

INSTRUCTION MANUAL



Model J250

Multi blade wood cutting machine

www.DaltonsWadkin.com

List of contents:	Page
Machine identification	3
Warranty	4
Technical specifications	4
Phonometric survey	5
Installation:	6
Lifting	6
Positioning	6
Suction	7
Electrical wiring	8
Control panel	10
Instructions for use	11
Wooden boards	17
Blades	18
Safety measures	19
User security and residual risks	20
Possible anomalies: identification and countermeasures	21
Maintenance and cleaning	23
Lubrication	23
Electric diagrams	24
Spares	00
Enclosures	00
Motor position diagram	
Stroke-end emergency position diagram	
Lubrication diagram	
Variator	
Feeding speed display	

MACHINE IDENTIFICATION

MANUFACTURER:

CML Srl
Viale delle Industrie, 28/B
I - 20040 CAMBIAGO (MI)
Tel.: ##39 2 95 30 80 16
Fax: ##39 2 95 30 80 03

CE (standard marking)

DENOMINATION:

J250

SERIAL NUMBER:

10109Y

CERTIFICATE CE EXAM TYPE:

N° 0476 13 060 12 96

ADMINISTRATIVE REPORT:

CERMET
Via Aldo Moro 22
I - 40068 S. LAZZERO DI SAVENA
BOLOGNA

CONSTRUCTION YEAR:

199Y

TOTAL INSTALLED KW:

19,5

OPERATING RATED VOLTAGE:

415 v 50Hz

MAIN MOTOR POWER:

KW 18,5 TYPE VEH

FEEDING CARPET MOTOR POWER:

KW 0,35/0,75 TYPE VEH

REDUCER TYPE:

HYDROHEC

CML s.r.l.
Viale delle Industrie, 28/b - 20040 CAMBIAGO (MI) Italy
Tel. 02/95.30.80.16 - Fax 02/95.30.80.03

modello: SCA J250 T ☒
matricola n°: 10109Y
anno costruzione: 199Y
volt: 415 Hz: 50
kw motore lame: 18,5
kw installati: 19,5
 Ø Dmin: 220
Ø Dmax: 300
Ø d: 60/85

- technical and/or dimensional modifications without notice -

WARRANTY

The machine is covered by a six-month warranty, starting from the date of delivery. All parts that show defects in materials or in workmanship during this period will be repaired or replaced free of charge.

This warranty does not cover breakdowns due to transportation, or caused by electrical miswiring, breakage of blades, breakdowns due to operator's misuse or resulting from repairs performed by unauthorized personnel.

Forwarding charges of parts replaced during the warranty period are to be charged to the client.

TECHNICAL SPECIFICATIONS J250

Max cutting thickness	80mm
Distance between blades	220mm
Blades max diameter	300mm
Blades min diameter	220mm
Blade holder bore size	60mm
Blade shaft speed	3500rpm
Feeding carpet width	250mm
Working plank min length	500mm
Optional min length	280mm
Feeding carpet speed	12+24m/min
Plank max width	520mm
Work surface height from ground	750mm
Blades motor power	15, 18.5, kW
Feeding truck motor power	0,75kW
Suction mouth bore size	250mm
Dimensions	135x114x138cm
Weight	1120kg

Available on request:

- blade position laser indicator
- max passage boards width 620

Please contact our offices for availability, delivery terms, etc.

Phonometric survey

The phonometric survey was performed on a machine equipped with sound-proofing materials in respect ISO 7960.

For survey data, see attached.

- Acoustic equivalent pondered pressure PA 95 db (A)
- Instant sound power 100 db (A)
- Ambient correction factor K 1,9 db

NOTE: the noise values shown must be regarded as edmission levels; therefore, they do not necessariy represent safe operating levels.

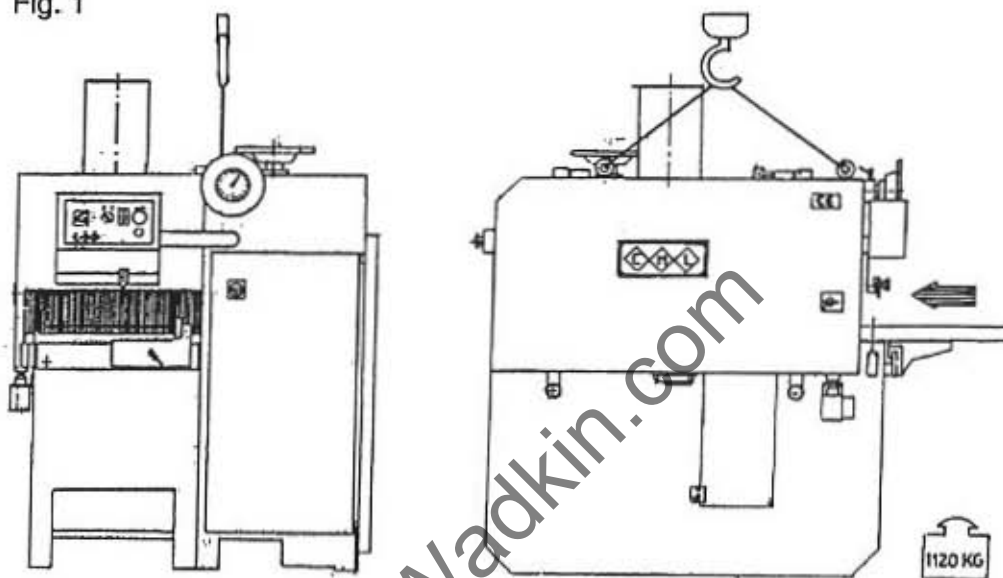
www.DaltonsWadkin.com

INSTALLATION

Lifting

The machine body is provided with hooks that must be used for hoisting. Care must be taken to avoid bumps to the machine during this operation.

Fig. 1



Positioning

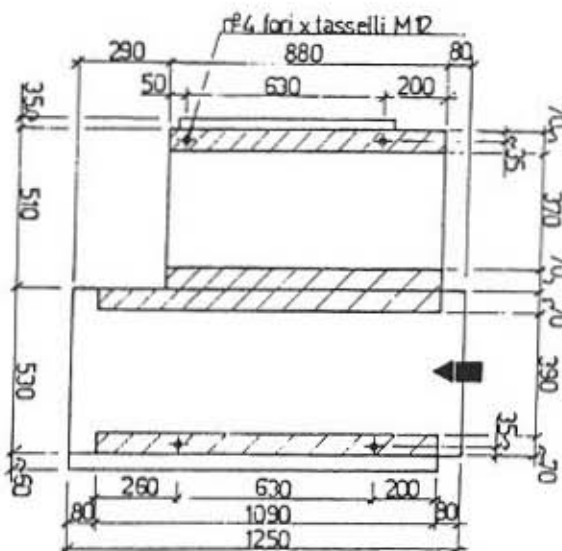
The machine must be positioned on a solid cement base, adequately levelled and capable of handling the weight.

Thus, proceed with the levelling of the machine by means of a precision level tool, layed on the working surface.

Clamping the machine is not necessary, as the weight of the machine itself is enough to hold the machine perfectly steady without clamping.

For a better working condition it's needer antivibration supports put between the concrete and the machines basement.

Fig. 2



Vacuum system

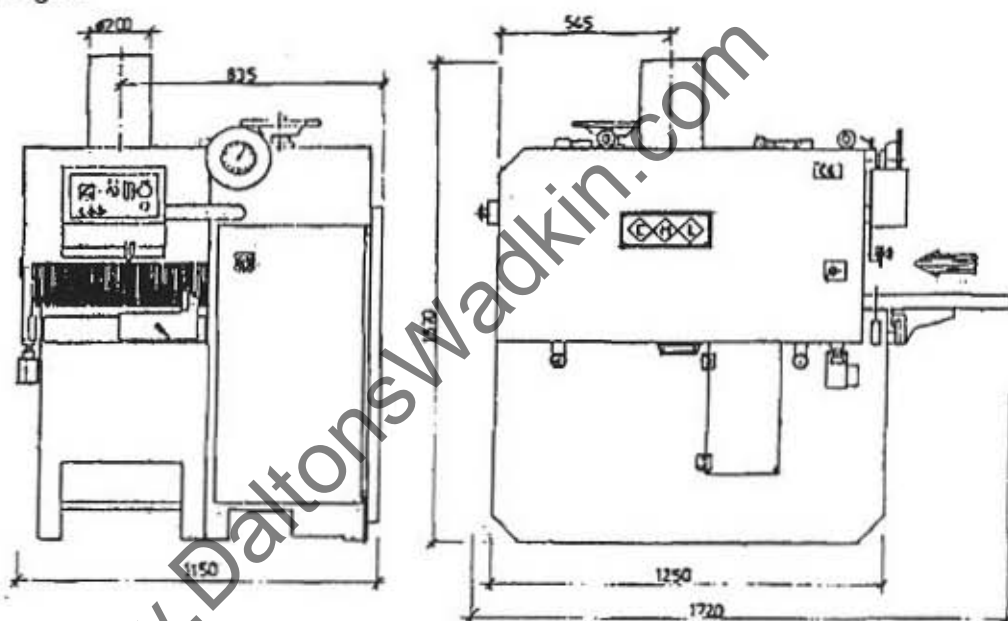
The machine must be connected to an efficient suction system by means of the proper suction mouth ($\varnothing 200\text{mm}$), respectively located on the front part of the machine.

The 200mm suction mouth must always be used during the normal operation of the machine.

The end of the tube which connects the suction aspirating mouth must be flexible about 1,5 Mt. to allow to open properly the blades head cover.

The required suction flow is of about $3400\text{m}^3/\text{hour}$, at a flow speed of 30m/s .

Fig. 3



Electrical wiring

The electrical wiring should be done by professionals:

all the needed plans for electrical wiring are attached to the present manual.

Before connection to a power line make sure that the line voltage is the same for the motors equipped on the machine (see plate attached to the machine body).

R-S-T connecting terminals and the GND connecting terminal are located in the panel #8016 (see page 14).

The power supply wire must be properly fixed by hold fast for hooking the electrical sets, and protected by means of a strong wiring cable.

The electrical connection can be made by means of aerial or underground wires: in both cases make sure that the wires are properly fixed.

The body of the machine must be connected to the ground.

The wires section must be able to handle the installed power; see the following table:

Blades motor power (HP)	380V-50Hz			220V-50Hz		
	Blades motor current (A)	Motor supply wires section (mm ²)	Autoswitch setting (A)	Blades motor current (A)	Motor supply wires section (mm ²)	Autoswitch setting (A)
20	28.5	6x6+T	33	49.5	6x6	57
25	34	6x6+T	39	58.9	6x6	68

The ammeter shows the motor power consumption; the above table shows the maximum values according to the supply voltage and to the total installed power. The consumption values should not be exceeded while the machine is working: in that case the feeding truck speed must be reduced.

After the electrical connection control that the rotation direction of all motors is correct, pressing: first the B button and after awaiting for 10 seconds turn the selector on position A if the track runs in the direction shown on the sketch underneath the wiring it's been done corectly.

On the contrary, put the main switch on position O, cut off the electrical power of the line connected to the machine and change position of the power of the power supply wires.

Electrical wiring

The electrical wiring should be done by professionals:

all the needed plans for electrical wiring are attached to the present manual.

Before connection to a power line make sure that the line voltage is the same for the motors equipped on the machine (see plate attached to the machine body).

L1-L2-L3 connecting terminals and the GND connecting terminal PE are located in the panel #8016 (see page 14).

The power supply wire must be properly fixed by hold fast for hooking the electrical sets, and protected by means of a strong wiring cable.


The electrical connection can be made by means of aerial or underground wires: in both cases make sure that the wires are properly fixed.

The body of the machine must be connected to the ground.

The wires section must be able to handle the installed power; see the following table:

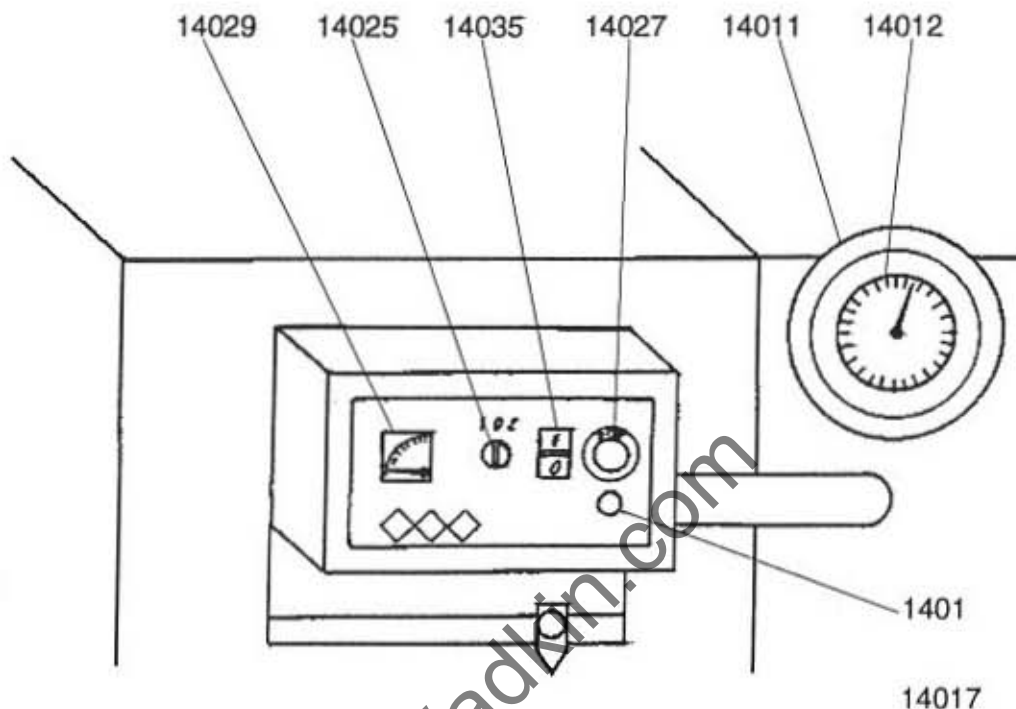
Blades motor power (Kw)	380V-50Hz			220V-50Hz		
	Blades motor current (A)	Motor supply wires section (mm ²)	Autoswitch setting (A)	Blades motor current (A)	Motor supply wires section (mm ²)	Autoswitch setting (A)
15	28.5	6x6+T	33	49.5	6x6	57
18,5	34	6x6+T	39	58.9	6x6	68

The ammeter shows the motor power consumption; the above table shows the maximum values according to the supply voltage and to the total installed power. The consumption values should not be exceeded while the machine is working: in that case the feeding truck speed must be reduced.

After the electrical connection control that the rotation direction of all motors is correct, pressing first the B button and after awaiting for 10 seconds turn the selector on position  if the track runs in the direction shown on the sketch underneath the wiring it's been done correctly.

On the contrary, put the main switch on position O, cut off the electrical power of the line connected to the machine and change position of the power of the power supply wires.

Control panel



- 14027 **EMERGENCY STOP** button
- 14035 Blades shaft ON-OFF button
- 14025 Selector 1-0-2: feeding carpet START/STOP: the carpet will not start if the blades shaft is stopped.
- Position: 0 stop
- 1 feeding speed
- 2 fast feeding speed
- 14029 Ammeter
- 1401 Blades door timer blinking light indicator
- 14011 Hand-wheel for lowering-uppering group rollers pressure
- 14012 Pressing group height millimtered scale
- 14017 Index first sawblade

WARNING:

The machine will not start under one of the following conditions:

- **EMERGENCY STOP** button pressed
- Blades access door or feeding carpet access door opened

INSTRUCTIONS

When the operations explained in the 'Installation' chapter have been made, the machine is ready for working.

Following are listed - in the right order - all the operations that must be made to operate the machine.

Select the needed blade diameter. The following table shows the maximum cutting thicknesses according to the blade diameter:

Blade diameter	Max cutting thickness with fixed blades	Device for short pieces
Ø220mm	40mm	-
Ø250mm	55mm	30
Ø300mm	80mm	55

With the main switch set on the position 1 push the EMERGENCY STOP button and wait until the blades access door timer unlocks the blades access door itself (the blinking indicator shows that the door is unlocked).

- Open the blades access door No. 1407.
 - Make sure that the wood boards are locked in their places, and lined up with the pressing group. It is important that the wood boards are made according to the attached drawing (see attached: "Wood boards"), and made of undeformable wood.
 - Assemble the blades ass'y and its spacers only on the spindle, after having carefully cleaned the blades and spacer with a dry cloth.
 - When the blades ass'y is assembled, lock the threaded locking ring 2 only by means of the specific tool supplied with the machine.
 - According to the diameter of the mounted blades, lift the main shaft operating on the manual wheel 14031 (see page 14) to allow the assembly of the saw on its shaft. Warning: never use hammers or similar tools to facilitate this operation, as it is supposed to be performed as gently as possible.
- Furthermore, the shaft must be carefully cleaned using rags: avoid blowing them with compressed air that would raise dust that anyway falls back. When the saw have been positioned on the shaft, lock it by means of the special ring nut which has been previously cleaned.

Check, operating on the disposal #8005 by means of the 55mm wrench supplied with the machine, the correct functioning of the splinter proof security disposals, that - due to their own weight - should always fall perpendicularly to the feeding truck. Furthermore, check that the splinter proofs located on the working surface can easily slide according to their function.

Close the blades access door No. 1407.

- Set the reference guide No. 14019 at the feeding side of the machine, operating on the handle No. 14022 and referring to the specific millimetric ruler.
- Re-press the EMERGENCY STOP button.

- Start blades rotation pressing the button No. 14035 (see attached 'Control panel').

- Set the pressing rollers height operating the hand wheel No. 14011 (see on the attached 'Control panel') according to the nominal thickness of the boards to be worked: the specific scale No. 14012 shows the height position of the rollers.

Should the short boards disposal be assembled in the machine, the height setting of the pressing rollers must absolutely not exceed the values shown in the table, in order to avoid possible damages.

It is important that the working boards are not supposed to exceed the nominal thickness for more than $\pm 10\text{mm}$, both in thickness and difformity. On the contrary, the machine can get damaged, and unsafety for the operator.

- Unlock the handle No. 14036, then start lowering the blades shaft, operating on the hand wheel L No. 14031, controlling at the same time the scale shown by the arrow indicator No. 14037 located near the wheel, until the corresponding size diameter of the blades assembled into the machine is reached.

Then lock again the handle No. 14036.

- Start the feeding carpet pressing the button No. 14025 (see on attached 'Control panel'); the feeding speed will be set by means of the selection: on position 1 (slow speed) and if the working condition allows to work with a faster speed put on position 2 (fast speed).

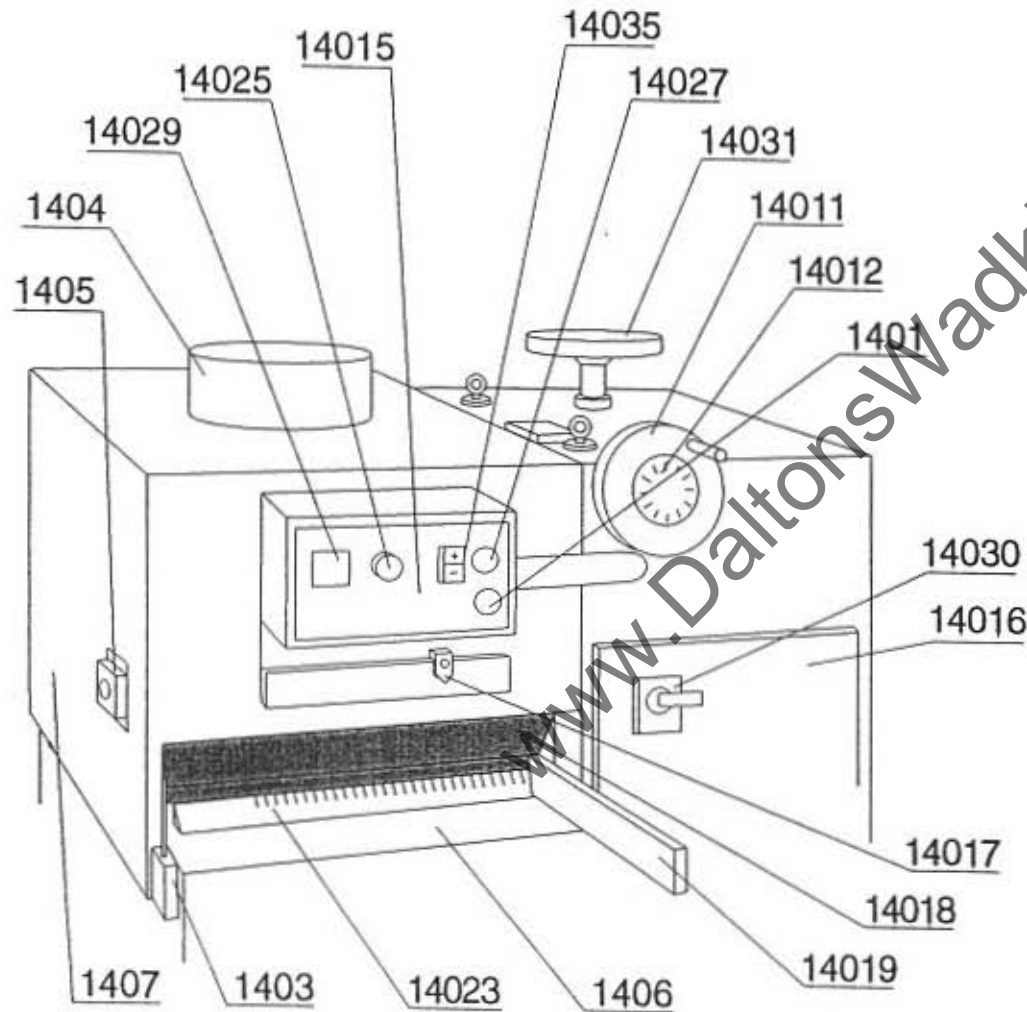
- Start the cutting, setting the boards into the machine, paying attention to the linearity with the reference guide, because once they are caught by the feeding truck, they cannot be set differently.

Never feed boards laid one on top the other, and never exceed the blades operating limits: not observing these rules drastically reduces the working quality, and may cause damages to the machine.

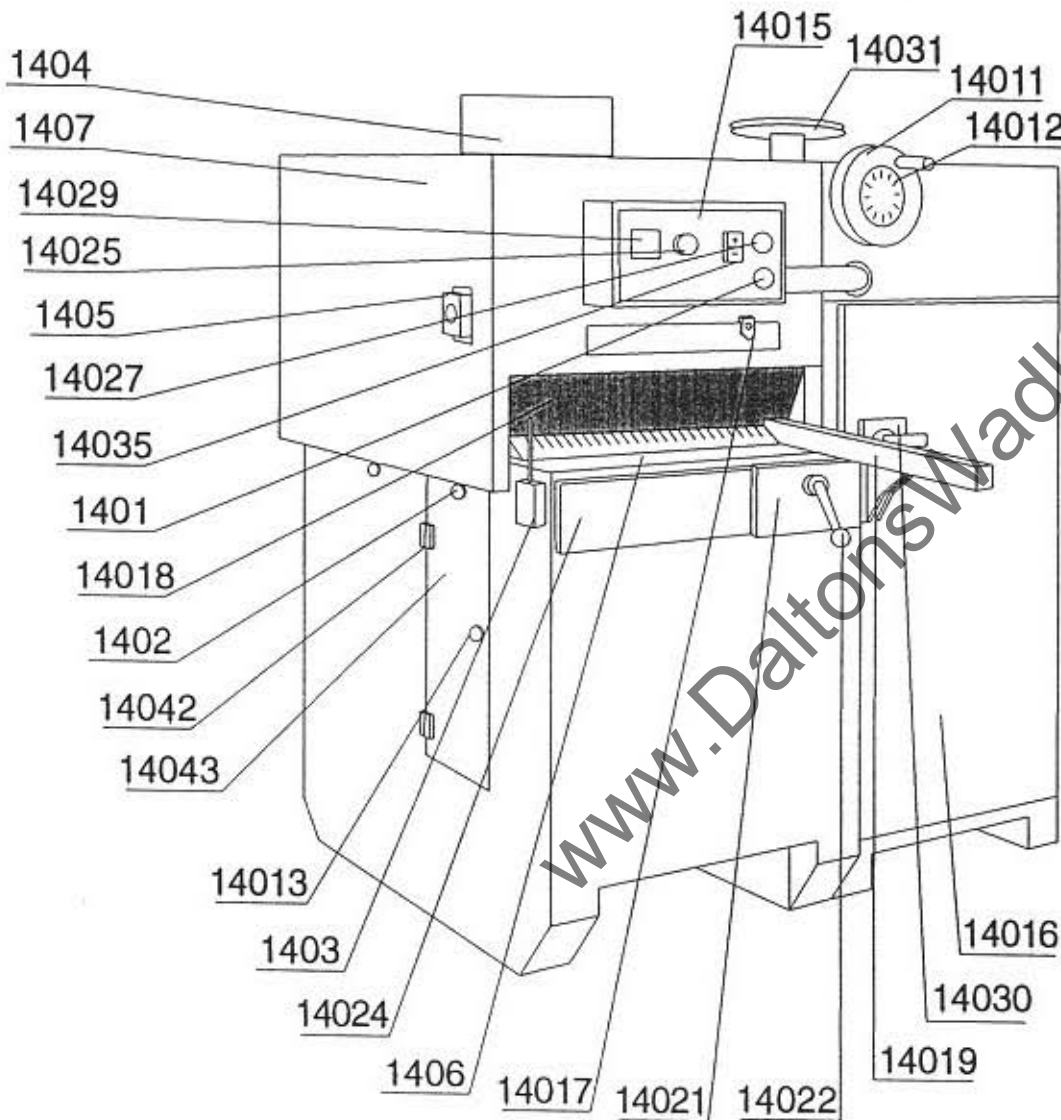
The ammeter is specifically provided on the 'Control panel' to constantly display the power consumption of the motor that operates blades.

The maximum estimate values are shown in the table on page 8.

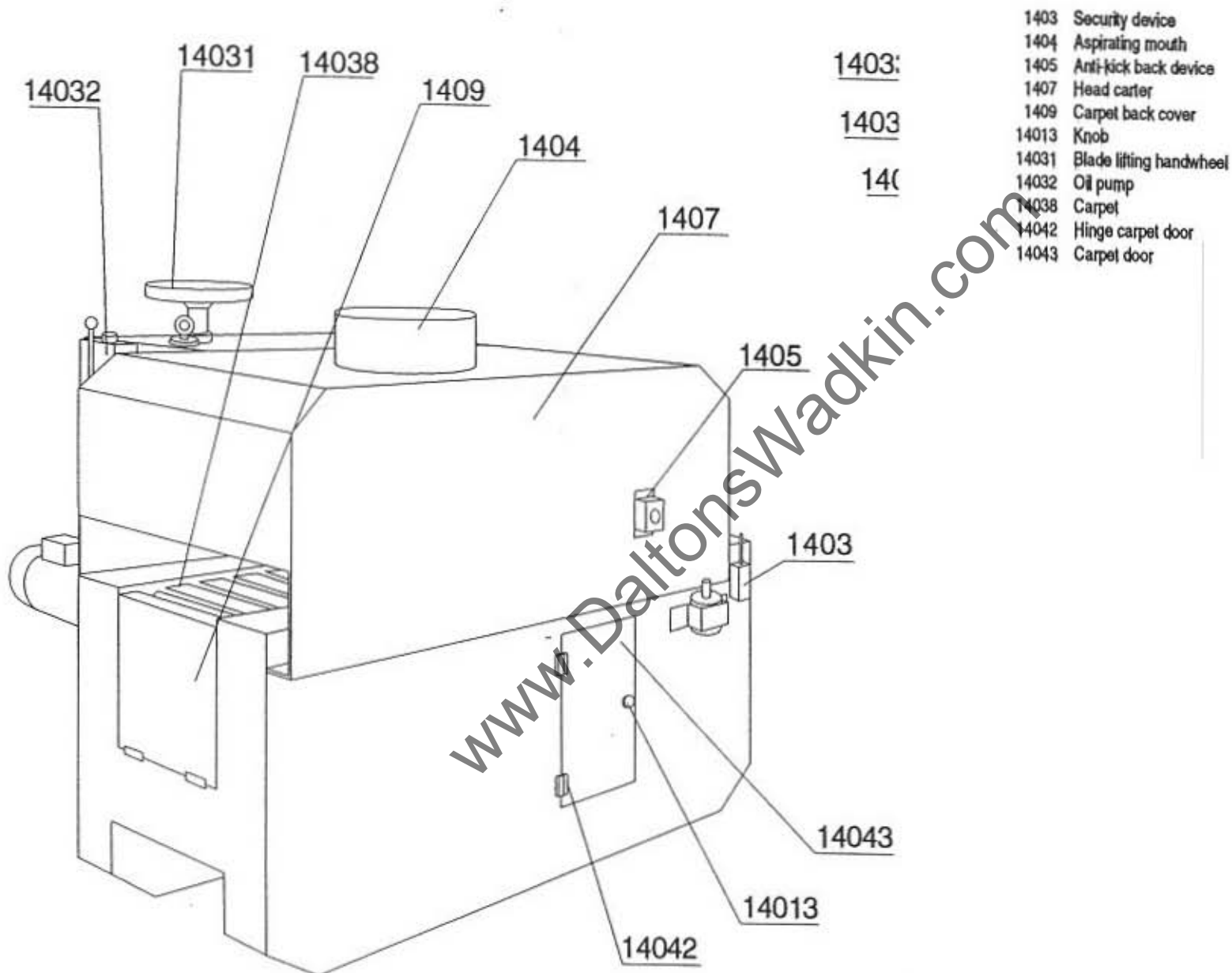
The limiting width device located at the feeding side of the machine is provided with a microswitch Fc5 (see attached 'Position microswitches and emergencies') that stops the machine when put into action.

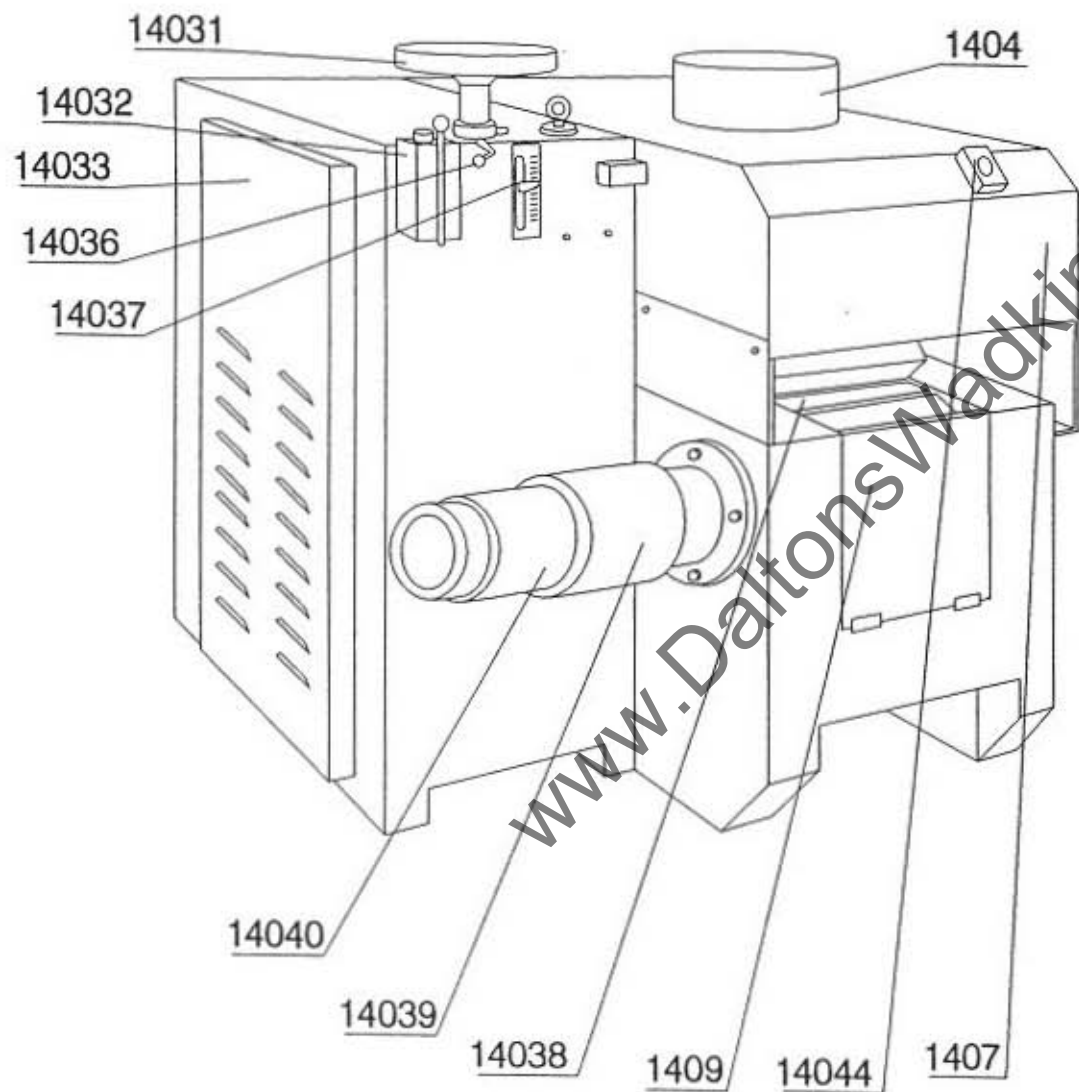


- 1401 Blinking light
- 1403 Security device
- 1404 Aspirating mouth
- 1405 Upper anti-kick back device
- 1406 Working surface
- 1407 Head carter
- 14011 Handwheel for uppering and lowering pressing rollers group
- 14012 Handwheel cutting thickness
- 14015 Panel control board
- 14016 Electrical box door
- 14017 First blade index
- 14018 Steel fingers
- 14019 Fence
- 14023 Lower anti-kick back
- 14025 Feeding carpet START/STOP
- 14029 Ammeter
- 14030 Main switch
- 14031 Blade lifting handwheel
- 14035 Blades starting button



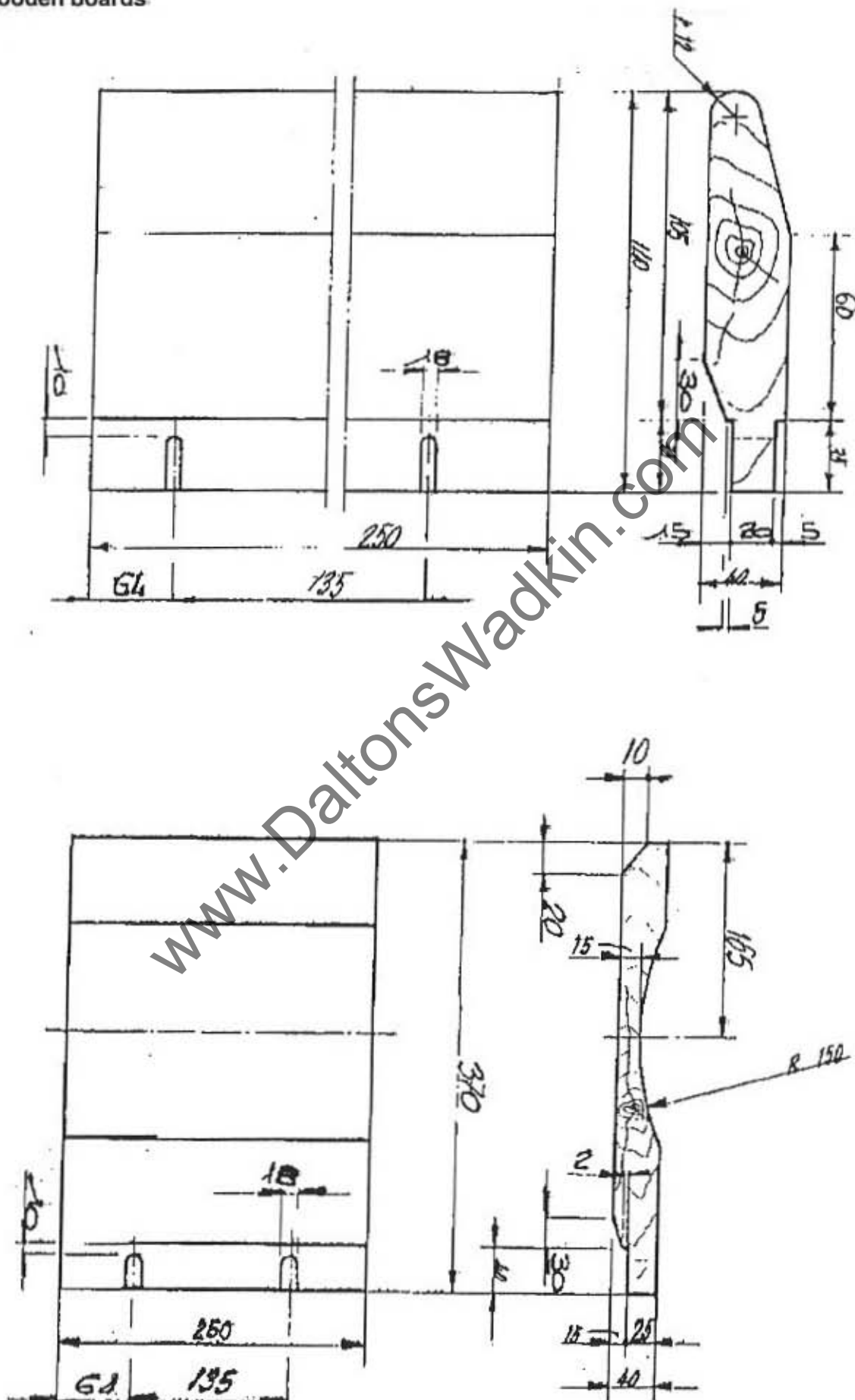
- 1401 Yellow lamp
- 1402 Knob
- 1403 Security device
- 1404 Aspirating mouth
- 1405 Upper anti-kick back device
- 1406 Working surface
- 1407 Head carter
- 14011 Handwheel for uppering and lowering pressing rollers group
- 14012 Handwheel cutting thickness
- 14013 Knob
- 14015 Panel control board
- 14016 Electrical box door
- 14017 First blade index
- 14018 Steel fingers
- 14019 Guide holder
- 14021 Fence
- 14022 Locking handle fence
- 14023 Lower anti-kick back
- 14024 Plate guide holder
- 14025 Feeding carpet START/STOP
- 14027 Emergency button
- 14029 Ampmeter
- 14030 Main switch
- 14031 Blade lifting handwheel
- 14042 Hinge carpet door
- 14043 Carpet door



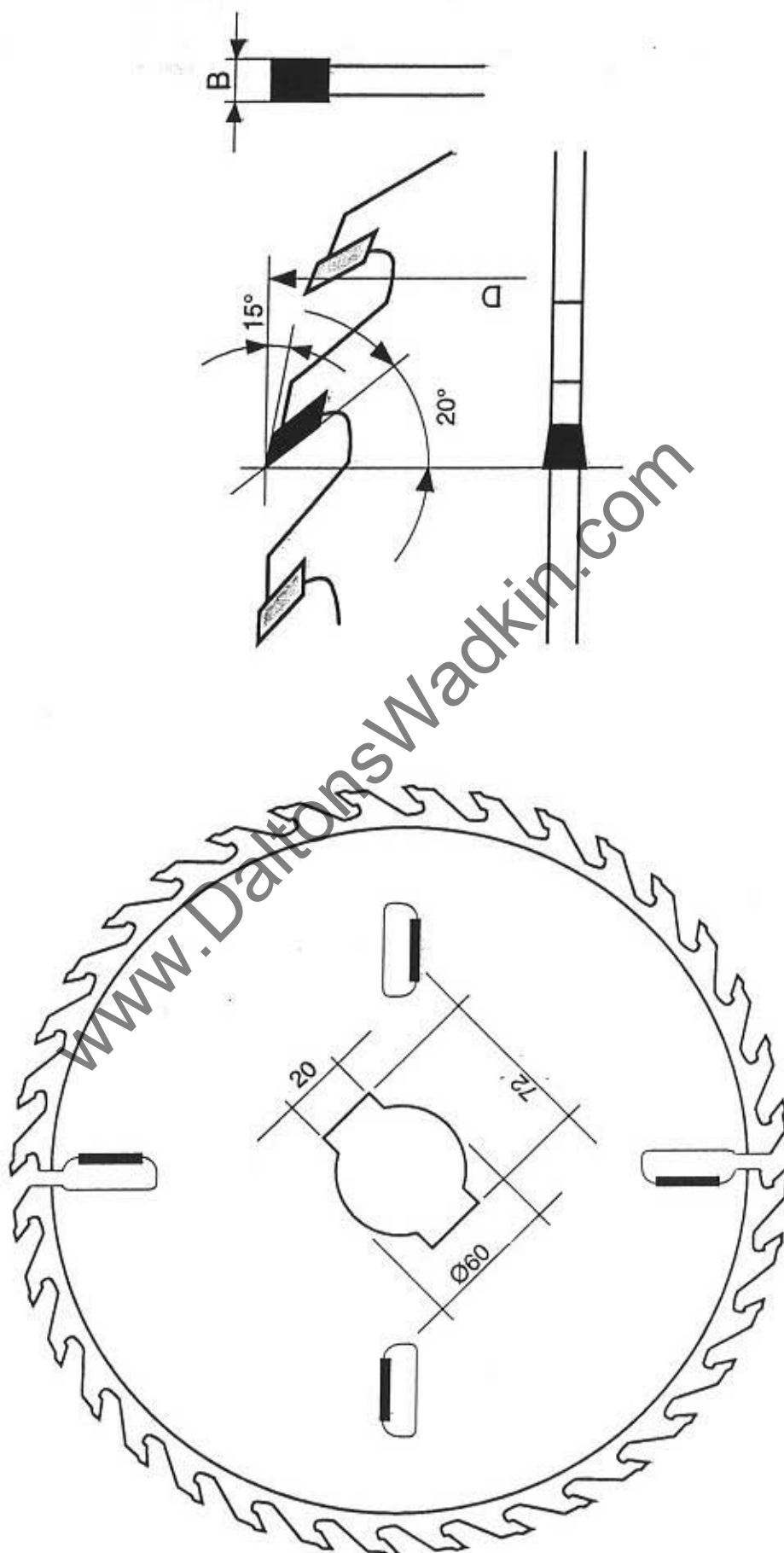


- 1404 Aspirating mouth
- 1407 Head carter
- 1409 Carpet back cover
- 14031 Blade lifting handwheel
- 14032 Oil pump
- 14033 Rear carter
- 14036 Locking handwheel
- 14037 Blade diameter index
- 14038 Carpet
- 14039 Reducer
- 14040 Motor

Wooden boards



Blade



SAFETY MEASURES

The machine is provided with a specific terminal for ground connection.

A pre-set timer prevents the opening of the blades access door, but when the blades have come to a complete stop.

The timer is pre-set on 60 seconds, and this time cannot be changed.

Other security sensors are foreseen as follows:

- a) closed door confirming sensor SQ1 (see 'Microswitches and emergency')
- b) positive sensor that prevents the machine starting if the blades access door is opened SQ2 (see 'Microswitches and emergency')
- c) microswitch of the plank passage limiting disposal Fc5 (see "Microswitches and emergency")

The feeding truck can be exclusively started after the automatic switching 'star-delta' of the motor that moves the blades shaft.

The height setting of pressing rollers while working should be avoided.

In case of electric overload, a relay stops the machine: it is not recommended to increase the 'thermic' in order to avoid blades blocking inside wood.

After a black-out due to any possible cause, or after an emergency stop caused by one of the security sensors, the machine can only be re-started with an intentional action of the user.

The electrical panel door can only be opened when the main switch is set on the position O.

USER SECURITY AND RESIDUAL RISKS

- never set overlap boards.
 - steady supports (like trestles or similar) should be used at the feeding and at the output side of the machine in case of working of very long planks.
 - never exceed the $\pm 10\text{mm}$ tolerance on the nominal thickness shown by the G indicator.
 - never use unbalance or worn-out blades.
 - every turn-over of work check that the anti-kick back fall in their proper position under their weight effect.
 - while operating the machine always wear safety shoes and a leather vest.
- Always use safety gloves and proper protection while assembling or changing blades.
- during any kind of preparation work or maintenance the main switch must be set on the position O.

If the machine is not being used, or if it is stopped due to a breakdown or for maintenance, it is advisable to lock it and to provide a sign indicating the reason for which the machine cannot be started.

POSSIBLE ANOMALIES: IDENTIFICATION AND ADVICES

Anomaly	Possible cause	Advices
The machine doesn't start	A door could be not properly closed	Check all doors and close them. Check all emergency buttons on the control panel and on the back of the machine
The machine has stopped	Excessive power consumption	Check all the magnetothermic switches on the electric board: they must be all set on the position 1. Reset ON any eventual switch set OFF
	Check the In and OUT voltages on the transformator (380VAC and 110VAC)	If new, the transformator could be defective
	Emergency-stop actuated, or security sensor opened	Check all emergency buttons and security sensors, then eliminate the eventual cause

IN CASE OF BLADES BLOCKED INSIDE WOOD

Should blades block inside wood follow these instructions:

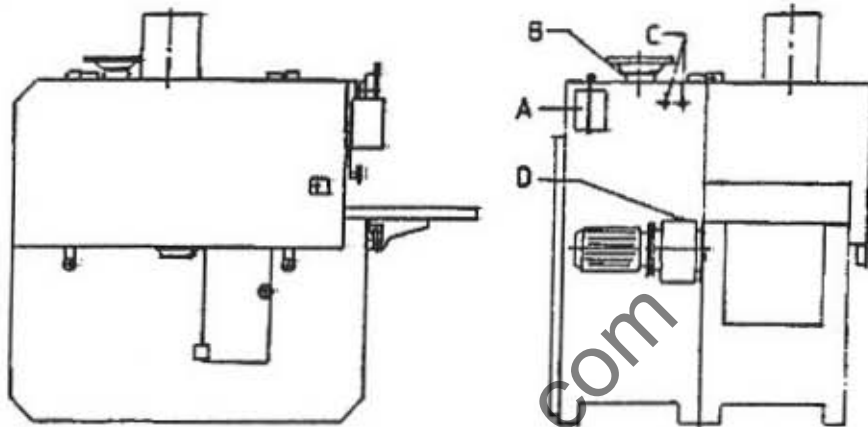
- a) press the Emergency stop button
- b) lift the blades shaft until blades are unhooked
- c) lift the pressing rollers group
- d) wait until it is possible to open the blades access door
- e) lift the anti-kick back disposal by means of the proper tool supplied with the machine: at the same time slip the board out of the machine, pulling it backwards
- f) press the Emergency stop button
- g) reset the machine as required, but reduce the feeding speed

For breakdowns not foreseen by the present manual contact the supplier.
Professional Assistance personnel will intervene to evaluate the anomaly and for proper solutions.

www.DaltonsWadkin.com

MAINTENANCE

- every week: general cleaning, check oil level in the lubrication pump.
- every two weeks: apply grease on the shaft bearings through the C lubrication points.
- every month: check the correct function of every lubrication point.
- every year: change speed reducer oil.



Periodically check the suction disposal; its correct function is a necessary for the machine to work properly.

LUBRICATION

- use low viscosity oil
 - every 40 hours of work the blades holder bearings must be lubricated rotating for half a turn the two 'stauffer' C.
- Use grease type:

ESSO INVAROL EP68, or
ESSO NUTO H100, or corresponding.

- every 80 hours of work apply standard grease at the B location.
- periodically check the oil level of the feeding truck variator box, adding oil at the D location when necessary.

Use oil type:

AGIP - BLASIA 220
ESSO SPARTALI EP 220
BP ENERGOL GR-XP 220
MOBIL MOBIL GEAR 630
SHELL OHALA 220 or corresponding

Motors and all feeding truck supports do not require lubrication, as they are provided with bearings made of self-lubricating materials.

The lubrication of the truck, gearing chains, screws, feeding guides is manually done by the oil pump.

Periodically check oil level of the cup A and add oil when necessary.

List of components
20HP 380V 50Hz multiblade E. S.

QTY.	DESCRIPTION	CODE	SETTING	REF.	MANUFACTURER
1	DISCONN. SWITCH + BP	3KA5330-1EE00	3 x 160 A	Q1	SIEMENS
1	AUTOSWITCH	3VF 1231-1DK11	45 : 63A	Q5	SIEMENS
1	COUNT. AUX	3VF9122-1GD40	1L+1R	Q5	SIEMENS
1	AMMETER TRANSF.	T 30	100/5A	TA1	SIPIE
1	TRANSFORMER	0-220-380/0-110-132-220 V	200 VA	T1	ELCA
1	AUTOSWITCH	5SQ2270-0KA01	2X1 A	Q2	SIEMENS
1	AUTOSWITCH	5SQ2170-0KA02	1X2 A	Q3	SIEMENS
1	AUTOSWITCH	5SQ2170-0KA05	1X0.5 A	Q4	SIEMENS
1	AUTOSWITCH 1R+1L	3VU1300-1MK00	4 : 6A	Q6	SIEMENS
1	AUTOSWITCH 1R+1L	3VU1300-1MH00	1.6:2.4 A	Q7	SIEMENS
1	AUTOSWITCH 1R+1L	3VU1300-1MD00	0.24:0.4 A	Q8	SIEMENS
1	TIMER	7PU6020-7NJ20	"2:20"	t1	SIEMENS
1	RELAY SWITCH (L)	3TF 4422-0AFO	15KW	K1	SIEMENS
1	RELAY SWITCH (D)	3TF 4422-0AFO	15KW	K2	SIEMENS
1	RELAY SWITCH (Y)	3TF 4211-0AFO	7,5KW	K3	SIEMENS
1	RELAY SWITCH	3TF3010-0AFO	4 KW	K4	SIEMENS
1	RELAY SWITCH	3TF3001-0AFO	4 KW	K5	SIEMENS
1	RELAY SWITCH	3TF3001-0AFO	4 KW	K6	SIEMENS
1	RELAY SWITCH	3TF3001-0AFO	4 KW	K7	SIEMENS
1	RELAY SWITCH	3TF3001-0AFO	4 KW	K8	SIEMENS
1	RELAY AUX	3TH30 22-0AFO	2L+2R	d1	SIEMENS
1	RELAY AUX	3TH30 22-0AFO	2L+2R	dx	SIEMENS
1	RELAY AUX	3TH30 22-0AFO	2L+2R	dy	SIEMENS
1	RELAY AUX	3TH30 22-0AFO	2L+2R	dz	SIEMENS
1	TIMER	7PU40 20-3AJ20	"0:100""	t2	SIEMENS
1	TIMER	7PU40 20-3AJ20	"0:100""	t3	SIEMENS
1	TIMER	7PU40 20-3AJ20	"0:100""	t4	SIEMENS
1	AMMETER	4960	100/5A	P1	SIPIE
2	ON/OFF BUTTON	P2/V O-I	D=22	S2-3/S4-5	ERSCE
2	SLOW/FAST BUTTON	P2/V + -	D=22	S6-7/S8-9	ERSCE
1	BLINKER	RM600 + L91	110V D=22	h1	BRETER
1	EMERGENCY BUTTON	PFB2V	D=22	S1	ERSCE



List of components
25HP 380V 50Hz multiblade E. S.

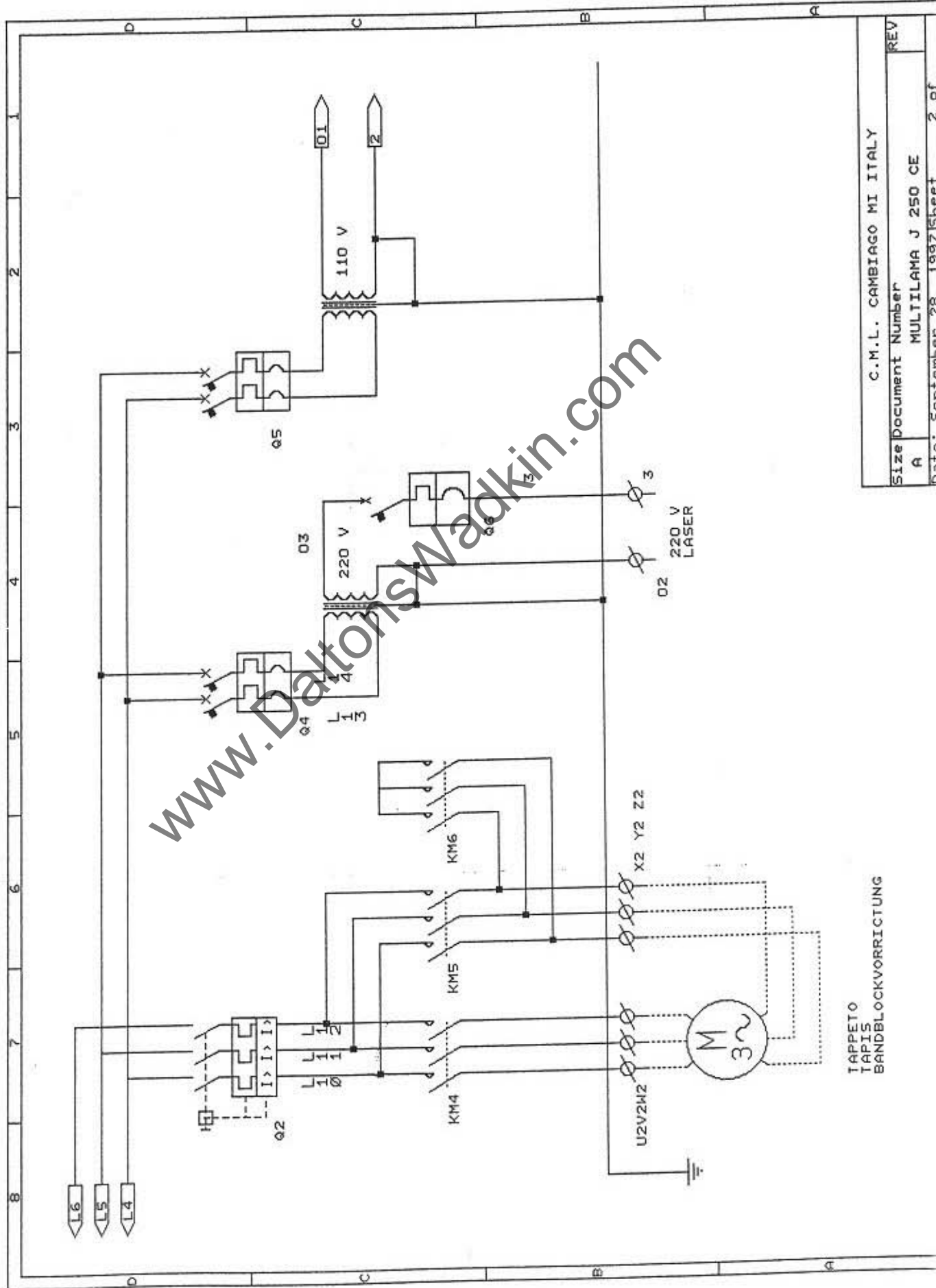
QTY.	DESCRIPTION	CODE	SETTING	REF.	MANUFACTURER
1	DISCONN. SWITCH + BP	3KA5330-1EE00	3 x 160 A	Q1	SIEMENS
1	AUTOSWITCH	3VF 3111-1BQ41	63 : 80A	Q5	SIEMENS
1	COUNT. AUX	3VF9322-1GB20	1L + 1R	Q5	SIEMENS
1	AMMETER TRANSF.	T 30	150/5A	TA1	SIPIE
1	TRANSFORMER	0-220-380/0-110-132-220 V	200 VA	T1	ELCA
1	AUTOSWITCH	5SQ2270-0KA01	2X1 A	Q2	SIEMENS
1	AUTOSWITCH	5SQ2170-0KA02	1X2 A	Q3	SIEMENS
1	AUTOSWITCH	5SQ2170-0KA05	1X0.5 A	Q4	SIEMENS
1	AUTOSWITCH 1R+1L	3VU1300-1MK00	4 : 6A	Q6	SIEMENS
1	AUTOSWITCH 1R+1L	3VU1300-1MH00	1.6:2.4 A	Q7	SIEMENS
1	AUTOSWITCH 1R+1L	3VU1300-1MD00	0.24:0.4 A	Q8	SIEMENS
1	TIMER	7PU6020-7NJ20	"2:20"	t1	SIEMENS
1	RELAY SWITCH (L)	3TF 4622-0AFO	22KW	K1	SIEMENS
1	RELAY SWITCH (D)	3TF 4622-0AFO	22KW	K2	SIEMENS
1	RELAY SWITCH (Y)	3TF 4422-0AFO	15KW	K3	SIEMENS
1	RELAY SWITCH	3TF3010-0AFO	4 KW	K4	SIEMENS
1	RELAY SWITCH	3TF3001-0AFO	4 KW	K5	SIEMENS
1	RELAY SWITCH	3TF3001-0AFO	4 KW	K6	SIEMENS
1	RELAY SWITCH	3TF3001-0AFO	4 KW	K7	SIEMENS
1	RELAY SWITCH	3TF3001-0AFO	4 KW	K8	SIEMENS
1	RELAY AUX	3TH30 22-0AFO	2L+2R	d1	SIEMENS
1	RELAY AUX	3TH30 22-0AFO	2L+2R	dx	SIEMENS
1	RELAY AUX	3TH30 22-0AFO	2L+2R	dy	SIEMENS
1	RELAY AUX	3TH30 22-0AFO	2L+2R	dz	SIEMENS
1	TIMER	7PU40 20-3AJ20	"0:100"	t2	SIEMENS
1	TIMER	7PU40 20-3AJ20	"0:100"	t3	SIEMENS
1	TIMER	7PU40 20-3AJ20	"0:100"	t4	SIEMENS
1	AMMETER	4960	150/5A	P1	SIPIE
2	ON/OFF BUTTON	P2/V O-I	D=22	S2-3/S4-5	ERSCE
2	SLOW/FAST BUTTON	P2/V + -	D=22	S6-7/S8-9	ERSCE
1	BLINKER	RM600 + L91	110V D=22	h1	BRETER
1	EMERGENCY BUTTON	PFB2V	D=22	S1	ERSCE

SPARE PARTS LIST

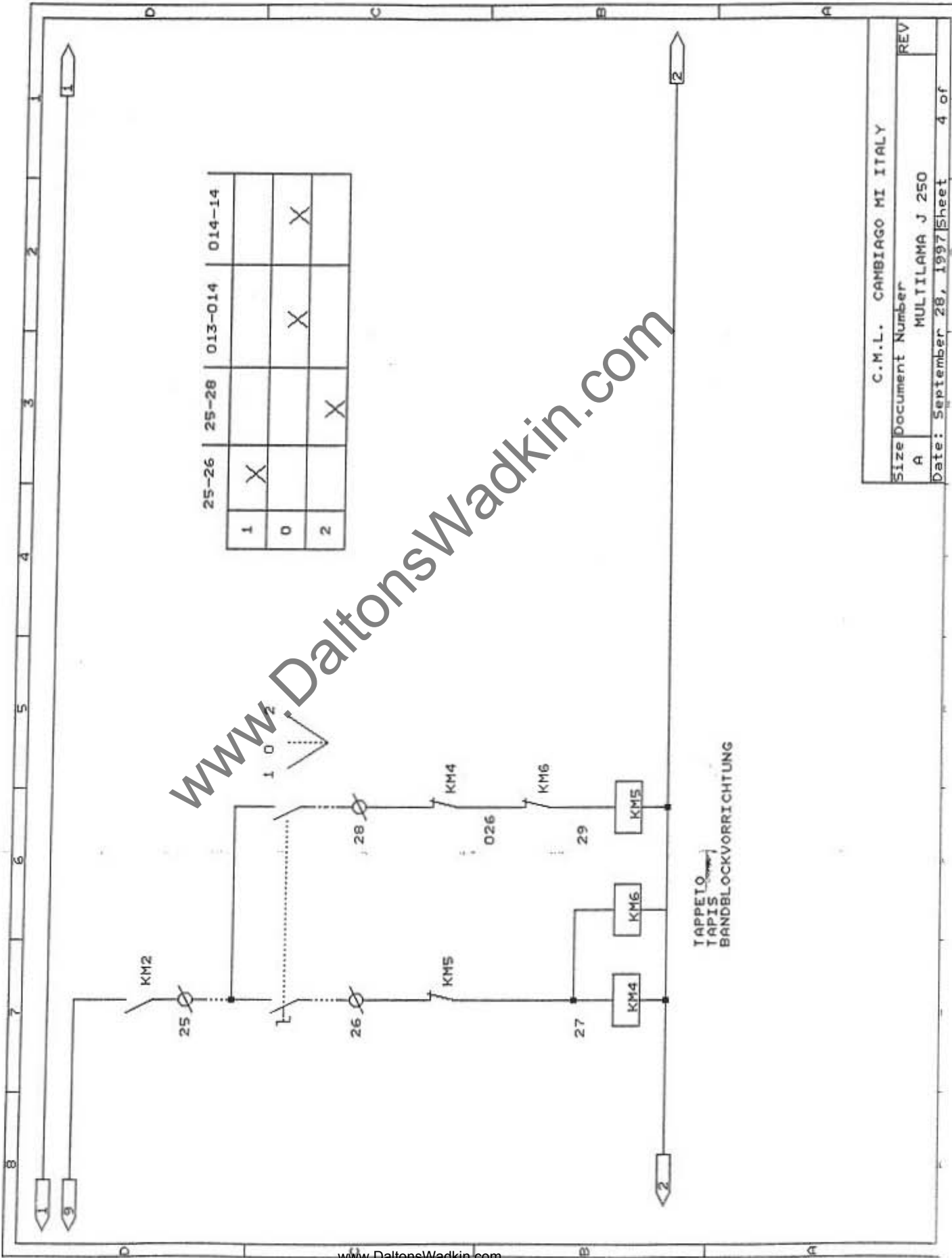
Blades shaft	Pos. 13, see attached 14A5001
Amperometer	Pos. 14029 control board panel
Reference guide	Pos. 14019
Door block V.110	Pos. SQ 8 see attached
	stroke-end and sensors location
Blade holder key	Pos. 21, see attached 14A5001
Motor key	Pos. 57, see attached 14A5002
Cast iron shaft quill	Pos. 14, see attached 14A5001
Track chain (one couple)	Pos. 56, see attached 14A5003
Quill key	Pos. 5, see attached 14A5001
Head lifting shell	Pos. 28, see attached 14A5002
Belts 3V600 (one series)	Pos. 49, see attached 14A5002
Belts 3V630 (one series)	Pos. 49, see attached 14A5002
Shaft bearing	3212, Pos. 11, see attached 14A5001
Free wheel bearing	6207-2RS, Pos. 82, see attached 14A5003
Sprocket bearing	6210-2RS, Pos. 76, see attached 14A5003
Pulley bearing	NU408, Pos. 16, see attached 14A5001
Pressing rollers bearing	6204-2RS, Pos. 84 see attached 14A5003
Blade screw bearing	51106NAZ., Pos. 20, see attached 14A5002
Head screw bearing	51107NAZ. Pos. 8, see attached 14A5002
Quill bearing spacer	Pos. 7, see attached 14A5001
Blade locking threaded ring	Pos. 1, see attached 14A5001
Coupling	Pos. 72, see attached 14A5003
Tempered steel guide (one couple)	Pos. 54, see attached 14A5003
Blade diameter index	Pos. 14037
First blade indicator	Control panel 14017
Main switch HP. 20-25	Pos. 14030
Jaccard handle	Pos. 14022
Jaccard handle	Pos. 14036
Knob	Pos. 1402
Knob	Pos. 14043
Micro switch	Pos. SQ1, SQ2, SQ3, SQ5 see attached
	stroke-end and sensors location
Blade access door microswitch	SQ1-SQ2, see attached
	stroke-end and sensors location
Gas spring	Pos. 2, see attached 14A5003
Spring for board and rollers	Pos. 87, see attached 14A5003
Track motor HP. 1	M2, see attached motors
	location
Spring for rollers	Pos. 85, see attached 14A5003
Spring for board	Pos. 20, see attached 14A5003
Complete control panel	Pos. 8015
Pad mat	Pos. 46, see attached 7AS1
Axe free wheel	Pos. 69, see attached 7AS1
Axe sprocket	Pos. 60, see attached 7AS1
Chain guide feeding side plate, 2 pcs	Pos. 67, see attached 14A5003

Chain guide outlet side plate, 2 pcs	Pos. 68, see attached 14A5003
Chain guide central plate, 2 pcs	
Free wheel (2 pcs)	Pos. 35, see attached 14A5003
Manual oil pump	Pos. 14032
Proximity	
3V belts saw quill pulley	
3V belts motor pulley	
Emergency button A	Pos. 14027 "Control panel"
Reducer	Pos. 14039
Blades ON/OFF button	Pos. 14035 "Control panel"
Truck ON/OFF button	Pos. 14025 "Control panel"
Electrical box	Pos. 14016
Multirip roller	Pos. 44, see attached 14A5003
Lower row anti-kick back nr. 72 pcs	Pos. 28, see attached 14A5003
Seeger I 72	Pos. 81, see attached 14A5003
Wrenches set nr. 11 pcs	
Guide holder	Pos. 14021
Sprocket support	Pos. 46, see attached 14A5003
Track complete of chain pads, chains, guides, central plate	
Short wooden tablet	See attached short board
Long wooden tablet	See attached long board
Transformer 110V	
Head lifting screw	Pos. 29, see attached 14A5002
Blades hand wheel	Pos. 19, see attached 14A5002
Handwheel for pressure roller group	Pos. 14011
Blade lifting handwheel	Pos. 14031

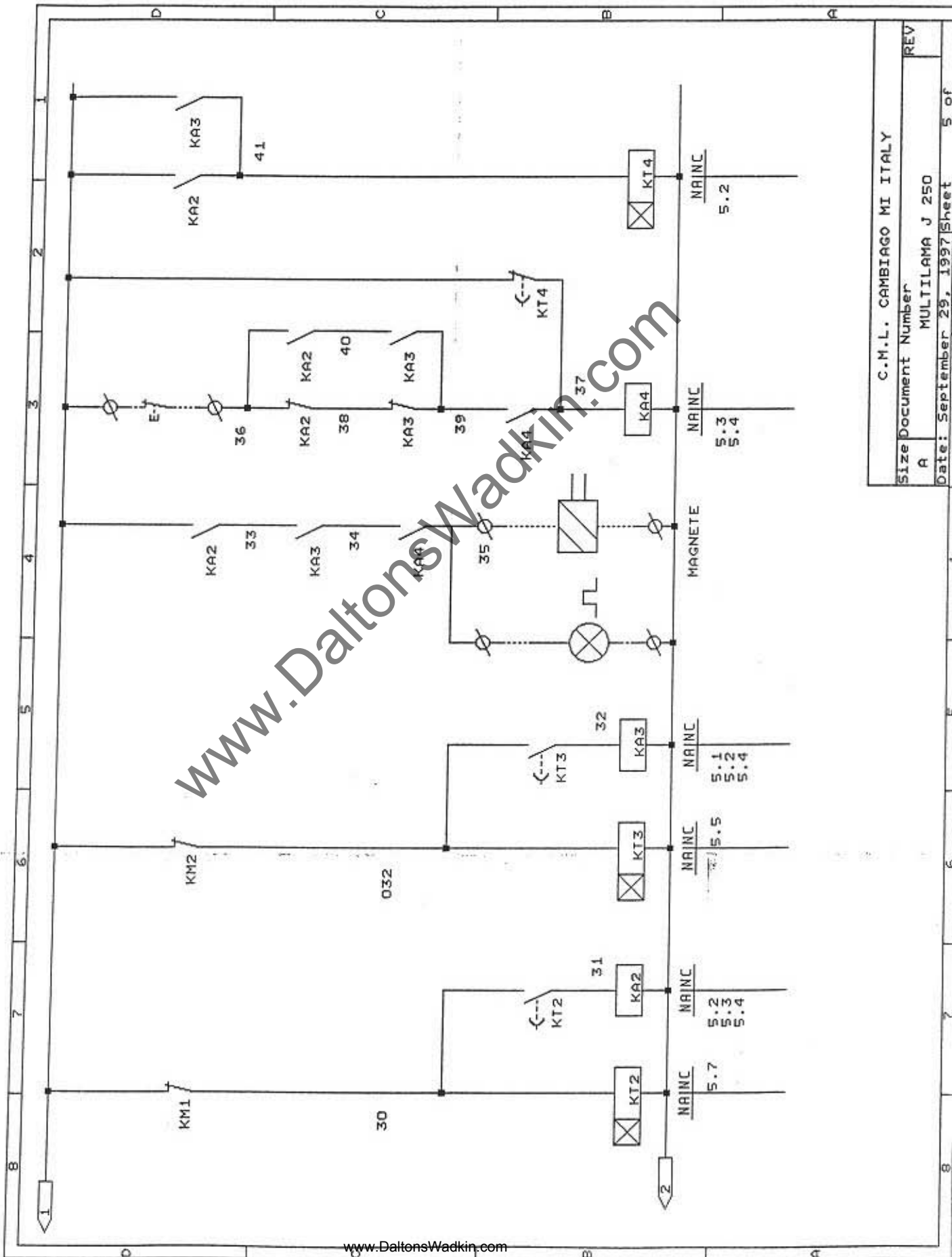
(0.1)



C.M.L. CAMBIAGO MI ITALY		
Size	Document Number	REV
A	MULTILAMA J 250 CE	
Date: September 28, 1997		Sheet 2 of



C.M.L. CAMBIAGO MI ITALY			
Size	Document Number	REV	
A	MULTILAMA J 250		
Date:	September 28, 1997	Sheet	4 of 4

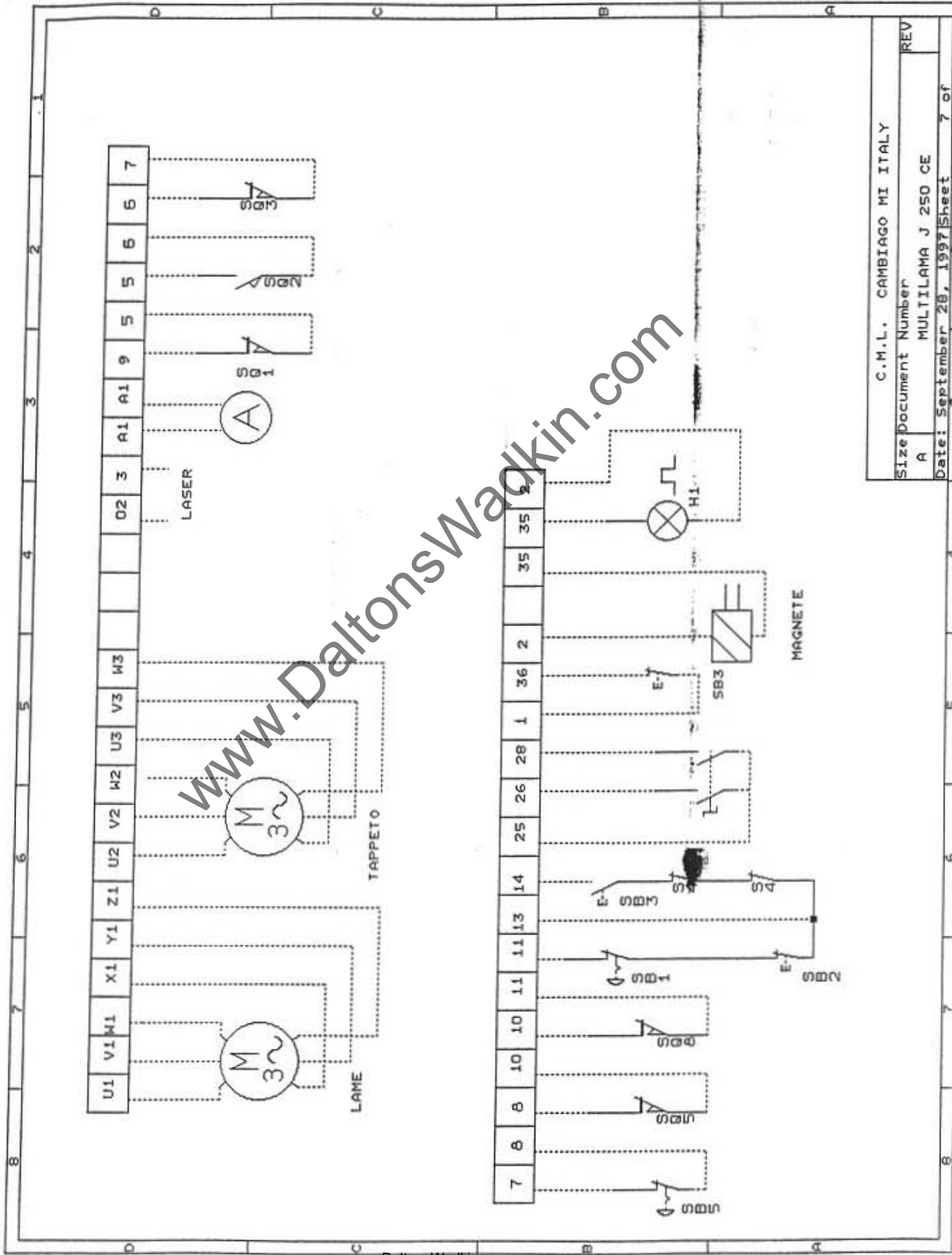


C.M.L. CAMBIAGO MI ITALY

Size Document Number A

MULTILAMA J 250

Date: September 29, 1997 Sheet 5 of 5



C.M.L. CAMBIAGO MI ITALY		
Size	Document Number	REV
A	MULTILAMA J 250 CE	
Date:	September 28, 1997	Sheet 7 of 7

Size	Document Number	REV
A	MULILAMA SCA 350 HP 50 COMPONENT LIS	