital outputs

WIRING DIAGRAM



Terminal: X1 - 1/1

WIRING DIAGRAM



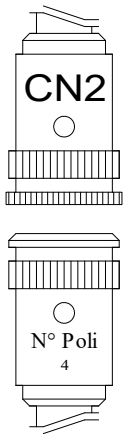
N° Pin	Loc.orig.	Origine	N° Filo	Pag./Col.	Destinazione	Loc. dest.	
1	QG	X1	10	06' 7	M4	BM	Filo 1
2	QG	X1	11	06' 7	M4	BM	Filo 1
3	QG	X1	24DC2	10' 5	S1	BM	Filo 1
4	QG	X1	D2.6	10' 5	S1	BM	Filo 1
5	QG	X1	D2.7	10' 6	S2	BM	Filo 1
6	QG	X1	D2.8	10' 7	C1	BM	Filo 1
GNYE			PE	06' 7			

FROR 7G1
-WCN1

DOUGH REELER ACTUATOR
DOUGH REELER ACTUATOR
REELER PLACED SENSOR
REELER PLACED SENSOR
REELER DISCONNECTED SENSOR
CONNECTOR INSERTION
CONTROL BRIDGE

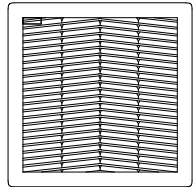
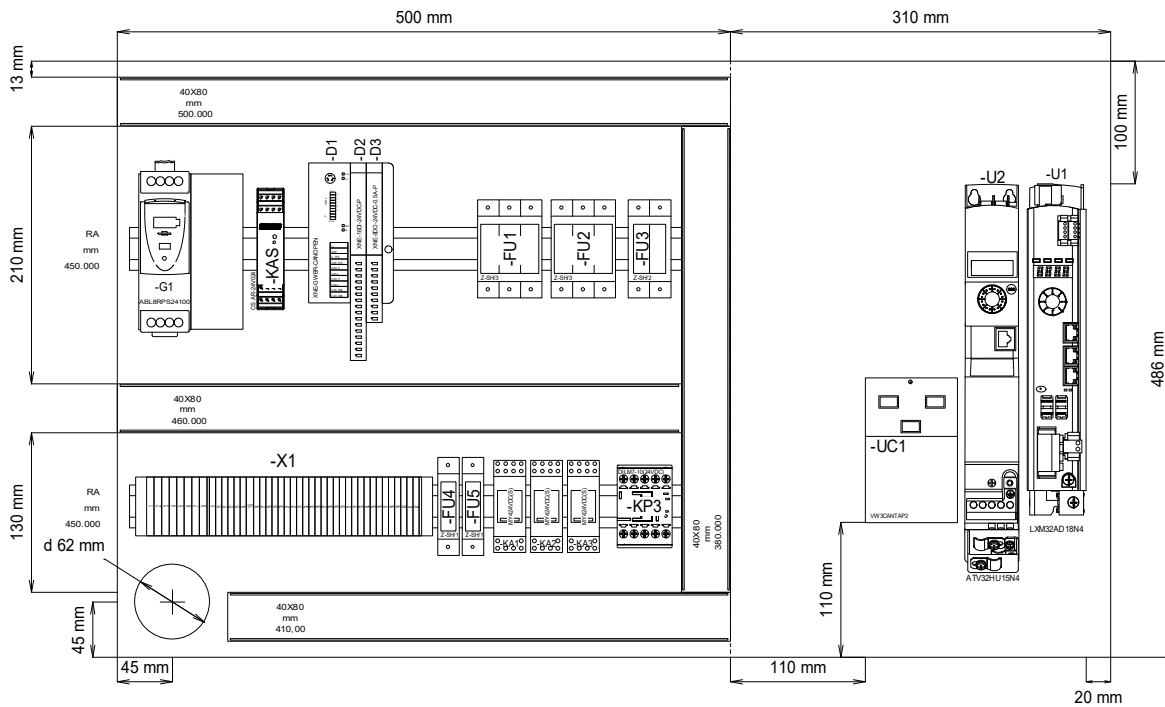
Connector: CN1 - 1/1

WIRING DIAGRAM



Connector: CN2 - 1/1

WIRING DIAGRAM



Panel planimetry

WIRING DIAGRAM

Signature	Description	Code	Builder	Location	Quantity	Position
A1	TOUCH SCREEN 10"	XV-303-10-C00-A00-1C	EATON	BM	1	08.1
A1-CAN	CAN BUS CONNECTOR	TSXCANKCDF90T	SCHNEIDER ELECTRIC	BM	1	08.8
ACC1	DUST PREVENTER FILTER	ARIA-F150.2.W	ZANARDO	QG	1	16.0
CN1	IP 65 METAL ENCLOSURE WITH LEVER	CHO 06 L13	ILME	BM	1	
CN1	METAL ENCLOSURE WITH LEVER AND COVER	CHP 06 LS	ILME	BM	1	
CN1	INSERT WITH FEMALE CONTACTS	CNEF 06 T	ILME	BM	1	
CN1	INSERT WITH MALE CONTACTS	CNEM 06 T	ILME	BM	1	
CN2	4 POLES M12 180° MALE CONNECTOR	E11504	IFM	BM	1	
CN2	4 POLES M12 90° FEMALE CONNECTOR	E11509	IFM	BM	1	
D1	GETWAY CANOPEN	XNE-GWBR-CANOPEN	EATON	QG	1	09.3
D2	16 DIGITAL INPUT SLOT	XNE-16DI-24VDC-P	EATON	QG	1	09.4
D3	8 DIGITAL OUPUT SLOT	XNE-8DO-24VDC-0.5A-P	EATON	QG	1	09.5
FU1	3P FUSE DISCONNECTOR	Z-SH/3	EATON	QG	1	03.2
FU2	3P FUSE DISCONNECTOR	Z-SH/3	EATON	QG	1	04.2
FU3	2P FUSE DISCONNECTOR	Z-SH/2	EATON	QG	1	06.3
FU4	1P FUSE DISCONNECTOR	Z-SH/1	EATON	QG	1	06.4
FU5	1P FUSE DISCONNECTOR	Z-SH/1	EATON	QG	1	06.5
G1	POWER FEEDER	ABL8RPS24100	SCHNEIDER ELECTRIC	QG	1	06.2
KA1	4 CONTACTS RELAY	MY424VDC(S)	OMRON	QG	1	12.2
KA1	MY4 SOCKET	PYF14-ESN	OMRON	QG	1	12.2
KA2	4 CONTACTS RELAY	MY424VDC(S)	OMRON	QG	1	12.3
KA2	MY4 SOCKET	PYF14-ESN	OMRON	QG	1	12.3
KA3	4 CONTACTS RELAY	MY424VDC(S)	OMRON	QG	1	12.5
KA3	MY4 SOCKET	PYF14-ESN	OMRON	QG	1	12.5
KAS	SAFETY RELAY	CS AR-24V024	PIZZATO	QG	1	07.3
KP3	3 kW 1NO CONTACTOR	DILM7-10(24VDC)	EATON	QG	1	12.1
M1	BRUSHLESS MOTOR	BMH1001P07A2A	SCHNEIDER ELECTRIC	BM	1	03.2
QM3	FRONTAL AUXILIARY CONTACTS	NHI-E-10-PK20	EATON	QG	1	05.2
QM3	MOTOR PROTECTION BREAKER	PKZM0-0.63	EATON	QG	1	05.2
QS1	MAIN SWITCH 16A	T0-2-1/EA/SVB-SW	EATON	BM	1	02.1
SB1	IP67 IMPULSIVE MUSHROOM BUTTON	ZB4BR3	SCHNEIDER ELECTRIC	BM	1	10.3
SB1	FRONT MOUNTING ADAPTER	ZB4BZ009	SCHNEIDER ELECTRIC	BM	1	10.3
SB1	NO CONTACT	ZBE101	SCHNEIDER ELECTRIC	BM	1	10.3
SB2	IP67 IMPULSIVE MUSHROOM BUTTON	ZB4BR3	SCHNEIDER ELECTRIC	BM	1	10.4
SB2	FRONT MOUNTING ADAPTER	ZB4BZ009	SCHNEIDER ELECTRIC	BM	1	10.4
SB2	NO CONTACT	ZBE101	SCHNEIDER ELECTRIC	BM	1	10.4
SE1	FRONT MOUNTING ADAPTER	M22-A	EATON	BM	1	07.7
SE1	NC CONTACT	M22-K01	EATON	BM	2	07.7
SE1	EMERGENCY BUTTON	M22-PVT	EATON	BM	1	07.7
SE1	EMERGENCY PLATE	M22-XBK1	EATON	BM	1	07.7
SQ1	SMALL WHEEL LIMIT SWITCH	XCMN2102L2	SCHNEIDER ELECTRIC	BM	1	07.7
SQ2	SMALL WHEEL LIMIT SWITCH	XCMN2102L2	SCHNEIDER ELECTRIC	BM	1	07.8
U1	1.8 kW DRIVES	LXM32AD18N4	SCHNEIDER ELECTRIC	QG	1	03.2
U2	INVERTER 1,5 kW	ATV32HU15N4	SCHNEIDER ELECTRIC	QG	1	04.2
UC1	CANOPEN SHUNTER	VW3CANTAP2	SCHNEIDER ELECTRIC	QG	1	03.7
WL1	FG7 4G1,5 + 16 A PLUG CABLE	100975600	ELEBI		1	

Components list

WIRING DIAGRAM

Group	Page	Title	Revision	Ultimate revision date	Chronology			
WIRING DIAGRAM	01	COVER	0	11/12/2013				
WIRING DIAGRAM	02	POWER DIAGRAM	0	11/12/2013				
WIRING DIAGRAM	03	POWER DIAGRAM	0	11/12/2013				
WIRING DIAGRAM	04	POWER DIAGRAM	0	11/12/2013				
WIRING DIAGRAM	05	POWER DIAGRAM	0	11/12/2013				
WIRING DIAGRAM	06	POWER SUPPLY UNIT	0	11/12/2013				
WIRING DIAGRAM	07	EMERENCY CIRCUIT	0	11/12/2013				
WIRING DIAGRAM	08	TOUCH SCREEN	0	11/12/2013				
WIRING DIAGRAM	09	PLC PLANIMETRY	0	11/12/2013				
WIRING DIAGRAM	10	DIGITAL INPUTS	0	11/12/2013				
WIRING DIAGRAM	11	DIGITAL INPUTS	0	11/12/2013				
WIRING DIAGRAM	12	DIGITAL OUTPUTS	0	11/12/2013				
WIRING DIAGRAM	13	Terminal: X1	0	11/12/2013				
WIRING DIAGRAM	14	Connector: CN1	0	11/12/2013				
WIRING DIAGRAM	15	Connector: CN2	0	11/12/2013				
WIRING DIAGRAM	16	PANEL PLANIMETRY	0	11/12/2013				
WIRING DIAGRAM	17	COMPONENTS LIST	0	24/04/2017				
WIRING DIAGRAM	18	COMPONENTS LIST	0	24/04/2017				
WIRING DIAGRAM	19	TERMINAL BLOCK LIST	0	24/04/2017				
WIRING DIAGRAM	20	PAGE INDEX	0	24/04/2017				

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Page index

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