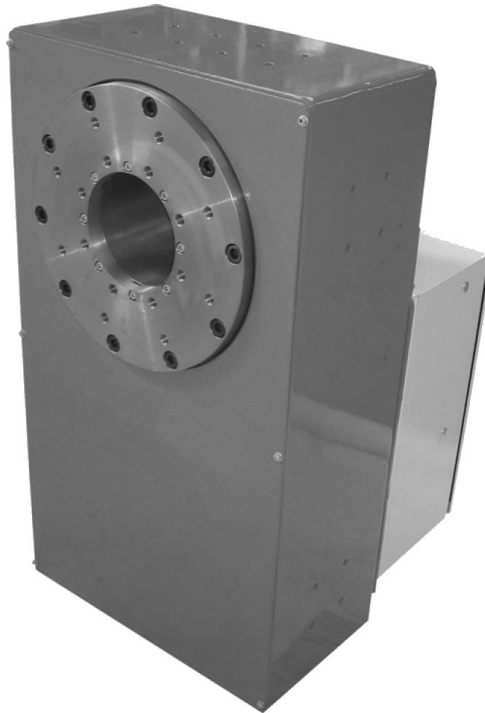


HEADSTOCK

# HEADMATIC SUPERTOP II

SAFETY INSTRUCTIONS FOR USE AND MAINTENANCE

DEVICE N° W000276829



EDITION: EN  
REVISION: E  
DATE: 10-2024

Instructions for use

REF: **8695 6460**

*Original instructions*

**LINCOLN**<sup>®</sup>  
**ELECTRIC**

**Thank for the trust you have expressed by purchasing this equipment, which will give you full satisfaction if you follow its instructions for use and maintenance.**

**Its design, component specifications and workmanship comply with applicable European directives.**

**Please refer to the enclosed CE declaration to identify the directives applicable to it.**

**The manufacturer will not be held responsible where items not recommended by themselves are associated with this product.**

**For your safety, there follows a non-restrictive list of recommendations or requirements, many of which appear in the employment code.**

**Finally we would ask you kindly to inform your supplier of any error which you may find in this instruction manual.**

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# INFORMATIONS

## DISPLAYS AND PRESSURE GAUGES

The measuring devices or displays for voltage, current, speed, pressure, etc., whether analog or digital, should be considered as indicators

For operating instructions, adjustments, troubleshooting and spare parts see safety instructions for use and maintenance

## REVISIONS

### REVISION B 04/11

DESIGNATION	PAGE
Update electrical cabinet	1-3-5-6-12-21

### REVISION C 07/14

DESIGNATION	PAGE
Update « Electrical diagram »	16-17

### REVISION D 10/16

DESIGNATION	PAGE
Update « Electrical diagram »	16

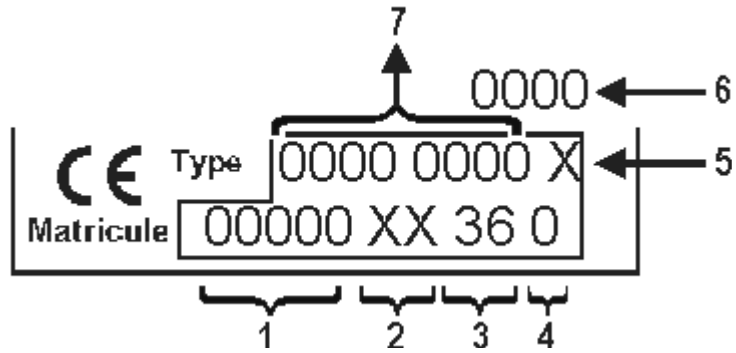
### REVISION E 10/24

DESIGNATION	PAGE
To change logo	

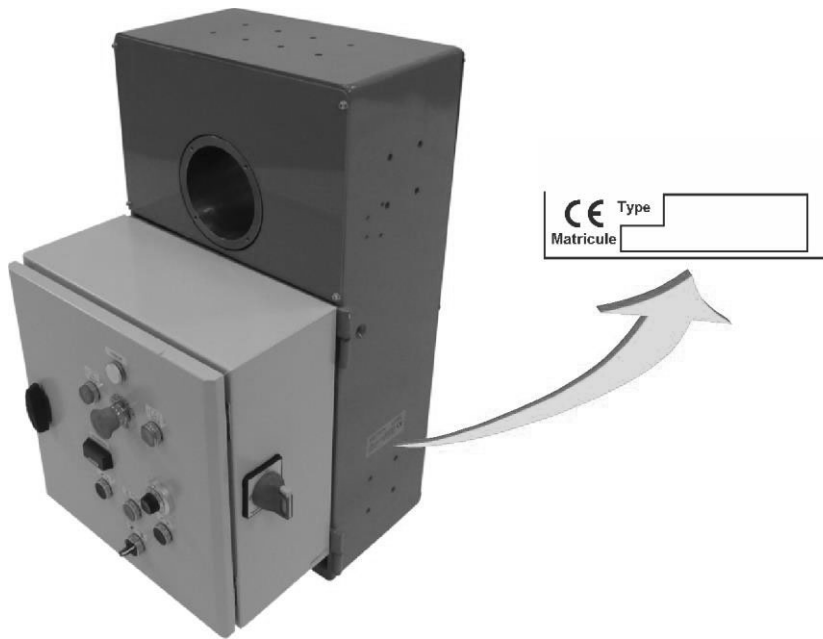
# A - IDENTIFICATION

Please enter the number of your equipment in the following box.

Quote this information in all correspondence.



<b>1</b>	Product serial n°.	<b>5</b>	Instruction for use modification index
<b>2</b>	Product family code	<b>6</b>	Year manufactured
<b>3</b>	Manufacturing factory code	<b>7</b>	Product type
<b>4</b>	Manufacturing year code		



## B - SAFETY INSTRUCTIONS

For general safety instructions, please refer to the specific manual supplied with the equipment.



### AIRBORNE NOISE

Please refer to the specific manual supplied with the equipment.

# C - DESCRIPTION

## 1 - DEFINITION

This headstock **SUPERTOP II** is a product which allows the rotation of pieces. The rotation movement is made by a brushless motoreducer which drives a slewing ring.

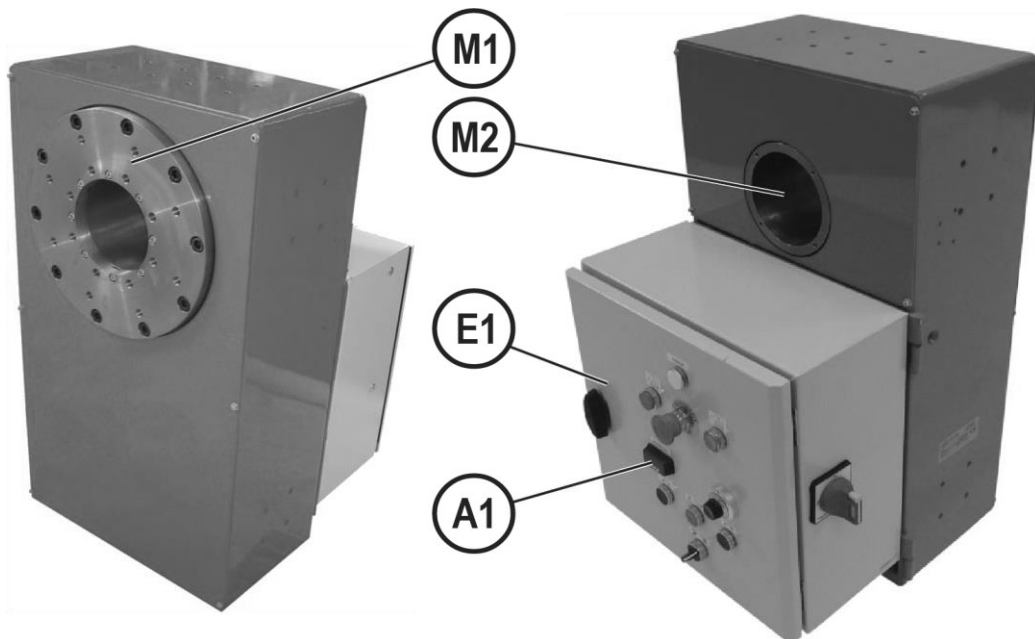
This headstock can be used in autonomous way, only needed the electrical supply 400V TRI. The electrical cabinet is dismountable with 3 m harness.

This motorised headstock can be coupled to an idler headstock in order to avoid the titling torque.

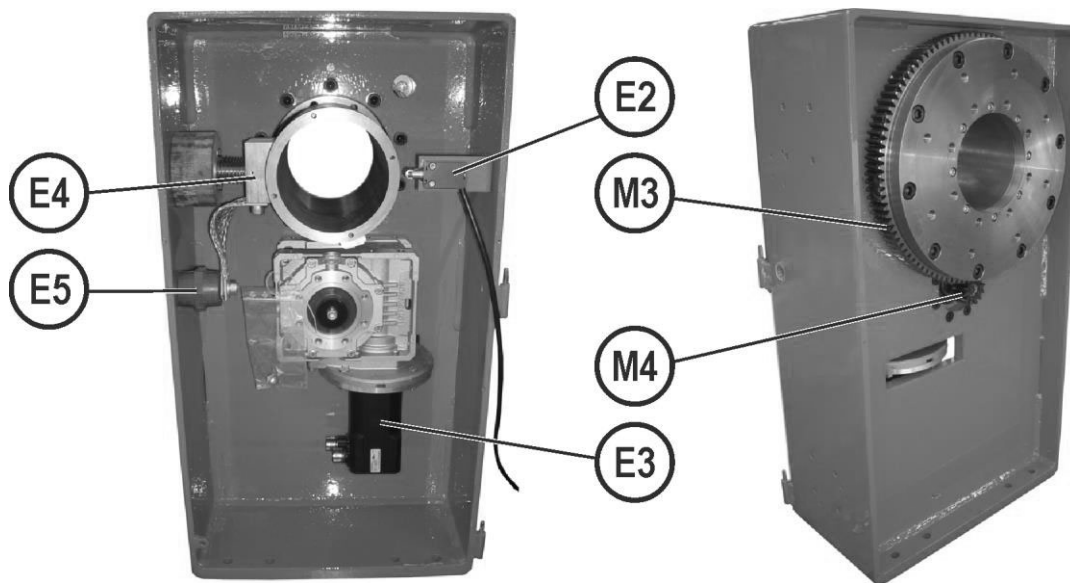
It's composed of:

- A strong structure,
- A motorized plate with a regulation (called plasma) with +/- 1% of accuracy on the speed,
- Earth connection 600 amps,
- Origin sensor with its limit switch,
- Electrical cabinet.

### EXTERIOR VIEW



<b>M1</b>	Fixation plate
<b>M2</b>	Hole
<b>A1</b>	Rotation speed display
<b>E1</b>	Electrical cabinet

**INSIDE VIEW**

<b>M3</b>	Slewing ring
<b>M4</b>	Pinion
<b>E2</b>	Limit switch « top zero »
<b>E3</b>	Moto reducer
<b>E4</b>	Earth brush 600 amps
<b>E5</b>	Earth connection

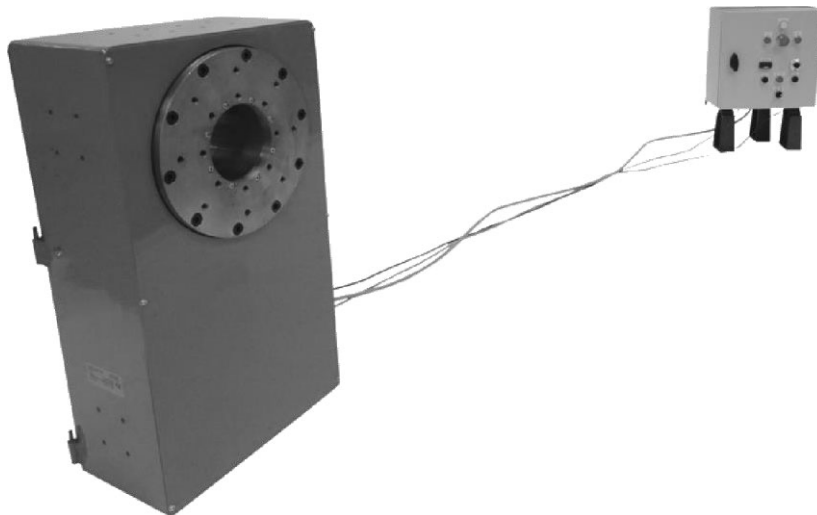


## 2 - CONFIGURATION

Possibility to work with the electrical cabinet in the front direction.



Possibility to work with the electrical cabinet at 3 m from the headstock.



### 3 - ELECTRICAL CONNECTION

The complete electrical cabinet positioned on the back of the headstock including:

- 1 switch on/off on the side of the electrical cabinet
- 1 speed controller for the rotation plate
- Command buttons
  - Light power on
  - Emergency stop
  - Switch on speed controller
  - Switch off speed controller
  - Manual mode : Rotation left / rotation right
  - Manual mode : Stop rotation
  - Auto or pedal mode : Rotation right / left
  - Potentiometer for manual speed
- Speed display tr/min
- An output for the 0-10V to connect an external speed display
- A simple contact (kit auto) for the start in auto or in manual (thanks to a foot pedal type W000273453 in option)
- A feedback information « headstock ready »
- An output of encoder 0-5V – 1024 pts/tr (match with HPW, PLC and 3A)
- An output for « Top zero ».



#### Speed controller diagnosis :

- Green LED flashing : Speed controller ready but no movement
- Green LED lightening : Speed controller in movement
- Red LED lightening : Speed controller out of service

## 4 - TECHNICAL CHARACTERISTICS

### ROTATION

Maximum rotation torque (C1)	60 m.kg
Rotation speed	0.05 to 5 tr/min
Tilting torque (C2)	300 m.kg

### CAPACITY

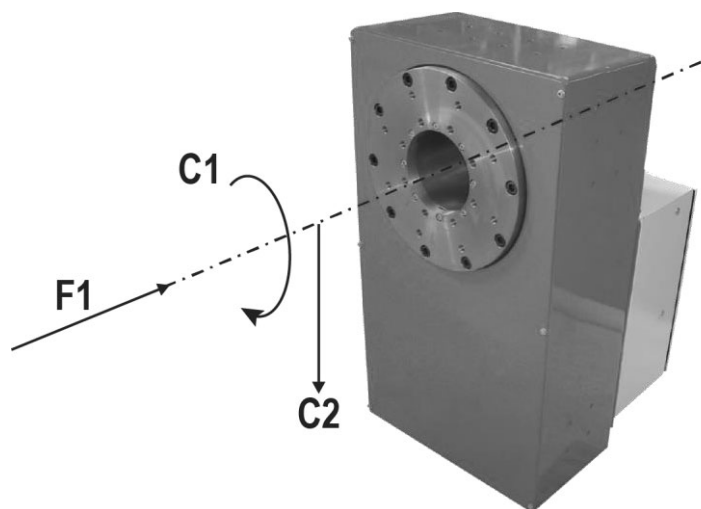
Maximum capacity in flat position (F1)	1500 kg
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### SUPPLY

Electrical supply	400 V tri
Maximum intensity	4 A
Frequency	50 / 60 Hz
Supply cable	no
Earth connection	600 A

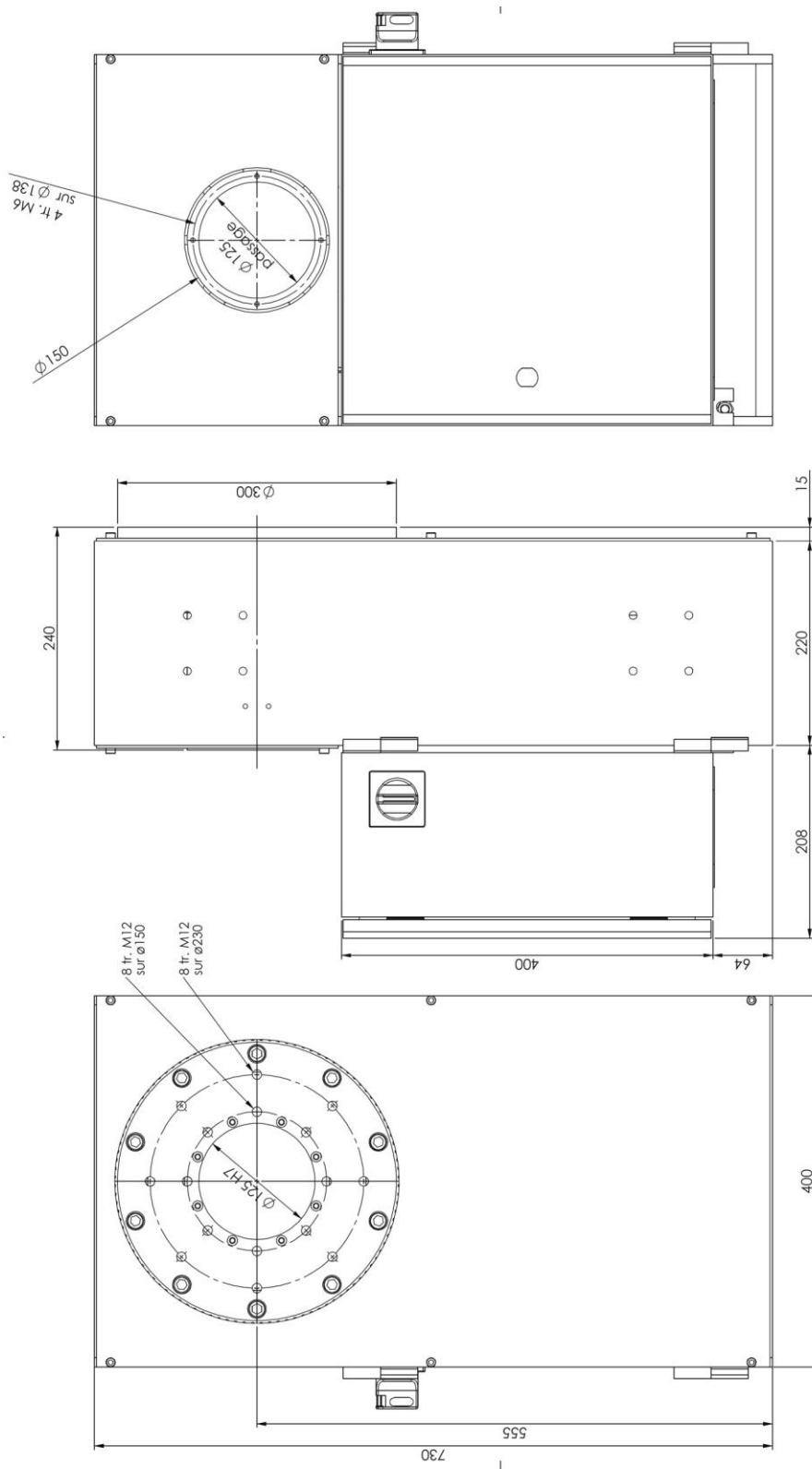
### PLATE

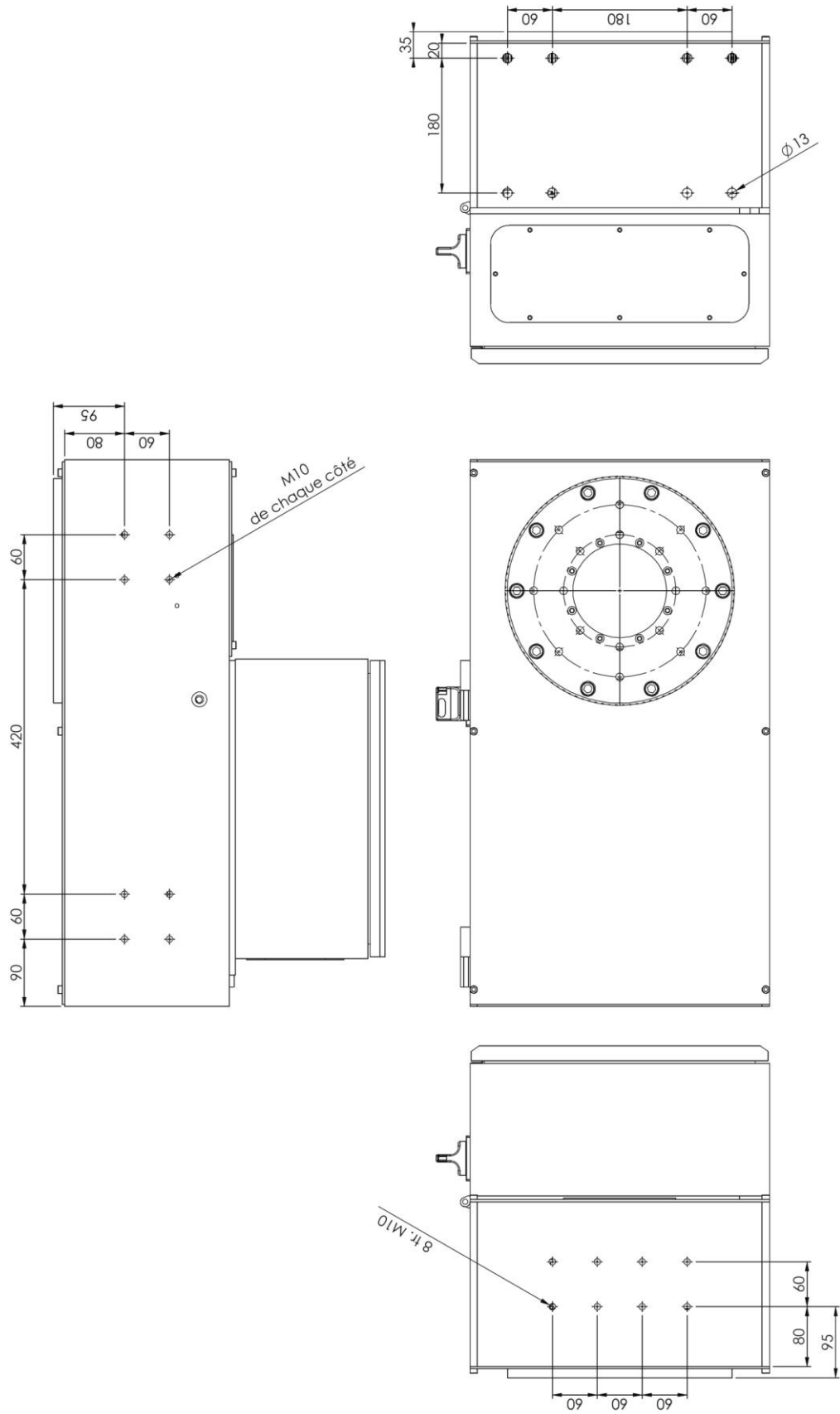
Plate diameter	Ø 300 mm
Plate thickness	20 mm
Central hole	Ø 125 mm



# 5 - LAY OUT

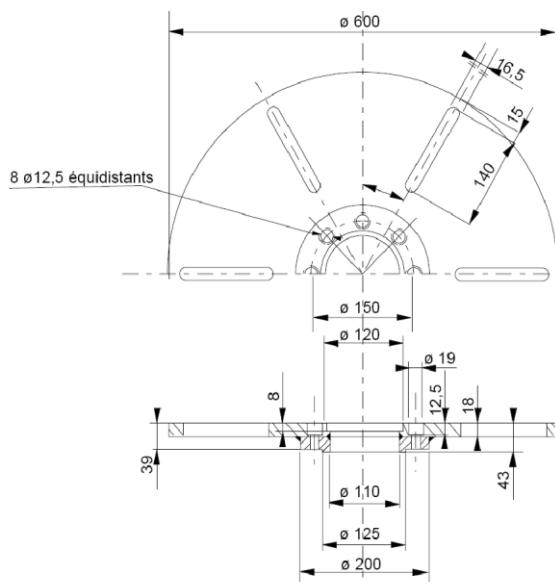
## MOTORIZED HEADSTOCK





## 6 - OPTION

- Foot pedal => W000273453  
Pedal to connect on the headstock to control the rotation of the plate.
  
- Plate Ø 600 mm => W000315399  
Plate to fix the customer piece.



- Adaptation piece for chuck :
  - For chuck 125 mm (W000315315) : W000275308
  - For chuck 250 mm (W000274993) : W000275315
  - For chuck 315 mm (W000274994) : W000275317
  - For chuck 400 mm (W000274995) : W000275319
  
- Idler headstock => W000315402

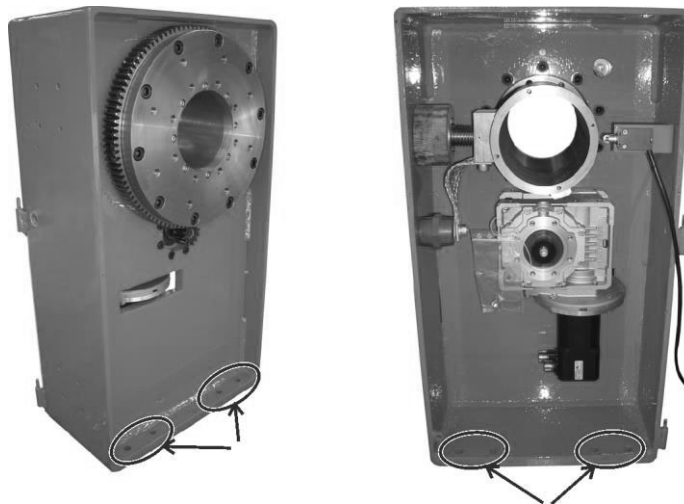
# D - MONTAGE INSTALLATION

## 1 - TRANSPORTATION



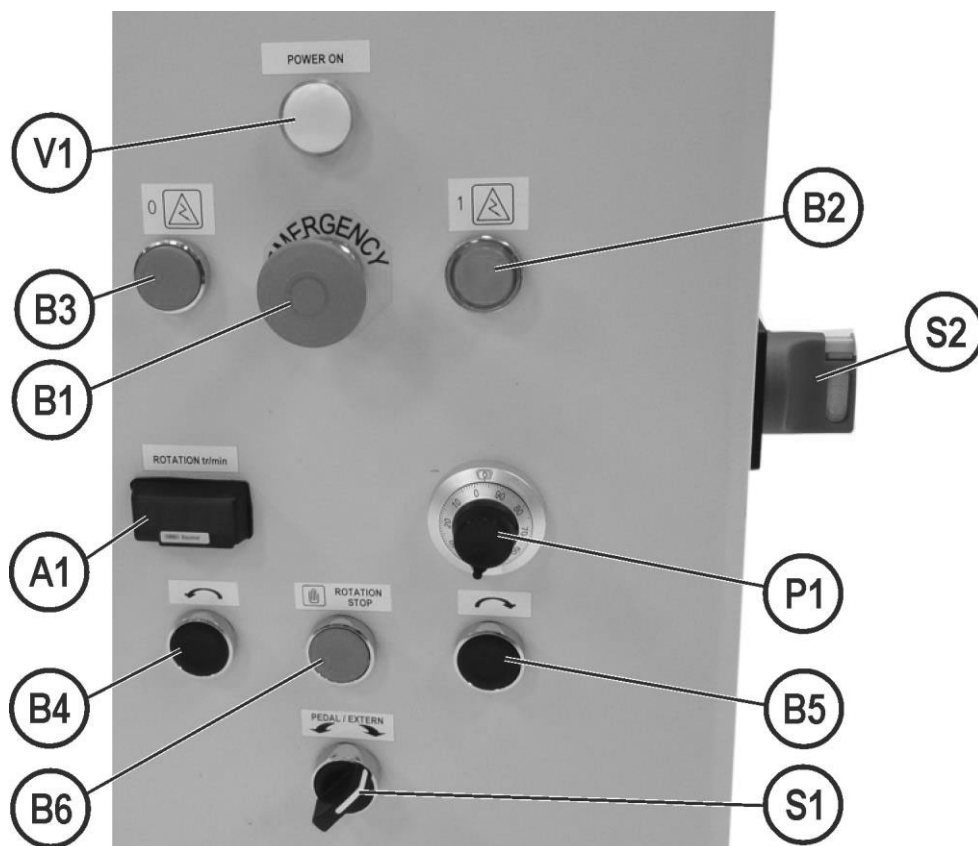
## 2 - FIXATION

The headstock **SUPERTOP II** has to be fixed with bolts or screws (Not Provided).



# E - OPERATOR MANUAL

## 1 - ELECTRICAL CONTROLS



<b>A1</b>	Display the speed in tr/min
<b>B1</b>	Emergency stop
<b>B2</b>	Switch on the speed controller
<b>B3</b>	Switch off the speed controller
<b>B4</b>	Start rotation to left direction
<b>B5</b>	Start rotation to right direction
<b>B6</b>	Stop direction
<b>V1</b>	Light for power on
<b>S1</b>	Movement direction selector (start automatically or by pedal)
<b>S2</b>	Main power switch on/off
<b>P1</b>	Potentiometer for rotation speed



## 2 - MANUAL OPERATOR

Switch on the headstock with « S2 », the light « V1 » is on..  
Switch on the speed controller with « B2 », and with the button « B3 » the speed controller will switch off.

### MANUAL MODE

- Push the buttons « B4 » or « B5 » to start the rotation movement.
- Adjust the rotation speed with the potentiometer « P1 » .
- Control the real speed on the display « A1 » (in tr/min).
- Push the button « B6 » to stop the rotation.

### PEDAL MODE

Use with a pedal connected to the headstock.

- Select the rotation direction left/ right with the selector « S1 ».
- Action the pedal to make the rotation movement.
- Leave the foot on the pedal in order to continue the rotation movement.
- Adjust the rotation speed with the potentiometer « P1 ».
- Control the real speed on the display « A1 » (in tr/min).
- Remove the foot from the pedal to stop the rotation.

### AUTOMATIC MODE

When the headstock is connected with an external contact "kit auto, it's the automatic mode (No possibility to use the pedal mode). 4 Modes exist :

1. Kit Auto  
The headstock rotate according the rotation direction of « S1 » and the speed done by the potentiometer « P1 ».  
  - Select the rotation direction with « S1 » and the speed with « P1 ».
  - Action the external contact for the rotation start, stop the action to stop it.
2. Kit Auto + external speed consign  
The direction of the rotation of the headstock is done by the position of the button « S1 » and the speed is done by the external consign 0/10 volts.  
  - Remove the shunt on the speed consign.
  - Select the rotation direction with « S1 ».
  - Action the external contact for the rotation start, stop the action to stop it.
3. Kit Auto + External Rotation direction  
The headstock rotate according the external rotation direction and the speed done by the potentiometer « P1 ».  
  - Remove connection « S1 ».
  - Adjust the speed with « P1 ».
  - Action the external contact for the rotation start, stop the action to stop it.
4. Kit Auto + external speed consign + external Rotation direction  
The direction of the rotation of the headstock is done by the position of the button « S1 » and the speed is done by the external consign 0/10 volts.  
  - Remove connection « S1 ».
  - Remove the shunt on the speed consign
  - Action the external contact for the rotation start, stop the action to stop it.

# F - MAINTENANCE

## 1 - SERVICING

- So that the machine continues to provide good service for as long as possible, a certain minimum of care and maintenance is necessary
- The frequency of this maintenance work is given on the basis of the production of one work station per day. Maintenance should be more frequent if production is greater.

Your maintenance department may photocopy these pages so that it can follow up maintenance dates and operations (tick as appropriate)



**Before intervention, put the headstock « POWER OFF »**

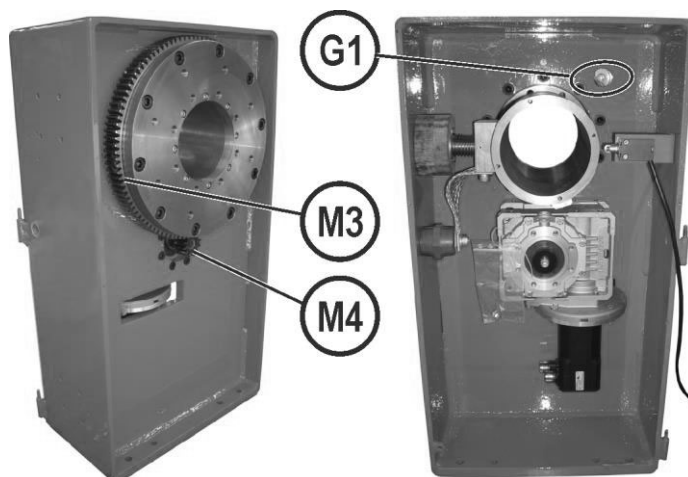
### Every 6 months

Date of maintenance :    /    /



Dismount the protection cover and put the grease on the bearing (M3) through the greaser (G1)

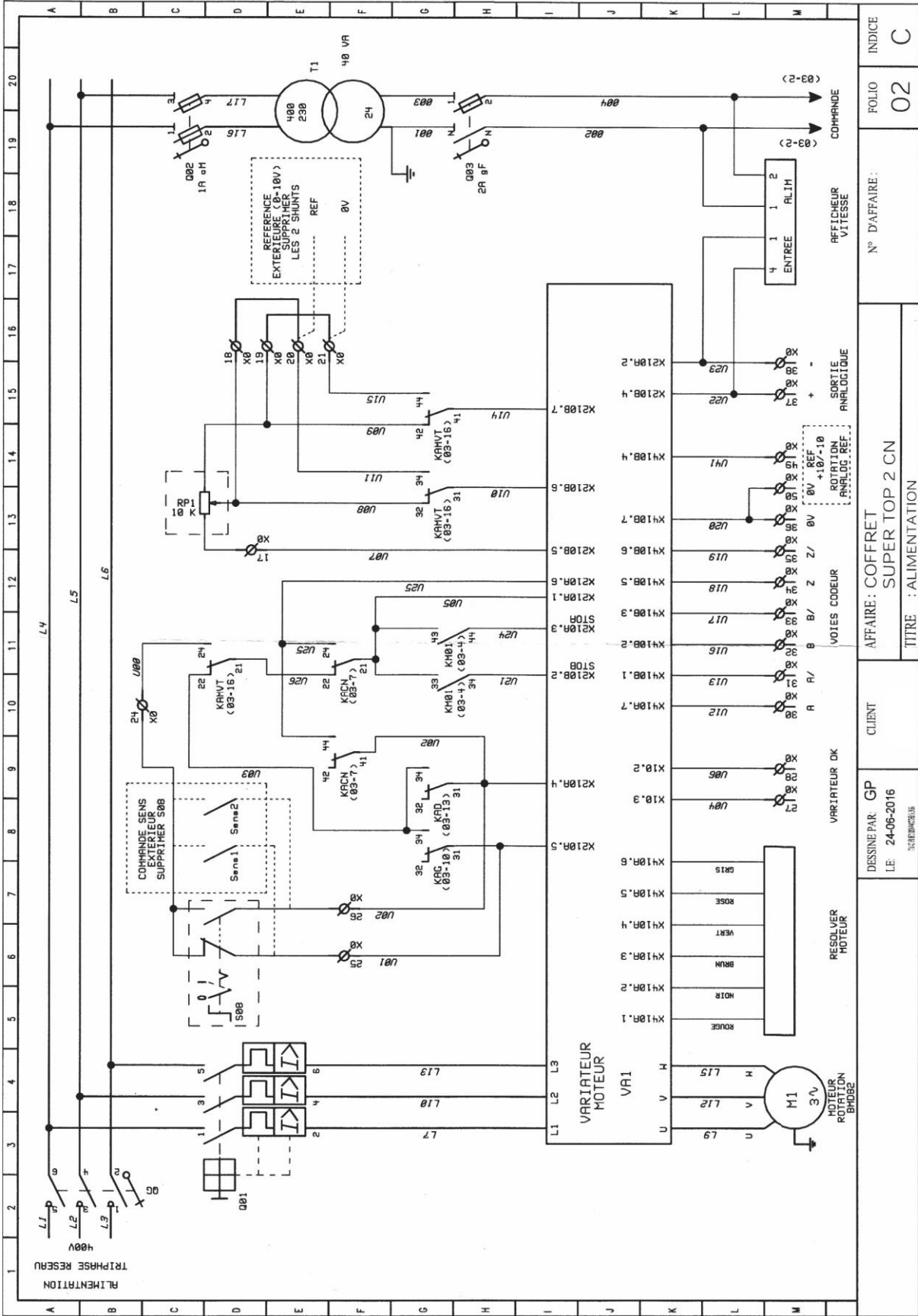
Dismount the protection cover and put the grease on the sweling ring (M3) and the motor pinion (M4)

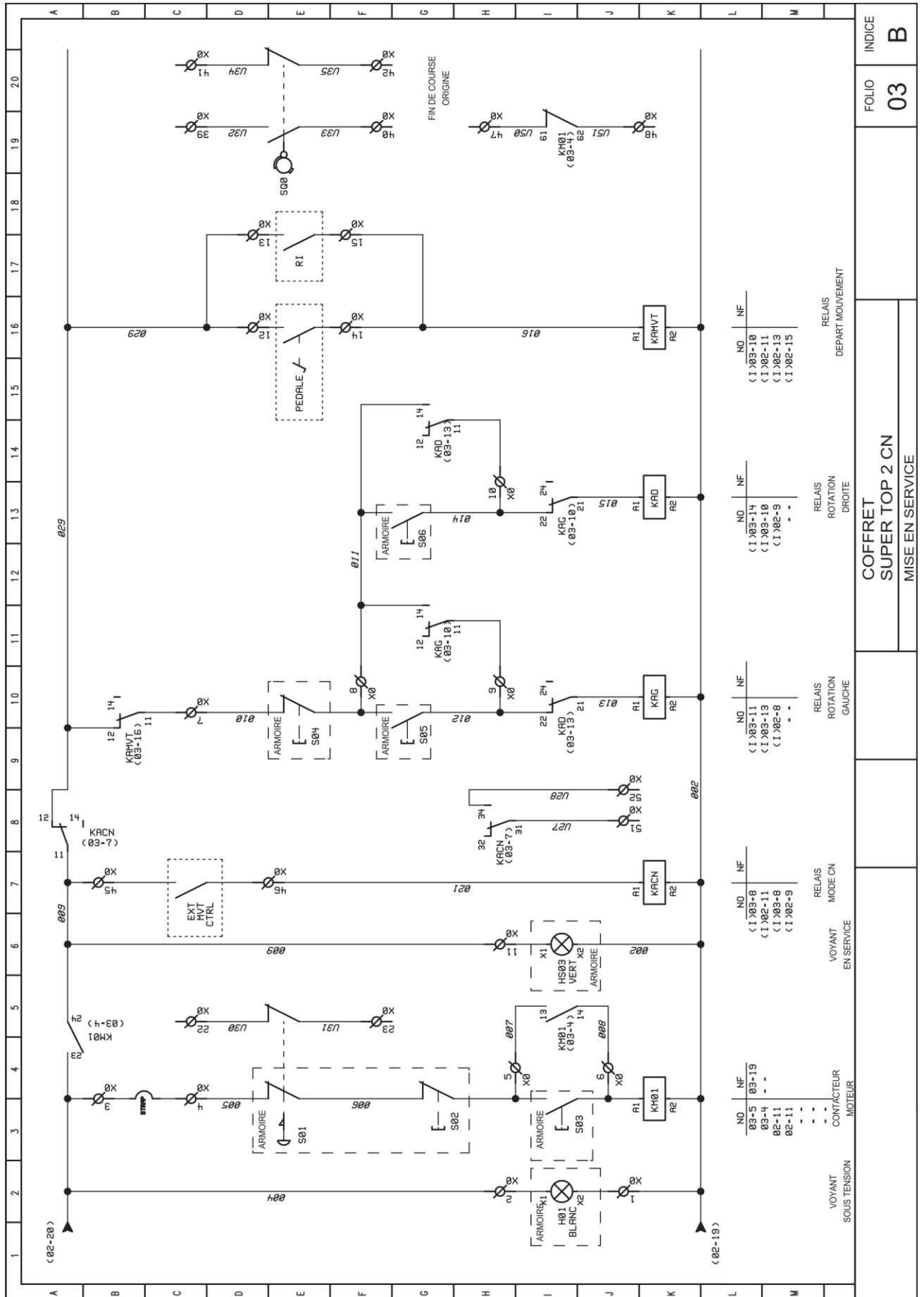


## 2 - TROUBLESHOOTING

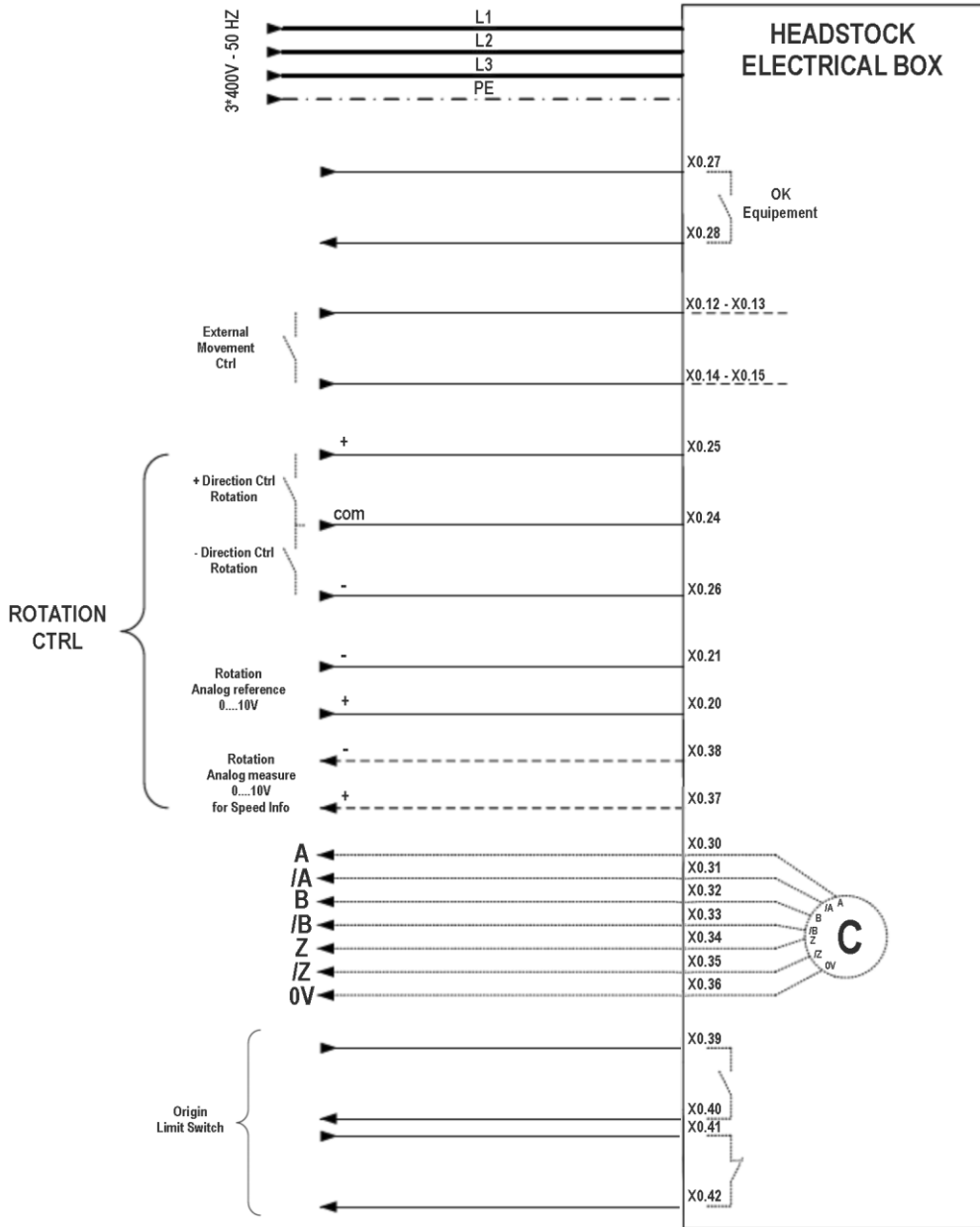
Possible symptoms	Probable causes	Possible remedies
Speed controller out of service => Red light switched on	Overload	Switch off the power to reset the default

3 - ELECTRICAL DIAGRAM





INDICE		B	
FOLIO		03	
COFFRET		SUPER TOP 2 CN	
MISE EN SERVICE			
NO	NF	RELAYS	VOYANT EN SERVICE
<I>03-8			
<I>02-11			
<I>03-8			
<I>02-9			
NO	NF	RELAYS	VOYANT EN SERVICE
<I>03-11			
<I>03-13			
<I>02-9			
NO	NF	RELAYS	VOYANT EN SERVICE
<I>03-10			
<I>02-9			
NO	NF	RELAYS	VOYANT EN SERVICE
<I>03-10			
<I>02-13			
<I>02-15			



# 4 - SPARE PARTS

## How to order

The photos or sketches identify nearly every part in a machine or an installation

The descriptive tables include 3 kinds of items:

- those normally held in stock: ✓
- articles not held in stock: ✗
- those available on request: no marks

(For these, we recommend that you send us a copy of the page with the list of parts duly completed. Please specify in the Order column the number of parts desired and indicate the type and the serial number of your equipment.)

For items noted on the photos or sketches but not in the tables, send a copy of the page concerned, highlighting the particular mark.

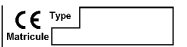
For example:

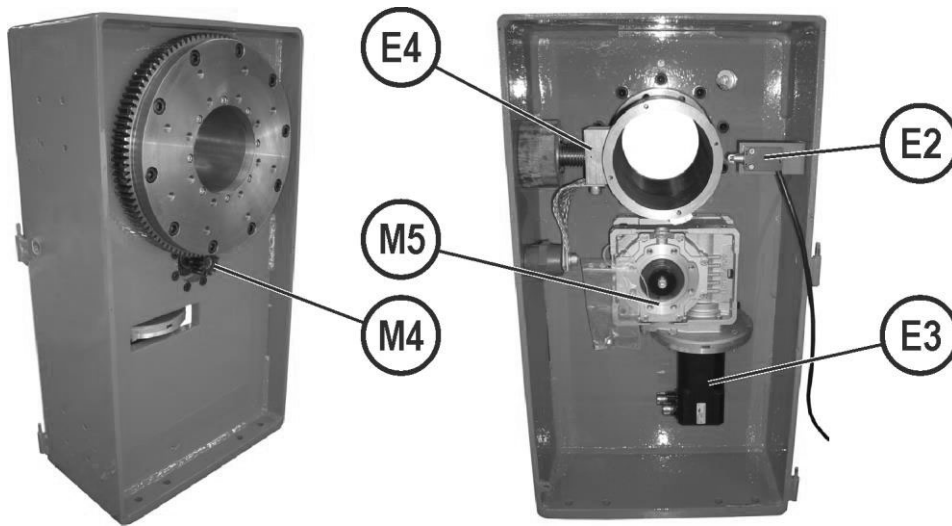
Item	Ref.	Stock	Order	Designation
1	W000XXXXXX	✓		Machine interface board
2	W000XXXXXX	✗		Flowmeter
3	9357 XXXX			Silk-screen printed front panel

✓	normally in stock
✗	not in stock
	on request

- For parts order, give the quantity required and put the number of your machine in the box below.

	TYPE:
	Number:



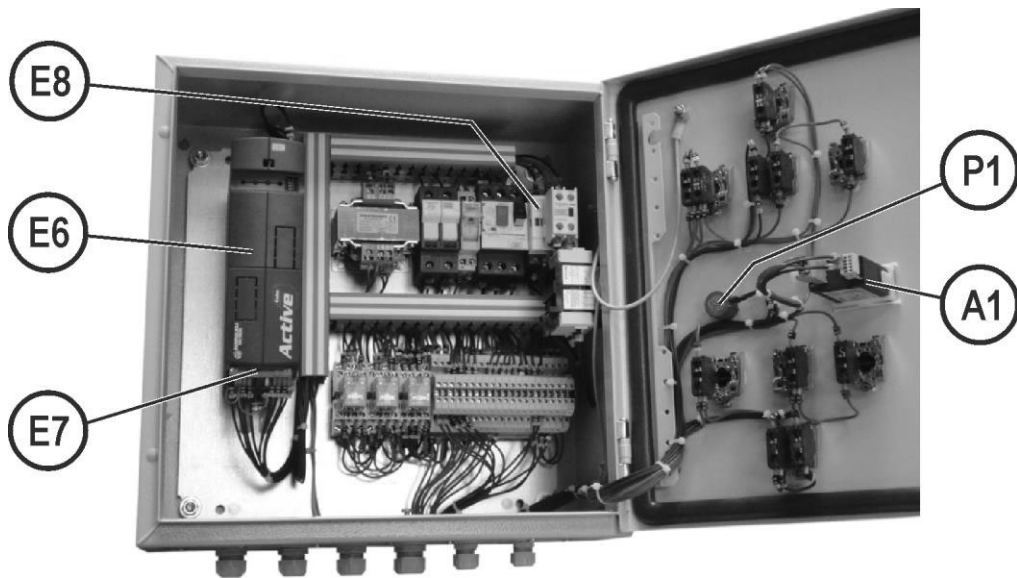
✓	normally in stock
✗	not in stock
	on request

Item	Ref.	Stock	Order	Designation
E2				Limit switch
E3				Motor brushless
E4				Earth brush 600 A
M4				Pinion
M5				Reducer

➤ For parts order, give the quantity required and put the number of your machine in the box below.

	TYPE:
	Number:





✓	normally in stock
✗	not in stock
	on request

Item	Ref.	Stock	Order	Designation
A1				Speed display
P1				Potentiometer
E6				Speed controller
E7				Encoder card
E8				Contacteur KM0

➤ For parts order, give the quantity required and put the number of your machine in the box below.

CE Type <input type="text"/> Matricule <input type="text"/>	TYPE:
	Number:

