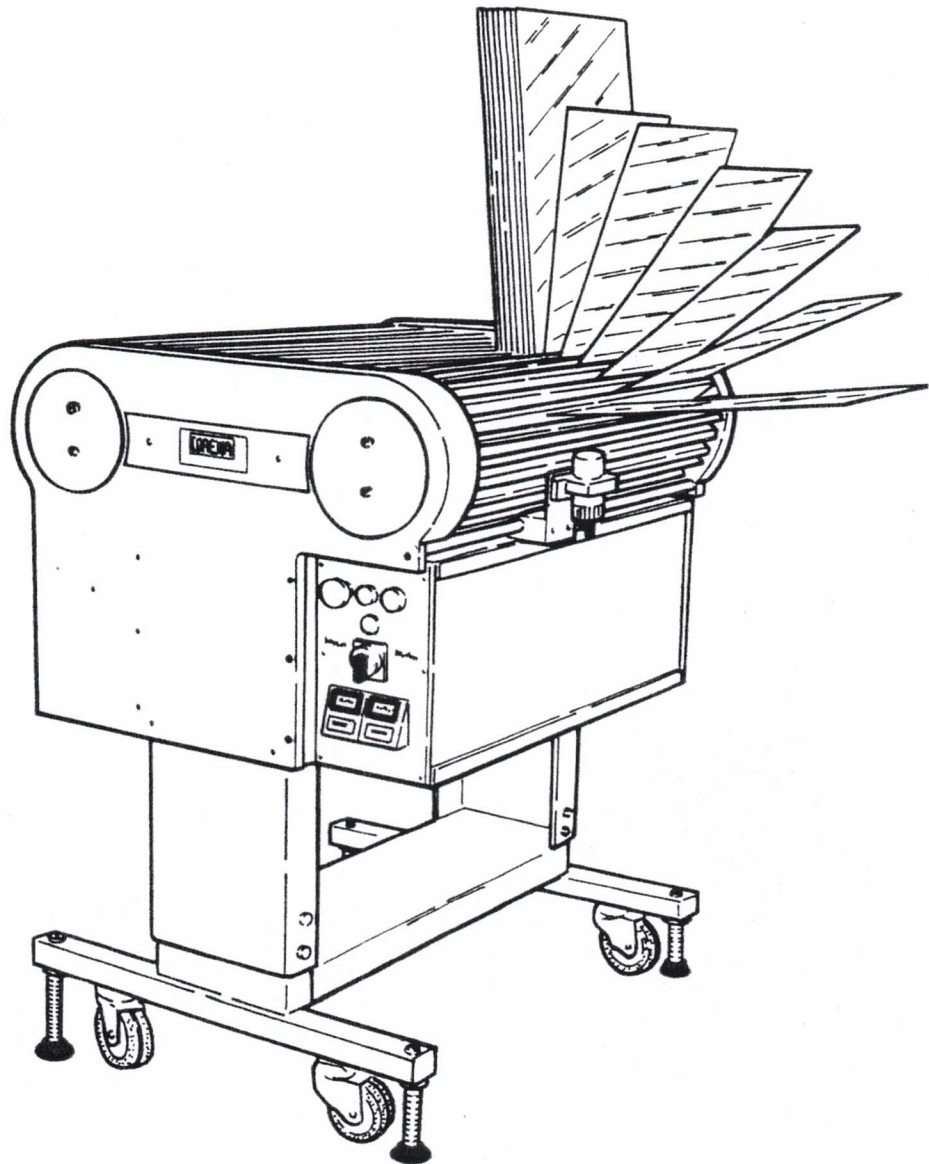


# TAPIMATIC



# TCMD

<b>IDENTITE DE LA MACHINE</b>		<b>DATE :</b>	févr-06
<b>TAPIMATIC</b>			
<b>TYPE</b>	CD50 / TR 24"		
<b>NUMERO DE SERIE</b>	T060301CH		
<b>DIMENSIONS</b>	<b>LONGUEUR</b>	890mm	
	<b>LARGEUR</b>	890mm	
	<b>HAUTEUR</b>	915mm	
<b>POIDS</b>	120 Kg		
<b>LARGEUR UTILE</b>	650mm		
<b>MOTO REDUCTEUR</b>	SIREM :R1C225H12B/F		
<b>DETECTEUR</b>	E25C2K MY1		
<b>MINUTERIE</b>	H3CAA		
<b>INDEX DE PAS A PAS</b>	XCMA102		
<b>PIGNON D'ENTRAINEMENT</b>	60 dents	3/8"	
<b>PIGNON MOTEUR</b>	12 dents	3/8"	
<b>TENSION - FREQUENCE</b>	220 V MONO		
<b>SCHEMA ELECTRIQUE</b>	16715	167270	
<b>CLIENT</b>	ALWAPRINT AG		
<b>LIEU</b>	GEDRUCKTE SCHALTUNGEN HERM ALEX WALTENBERGER SILORING 8 CH-5606 DINTIKON		

TCMD 10 RUE PASTEUR  
TEL : 01 34 05 82 36

95410 GROSLAY  
FAX : 01 34 28 79 90

## SUMMARY

### GENERAL DESCRIPTION AND TECHNICAL SPECIFICATIONS

#### MAIN DESCRIPTION

- Chassis
- PVC part
- Castors

#### INSTALLATION

- a. Setting procedure
- b. Electric connections

#### STARTING UP

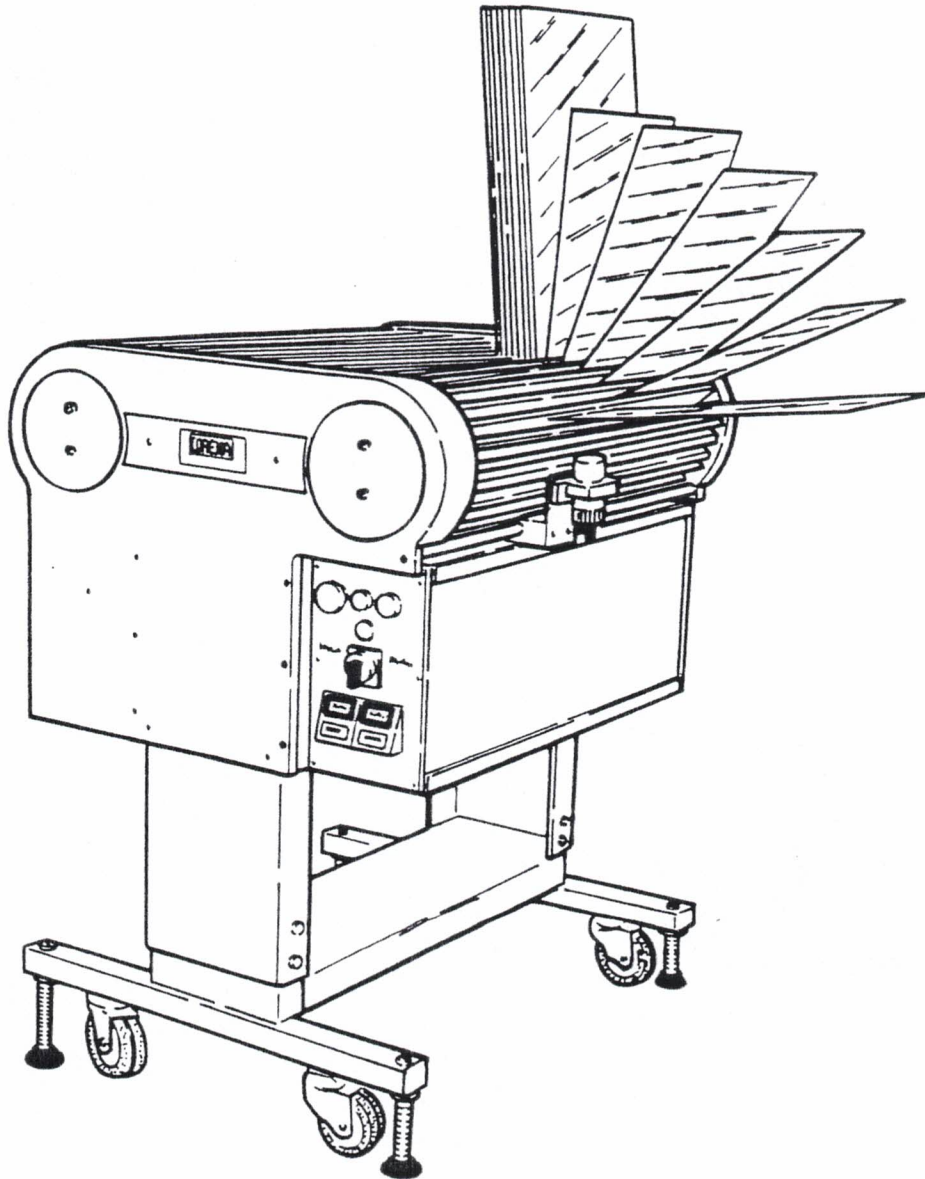
- a. Feeder version
  - V adjustment
  - Timer set up
- b. Collector version
  - V adjustment
  - Timer set up

#### SPECIAL ADJUSTMENTS

#### FUNCTIONING DEFECTS

- a. Feeder version
- b. Collection version

#### MAINTENANCE



#### GENERAL DESCRIPTION AND TECHNICAL SPECIFICATIONS :

The Tapimatic following its version is used for Loading, or for loading and unloading the pcbs and is available in 610mm "24" and 760mm "30" meanwhile 1016 "40" Tapimatic is delivered on special requests.

**Tapimatic C** is used as Loader while **Tapimatic CD** as loader/unloader in TR "Transfer" and R." Reversible ".



## **MAIN DESCRIPTION :**

The machine constitutes :

### **A CHASSIS**

Black metallic chassis made in two parts as shown in the exploded view :

1. Down part including the footing with height adjustment screws and two metallic bearers (10035 A3) right and left side.
2. Upper black mettalic part ( 10036 A4 )called cheeks which is fixed on the down part and allows manual height adjustment of about 300mm (telescopic foot) with the help of height adjustment screws ( 10083 A3 ).

### **B. WHITE PVC PART**

It's the main upper part equipped with belt and slats having 4.5mm gap.

### **C. CASTORS**

Most of the Tapimatic are delivered with castors and height adjustment screws (10083 A3).

In option, The Tapimatic can be delivered with bigger castors mounted on the screws ( for easy displacement of Tapimatic with pcbs from one machine to the other ).

The Tapimatic exists in two versions :

1. **TRANSFER**  
Collecting from one side and feeding from other side ( change of pcb face )
2. **REVERSIBLE**  
Collecting and feeding from the same side.

## **INSTALLATION :**

### **a. Setting procedure :**

**Never raise the machine by holding the slats.**

The Tapimatic is delivered bolted on a pallet with a pvc film around for protection against transport blows and dust.

Control outside packing and make reserves if necessary.

Install the machine at its working place. The Tapimatic can only be "Feeder" C or "Feeder/Collector" **CD** .

Security valve ( anti-jam device ) must always be to the side of the machine to be fed.

Proceed to height adjustment as follows :

The Tapimatic is installed next to the machine to be fed.

Place **PVC adjusting L**(supplied with the machine) on the slats ( handle on the slats and the top of this **L** going down wards on the slats). The Tapimatic will be on the right height when top side of the **PVC L** will stay over the machine to be fed (see drawing n° 11861 A4) and until you don't get this right height adjustment go on setting the height with height adjustment screws

Check machine's horizontality from all sides and block the screws with nuts.

### **b : Electric connections**

Connect to single phase 220 volts.

The Tapimatic is ready to run.

### **Important note :**

The conveyors of the machine to be fed must be enough long so that bigger size pcbs be placed otherwise **additional conveyor TAP CVV** sold in option must be planned.

## **STARTING UP :**

Just check Control board position. It can be fixed either to the right or to the left side passing whole control board plate from inside to the side wanted .

Select Feeder or Loader mode ( 3 position commutator on control panel ) The timer is operational if time is in seconds and the work mode on 1 ( see timer notice ).

## **IN COLLECTOR MODE :**

The Tapimatic has been positioned as described here above.

The pcb detector must be between the Tapimatic and the machine to be fed.

Check that pcb detector is about 10mm down to the pcb passage.

Check position of the V created by two pvc slats ( the gap between two slats making the form of V is called V ). The pcb must enter into the V while down slat is completely horizontal so that the pcb pick up takes place on full angle (  $18^{\circ}$  ).

## **Adjustment of V position :**

V position can be changed adjusting contact position in front of the coder cog wheel ( 10057 A4 )

Loosen blocking screw ( 10061 A4 ) and turn slightly the contact support ( 11702 ) in a way to shift the wheel of micro contact from coder cog wheel notch.

Check inferior slat of the V and start again if necessary.

## **COLLECTOR MODE TIMER SET UP**

This timer assures rise control. It must only allow passing distance between detector and V depth. This time delay can slightly be increased to let askew pcb get aligned in the V before rising ( if needed set timer on 0.1 seconds instead of 1 second to be more precise ).

## **IN FEEDER MODE :**

The security valve ( anti-jam device ) must always be to the side of the machine to be fed. Be carefull that the Tapimatic is not too near to the machine to be fed otherwise the security valve will not be able to operate. Once the Tapimatic aligned heightwise, place 3 position commutator on **Feeder** mode. Control that **feeder** is well in working mode **A** and timing in seconds. Press on any time say **20 seconds** and start the cycle pressing on **START** switch. The count down begins and activates the indexation motor when its on zero. The belt moves a bit and the pcb is taken by the conveyors of the machine to be fed. Note the time so that first pcb be at the needed distance for putting the second one on and for that increase the time ( check timer notice ). The right time selection comes quickly with a little bit experience and this time selection depends on the speed of the conveyor and on the pcb length.

## **V ADJUSTMENT**

**V** does not need to be refined for medium or short pcbs. In some cases when pcbs are long and heavy, one must be sure that the second pcb does not touch the one which is on the feed conveyor. This may occur if the pcb is slightly flexible ( less than 1.6 or long and narrow ) so control **V** position and adjust ( as explained for collector mode ) in a way that the angle between the flow direction and following slat be the maximum say maximum 18°.

## **SPECIAL ADJUSTMENTS :**

### **FOR SLANTWISE ENTRY**

It may be needed that the pcbs enter slantwise in the machine to be fed. It's possible and for this just need to put the Tapimatic higher from one side ( adjust with adjusting wheels and block ).

### **FOR FEEDING NOT TOO FINE PCBS : double or multiple indexation**

In this case one interior timer is added for allowing to index one, two or more angles. This subterfuge is used when pcbs are more flexible than rigid ones but are not too fine. This double or multiple indexation helps to avoid purchase of a **CDS** (Tapimatic for flexible pcbs).

### **ADDITIONAL CONVEYOR TAP CVV :**

This conveyor, needed either in entry or in exit, is to be fixed at the place of the round mouldings which are to be taken away. The conveyor speed which is variable and adjustable can be adjusted by means of a potentiometer situated on the Tapimatic control board.



## **FUNCTIONING DEFECTS :**

### **a. FEEDER VERSION**

**After power on and "start" the green indicator remains off :**

**Check :**

Emergency control switch ( may be is clicked )  
Security control board ( may be blocked ).

**The indicator is on but belt does not work :**

**Check :**

Commutator position : It must be on "Feeder".

The timer "feeder" is not in working mode " A " or the time selection is on " hours ". control and correct.

**The first pcb leaves and second one falls over :**

**Check :**

Time selection printed on the timer which must be in **Seconds**, following conveyor speed and the pcbs length ,make it a bit longer.

Indexation contact is loose ( 10061 A4 ). Tighten it and put it at the right position.

The break of the motor which may be defective so needs to be changed.

**The pcb comes on the conveyor to be fed but does not leave from the V :**

**Check :**

The Tapimatic height using height adjustment screws.

Front and back side level : The pcb is touching just the one roller of the machine. V bottom side is too high so the grip is too feeble for taking out the pcb.



**b. COLLECTOR VERSION :**

**The pcb enters in the V but the belt does not rise :**

**Check :**

The commutator position and it must be on COLLECTOR

**The pcb does not rise :**

**Check :**

The timer function it must be in mode " A " and time selection in " seconds "

**The pcb still does not rise :**

**Check :**

The detector. The count down must start as the pcb comes over vertically if still there is not count down then check the OMRON detector with one finger.

Obturate the detector and control that the red led is lighted ( cord side ). If still there is no light then control the connections and change if needed.

**The led is on so the detector is operational but does not detect after a while :**

**Check :**

Its detection height. If the distance is too big, modify the sensibility ( consult the notice and use the screw delivered with the machine ) The right sensibility is the one which will detect the pcb at 15mm distance from the detector and in detector axis. Adjust the height at 15mm and let the pcb enter.

**NOTE : too high sensibility may lead to two defects :**

Continuous detection of machine's element ( roller, or any corner ).

OR previously lifted pcb leading to continuous rotational movement.

### **ADDITIONAL CONVEYOR TAP CVV :**

**The conveyer does not work after power on :**

**Check :**

Potentiometer position and set far from zero.

**The motor does not run :**

**Check :**

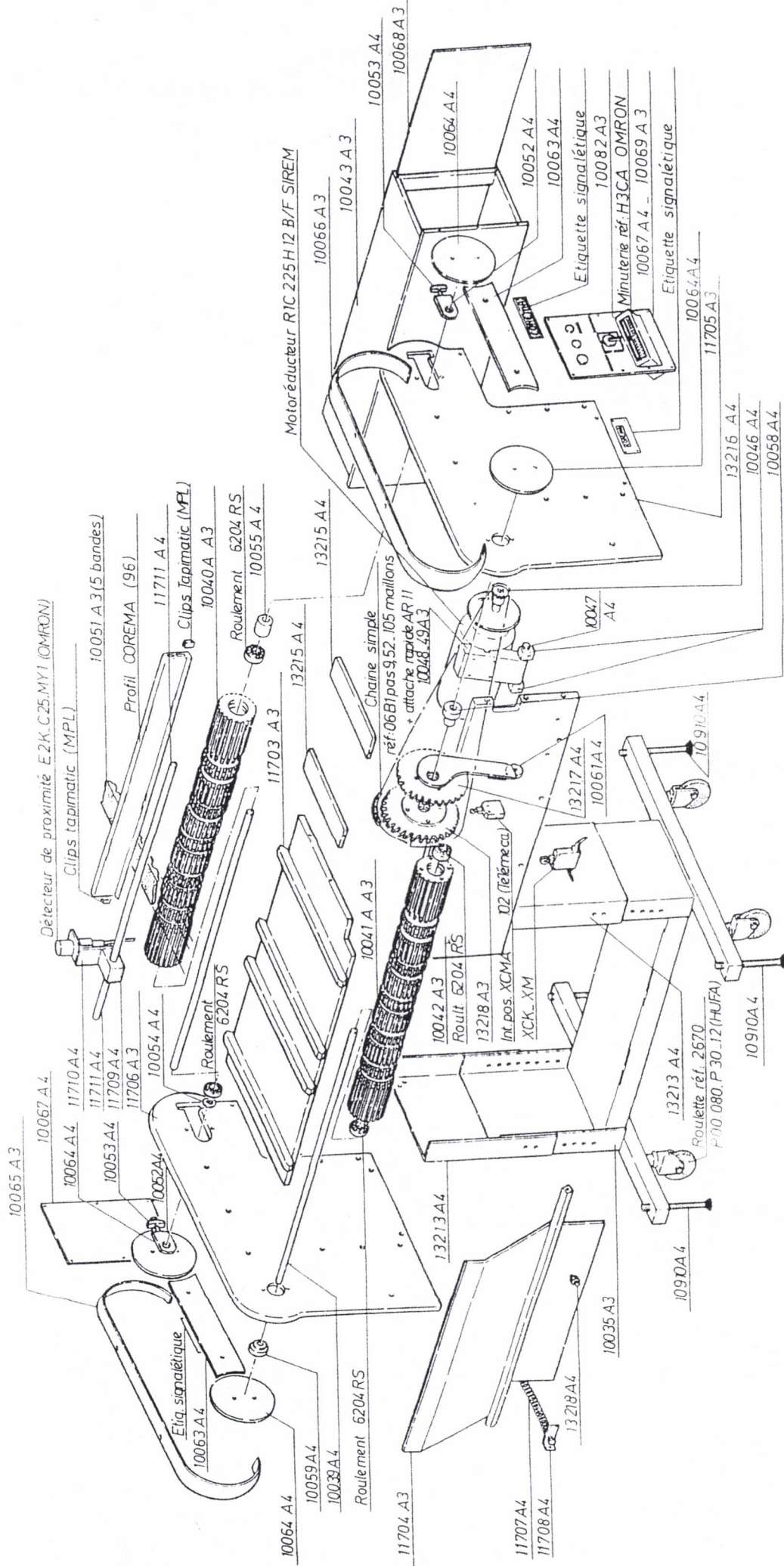
Power supply at motor infeed : 24 volts CC.

Carbon brushes if there is voltage in terminal

Voltage at speed control board infeed and if there is, control the fuses.

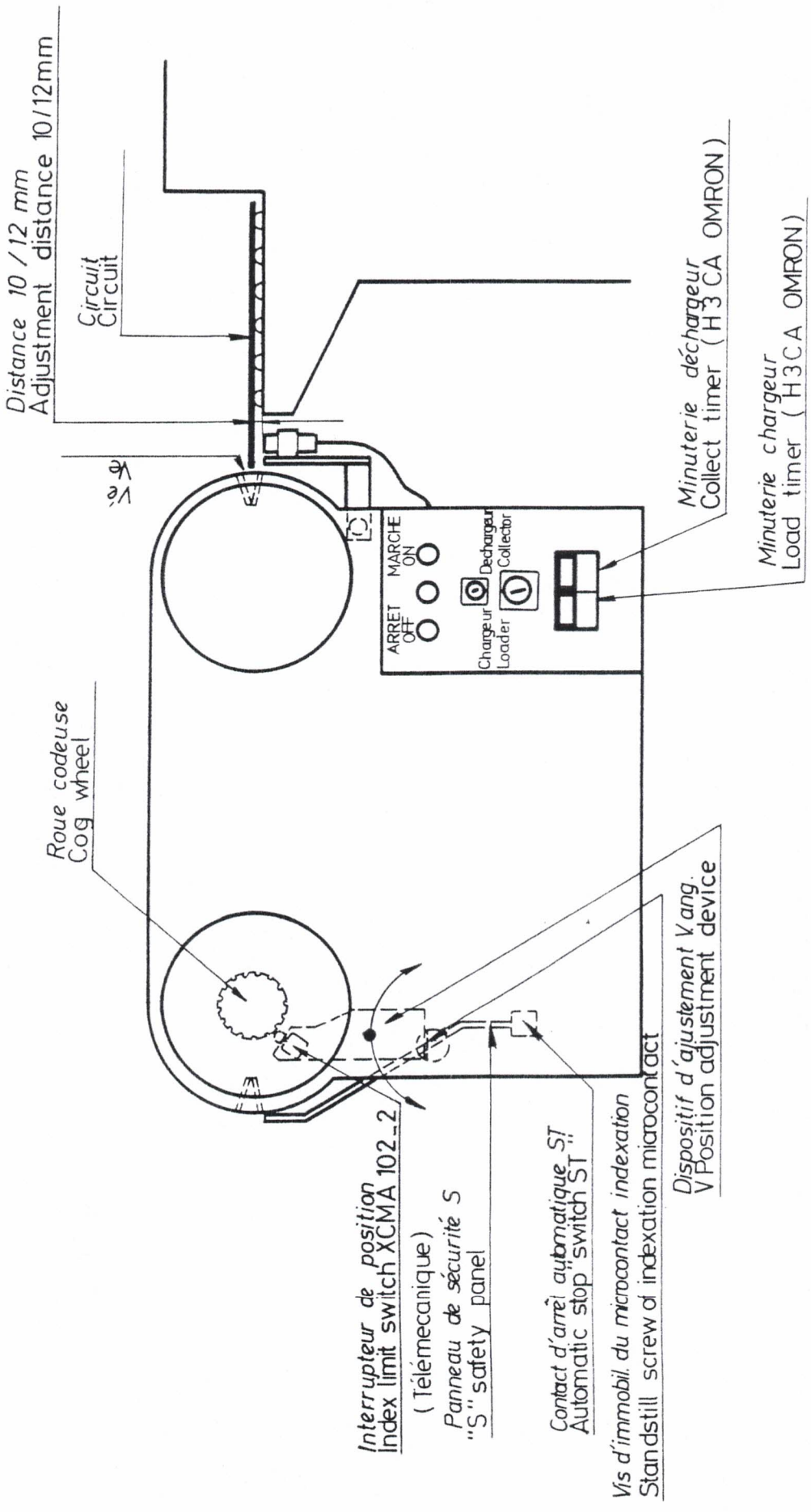
### **MAINTENANCE :**

There is no special maintenance except changing from time to time the motor brushes of indexation.



25.11.93	Date
1.7.92	Date
Matière :	
Quantité :	
Traitement :	
Indices Modifications	
B	MISE A JOUR
A	MISE A JOUR
Dessiné : <i>EUE</i>	
Vérifié :	
Date : 9.1.1991	

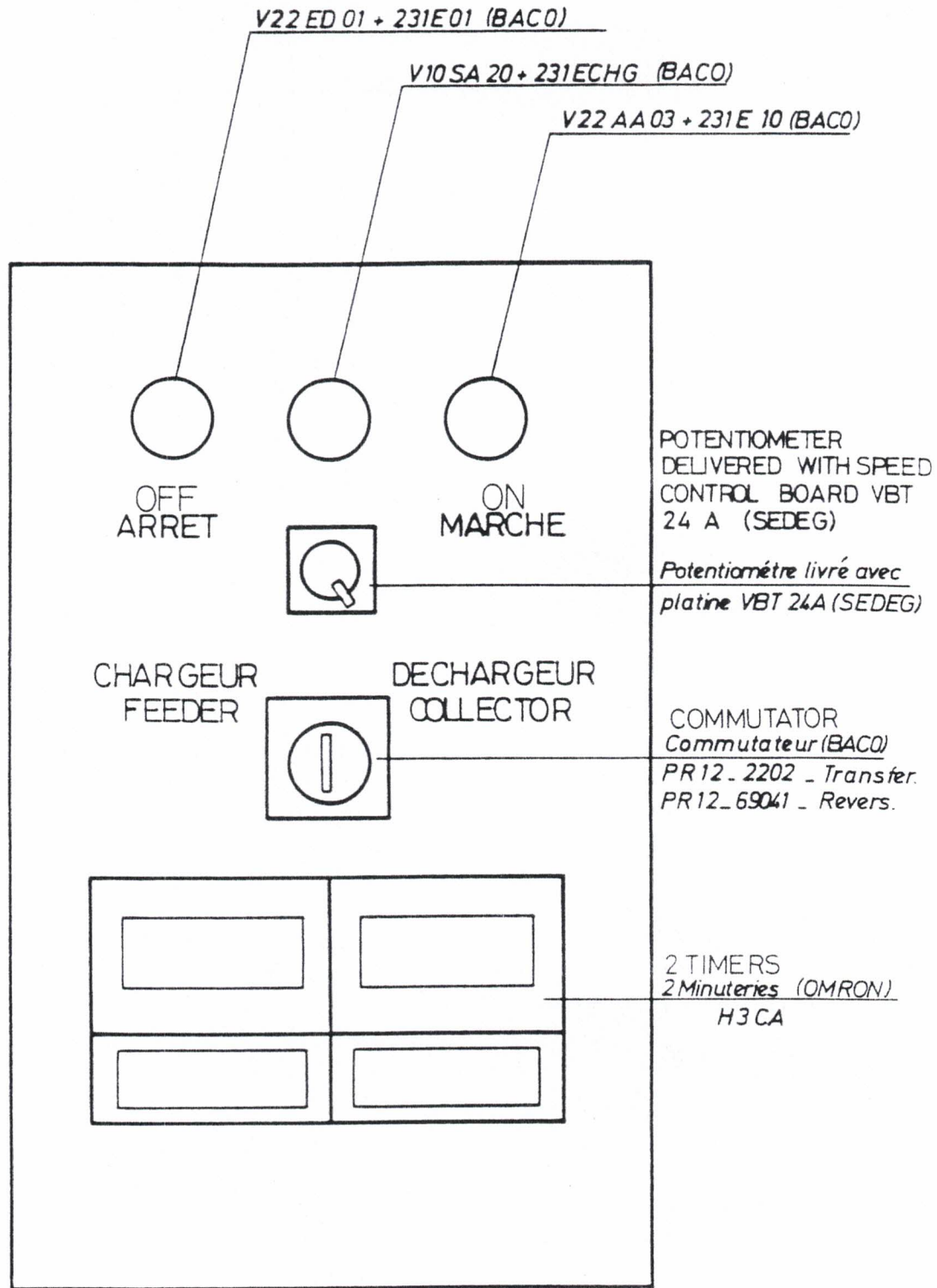
# TAPIMATIC CD 50



TAPIMATIC TRANSFERT

TRANSFER TAPIMATIC

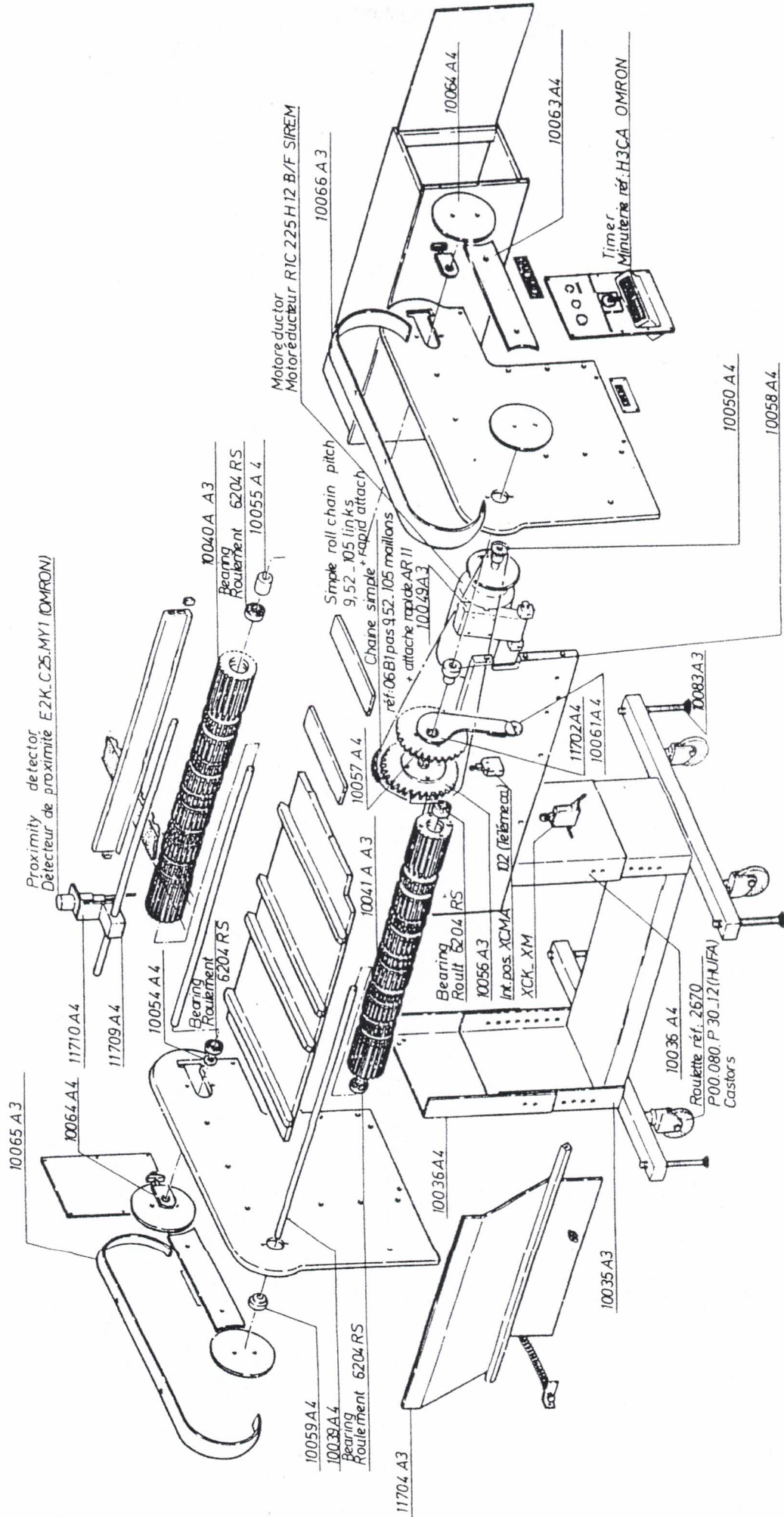




FACE AVANT TAPIMATIC  
FRONT SIDE TAPIMATIC



PLAN NOTICE



Index

Modifications

Date

Dessiné: *ELB*

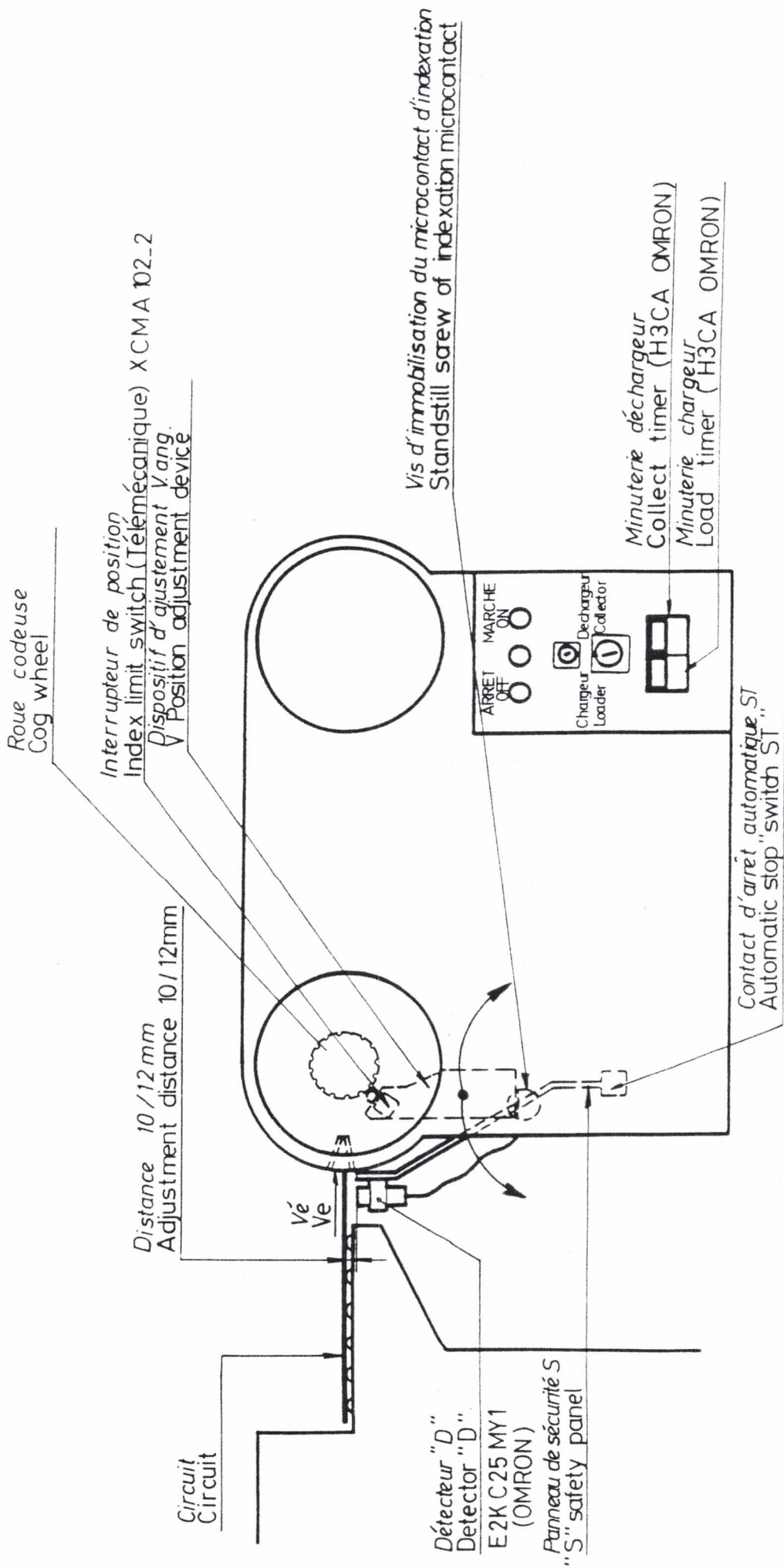
Vérifié:

Matériau:

Quantité:

TAPIMATIC CD 50

Traitement:



TAPIMATIC REVERSIBLE  
REVERSE TAPIMATIC

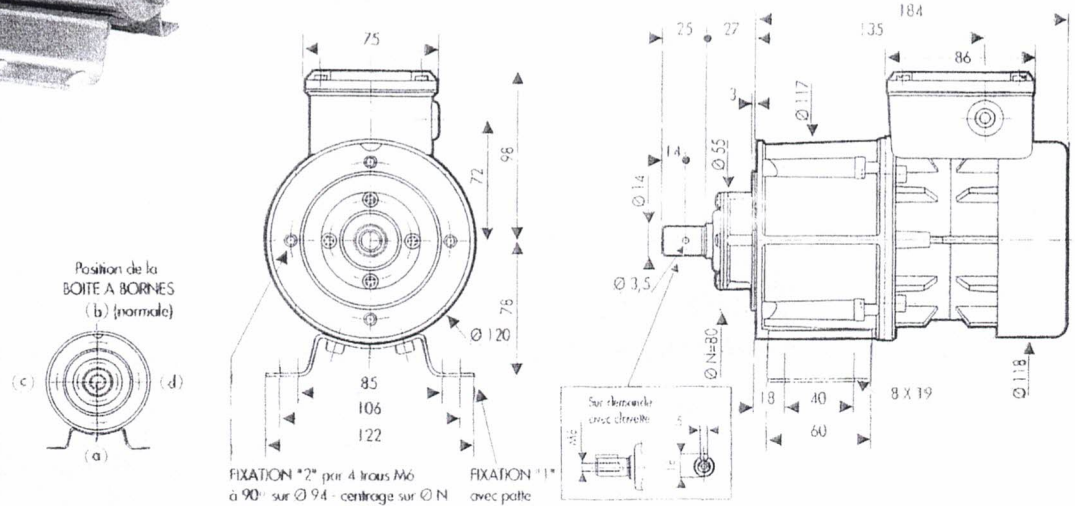
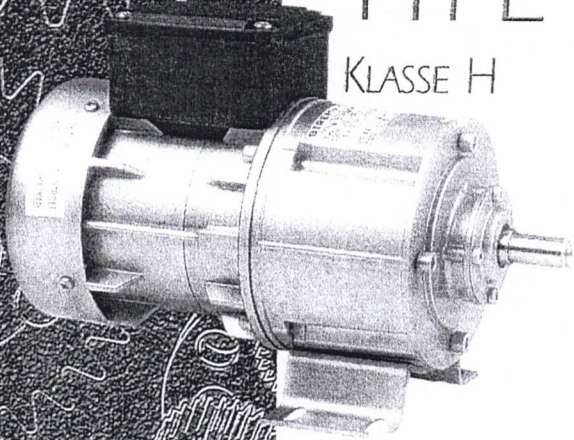


# TYPE H

KLASSE H

1,5 à 200 Tr/min  
0,17 à 3,5 m.daN  
Monophasé à condensateur permanent ou triphasé

1,5 bis 200 U/min  
0,17 bis 3,5 m.daN  
Einphasig mit Dauerkondensator oder Dreiphasig

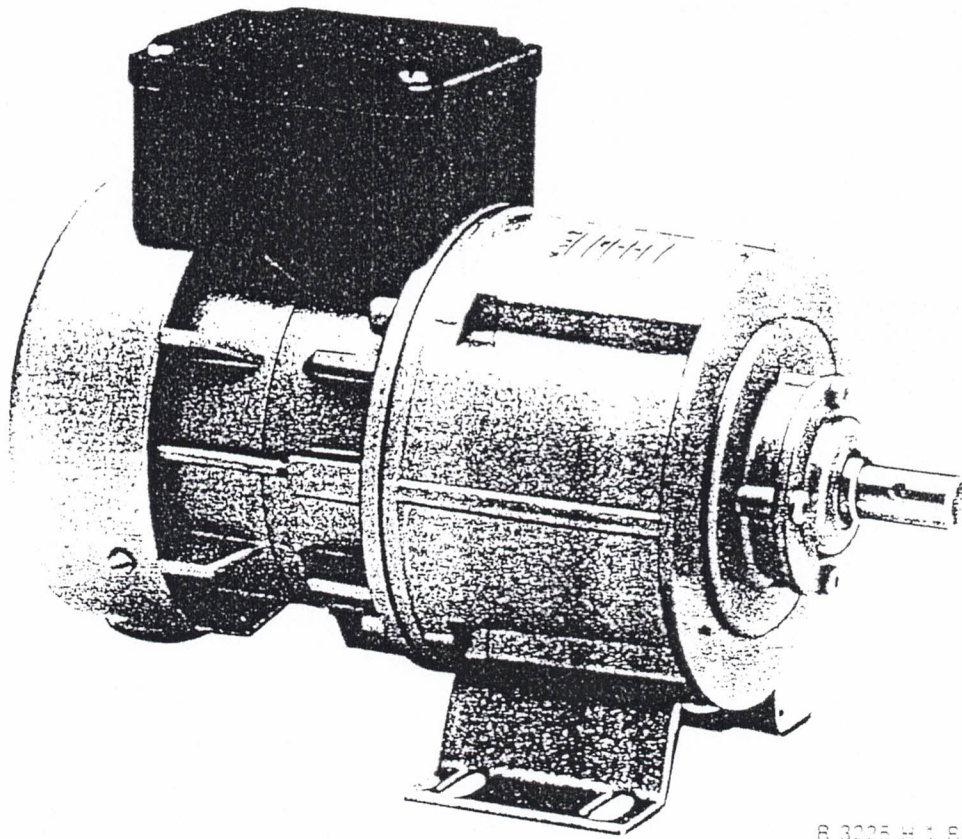


Caractéristiques techniques Technische Daten		Vitesse n2 Tr/min Drehzahl n2 U/min	Rapport de réduction n2/n1 Untersetzung n2/n1	Couple nominal m.daN Nenn Drehmoment m.daN		Charges maxi sur l'arbre lent (1) Maxi. Belastung auf den well (1)		kg kg
Col. 1	Col. 2			Col. 1	Col. 2	Radiale daN Radial daN	Axiale daN Axial daN	
RTC 625 HB	R3625 HB	1,5	1/547	3,5*	3,5*	100	105	3
RTC 425 HB	R3425 HB	2,3	1/547	3,5*	3,5*	100	105	
		3,5	1/390	3*	3*	100	105	
RTC 225 HB	R3225 HB	4,5	1/547	3,5*	3,5*	100	105	
		7	1/390	3*	3*	100	105	
RTC 425 HB	R3425 HB	10,5	1/134	1,5*	1,5*	92	80	
		15	1/184	1,5*	1,5*	82	70	
RTC 225 HB	R3225 HB	21	1/134	1,2	1,4	74	60	
		30	1/96	0,87	1	64	50	
		39	1/72	0,66	0,76	60	46	
		48	1/59	0,54	0,62	56	42	
65	1/45	0,41	0,47	50	36			
RTC 425 HB	R3425 HB	100	1/14	0,22*	0,22*	44	30	
RTC 225 HB	R3225 HB	125	1/22	0,22	0,26	41	27	
		200	1/14	0,14	0,17	35	23	

Caractéristiques moteur Motor kennlinie	Pôles Pole	Monophasé à condensateur Einphasig mit Kondensator 230 V-50Hz	Triphasé Dreiphasig 230/400 V 50 Hz	Couple nominal Nenn Drehmoment cm.N	Puissance utile Leistung W	Vitesse n1 Tr/min Drehzahl n1 U/min	Intensité sous 230 V - A Stromaufnahme bei 230 V - A	Ia In	Cd Cv	Cos φ
1C 625	6	•	•	14,2	13	870	0,37	1,1	1,31	0,99
3 625	6	•	•	15,3	14	870	0,32	1,5	2,1	0,67
1C 425	4	•	•	28,3	40	1350	0,55	1,34	0,85	0,99
3 425	4	•	•	27,3	40	1400	0,41	2	1,90	0,65
1C 225	2	•	•	13,4	38	2700	0,47	1,67	1,4	0,99
3 225	2	•	•	15,5	44	2700	0,29	2,45	0,97	0,82



# TYPE H



R 3225 H 1 B

## MOTEUR deux sens de rotation.

Monophasé à condensateur permanent, ou triphasé.

## MOTOR bi-directed MOTOR either.

Single phase with permanent capacitor or three phase.

## MOTOR mit 2 Drehrichtungen.


Einphasig, mit Dauer-Kondensator oder für Drehstrom.

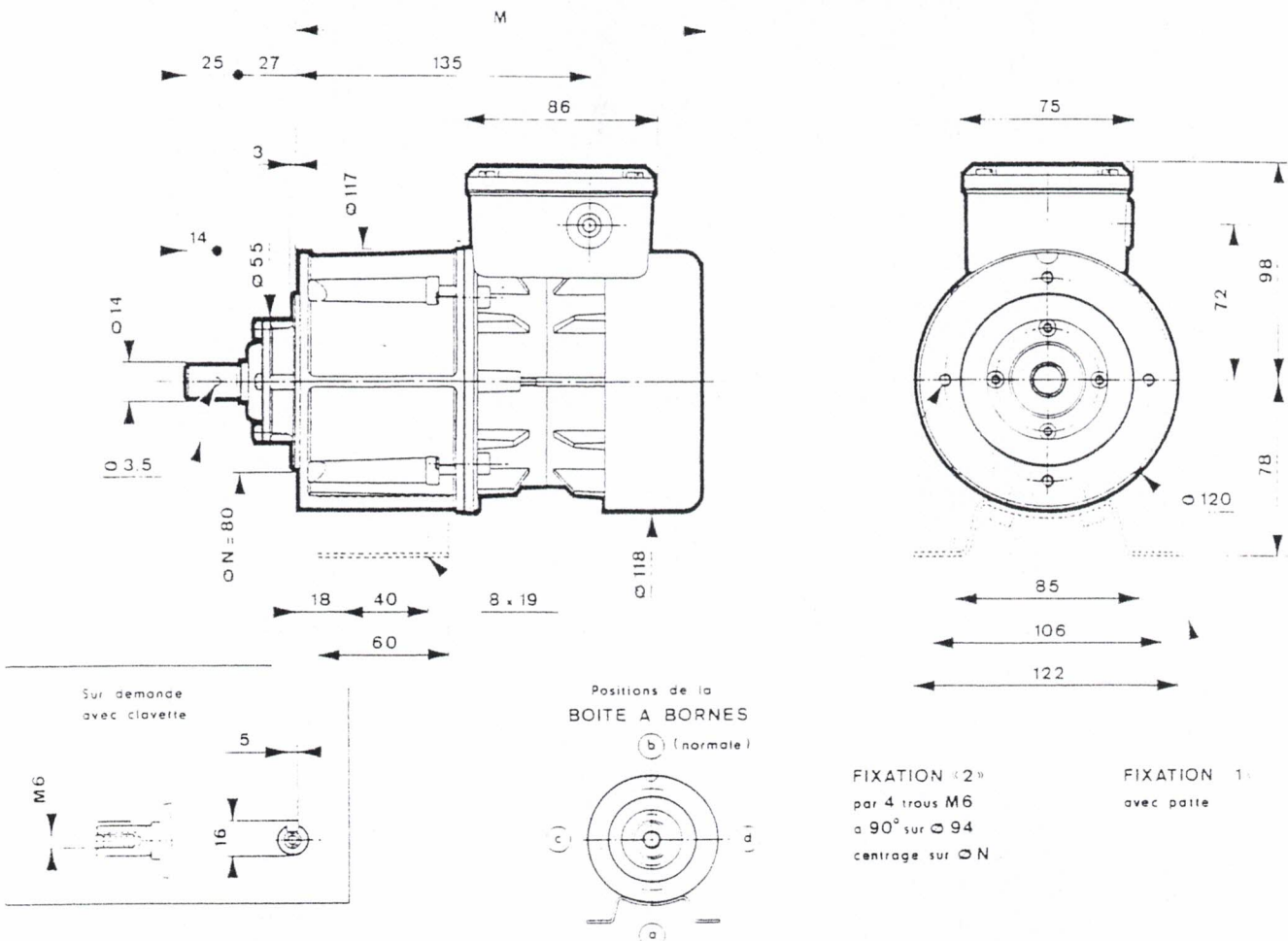
## MOTORE a due sensi di rotazione.

Monofase con condensatore permanente, oppure trifase.

## MOTOR dos sentidos de rotación.

Monofasico condensador permanente a trifasico.

	Pôles	Monophasé à condensateur 220 V-50 Hz	Triphasé 220/380 V 50 Hz	Couple nominal cm.N	Puissance utile W	Vitesse n1 tr/mn	Intensité sous 220 V A	$\frac{I_A}{I_N}$	$\frac{C_d}{C_N}$	Cos $\varphi$
1C 625	6	•		13,4	12	870	0,35	1,1	1,31	0,99
3 625			•	14,5	13	870	0,31	1,48	2,1	0,67
1C 425	4	•		25,8	36,5	1350	0,53	1,34	0,85	0,99
3 425			•	25,5	37	1400	0,23	2	1,9	0,65
1C 225	2	•		12,2	35	2700	0,45	1,67	1,41	0,99
3 225			•	14,2	40	2700	0,28	2,45	0,97	0,82



Sirem		Vitesse n2 tr/mn	Rapport de réduction n2/n1	Couple nominal m.daN <sup>(1)</sup>		Charges maxi sur l'arbre lent		Cote M	kg
						Radiale <sup>(2)</sup> daN	Axiale daN		
R 1C 625 HB	R 3 625 HB	1,5	1/547	3,5*	3,5*	100	105	184	3
R 1C 425 HB	R 3 425 HB	2,3	1/547	3,5*	3,5*	100	105		
		3,5	1/390	3*	3*	100	105		
R 1C 225 HB	R 3 225 HB	4,5	1/547	3,5*	3,5*	100	105		
		7	1/390	3	3*	100	92		
R 1C 425 HB	R 3 425 HB	10,5	1/134	1,5*	1,5*	92	80		
		15	1/184	1,4	1,6	82	70		
		21	1/134	1,15	1,3	74	60		
R 1C 225 HB	R 3 225 HB	30	1/96	0,82	0,95	64	50		
		39	1/72	0,61	0,7	60	46		
		48	1/59	0,50	0,59	56	42		
		65	1/45	0,38	0,45	50	36		
R 1C 425 HB	R 3 425 HB	100	1/14	0,20*	0,20*	44	30		
R 1C 225 HB	R 3 225 HB	125	1/22	0,21	0,25	41	27		
		200	1/14	0,14	0,16	35	23		

1) daN = 1 kgf. (2) Appliquée au milieu du bout d'arbre. \* Couple maxi à ne pas dépasser (moteur surpuissant pour ce rapport).



# E3JK

- 光电スイッチ
- PHOTOELECTRIC SWITCH
- CELLULE PHOTOELECTRIQUE
- FOTOSCHALTER
- SENSORE FOTOLETTRICO
- FOTOCELULA
- 光电开关

この製品は人体の保護を目的とした安全装置としてご使用いただけます。

Do not use this product as a safety device nor a part of safety systems for ensuring safety of persons.

Ne pas utiliser ce produit en tant que dispositif de sécurité ou même élément de dispositif assurant la sécurité de personnes.

Verwenden Sie dieses Produkt nicht als Sicherheitseinrichtung oder Teil eines Sicherheitssystems für den Personenschutz.

Non utilizzare questo prodotto né come dispositivo né come parte di un sistema per tutelare la sicurezza delle persone.

No utilizar este producto como dispositivo de seguridad ni como parte de sistemas de seguridad para garantizar la integridad de las personas.

不要将此产品用作保证人身安全的基础或安全系统的部分使用。

9413466-2

安全に正しくご使用いただくために、お使いになる前に必ず「取り扱い 扱い 方法」を記載したカタログをお読みになり十分に理解してください。

This sheet primarily describes precautions required in installing and operating the product. Before operating the product, read this sheet thoroughly to acquire sufficient knowledge of the product. For your convenience, keep this sheet for your disposal.

Cette fiche décrit simplement les précautions d'installations et d'opérations. Avant d'utiliser le produit, veuillez lire attentivement cette fiche. Pour plus de sécurité, garder toujours cette fiche.

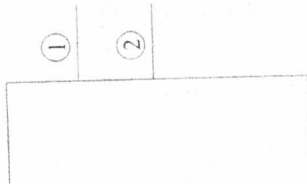
Dieses Blatt beschreibt die Funktionsweise und die Korrekte Installation des Produktes. Vor Inbetriebnahme des Produktes lesen Sie bitte diese Beschreibung sorgfältig. Zur eigenen Sicherheit bewahren Sie bitte diese Beschreibung auf.

Le ricordiamo che una buona conoscenza degli argomenti trattati, raggiunta attraverso un'attenta lettura del foglio di istruzioni, è requisito essenziale per un corretto uso del prodotto da Lei acquistato. Il presente foglio di istruzioni deve essere conservato per eventuali consultazioni future.

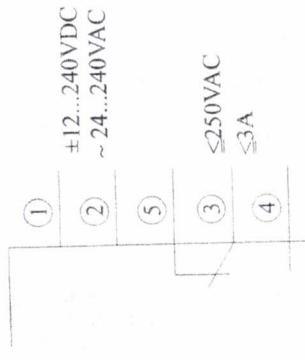
La presente hoja de instrucciones describe, de forma básica, las precauciones requeridas para una correcta instalación y operación del producto. Antes de utilizar el producto, recomendamos lea atentamente la hoja o manual de instrucciones. Mantenga localizada la presente hoja de instrucciones para posibles consultas futuras.

此说明书列出了在产品安装及使用过程中的注意事项，为了能正确安全使用本产品，请务必充分领会本说明书，使用完请妥善保管，以备随时查阅。

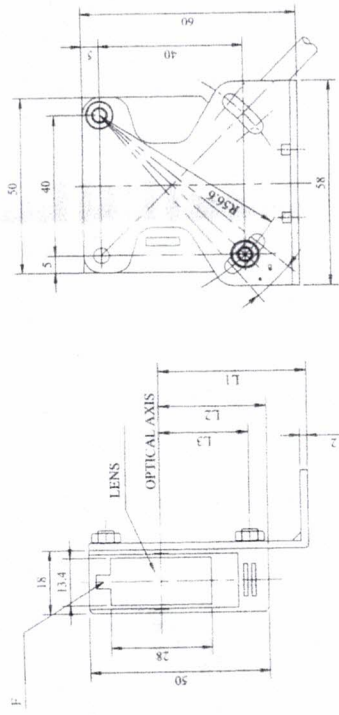
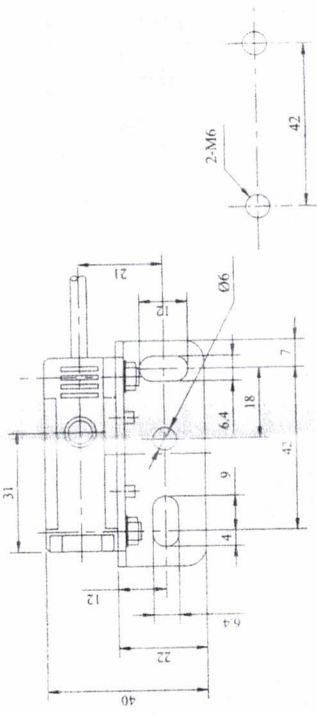
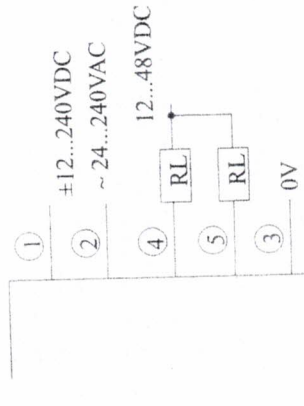
## E3JK-5L



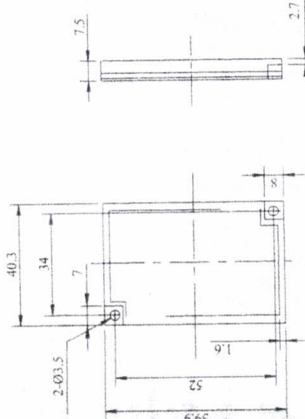
## E3JK-□M□



## E3JK-□S3



## E39-R1



Type	L1	L2	L3
E3JK-DS30□□	40	30	25
E3JK-R□□□□□	36.5	26.5	21.5
E3JK-5L			
E3JK-5D□□			

(1)	茶	Brown	Marron	Braun	Marrone	Marron
(2)	青	Blue	Bleu	Bleu	Blu	Azul
(3)	白	White	Blanc	Wiß	Bianco	Blanco
(4)	黒	Black	Noir	Schwarz	Nero	Negro
(5)	灰	Grey	Grís	Gray	Grigio	Grís

Unit(mm)

F	動作表示燈	Operation indicator	Indicateur d'opération	Indicador de operación
	Bereichsanzeige	Spia funzionamento		

電源電圧	Supply voltage	Tension d'alimentation	Nennspannung	Tensión de alimentación	電源電圧	12...240VDC±10% 24...240 VAC±10% 50/60 Hz	-5M□ -R2M□ -R4M□ -DS30M□ -SS3 -R2S3 -R4S3 -DS30S
消費電力	Power consumption	Consumation	Leistungsaufnahme	Consumo	消費電力	≤3W ≤2W ≤3W ≤2W	
検出距離 E39-R1反射板	Sensing distance with reflector E39-R1	Distance de détection Avec réflecteur E39-R1	Erfassungsabstand mit Reflektor E39-R1	Distancia de detección nominal Con reflector E39-R1	検出距離 E39-R1反射板	5m 30cm 5m 30cm	
指向角 E39-R1反射板	Directional angle with reflector E39-R1	Angle directionnel Avec réflecteur E39-R1	Richtungswinkel mit Reflektor E39-R1	Angulo direccional Con reflector E39-R1	指向角 E39-R1反射板	2.5m 4m 2.5m 4m	
応差の距離	Differential travel	Distance Différentielle	Hysteresis	Distancia diferencial	応差の距離	1...5° ≥40°	
制御出力 ルレー (最大) (最小)	Control output Relay output (max) (min)	Sortie de contrôle Sortie relais(max) (min)	Kontrollausgang Relaisausgang(max) (min)	Salida de control Salida de r.c.(max) (min)	制御出力 继电器輸出(最大) (最小)	250VAC 3A 5VDC 10mA	
無接点(最大)	DC solid state output (max)	Sortie Statique (max)	DC Halbleiter-Ausgang(max)	Salida de estado sólido, c.c.(max)	DC无接点輸出(最大)	48VDC 100mA	
応答時間	Response time	Temps de response	Anspruchzeit	Tiempo de respuesta	応答時間	≤30ms ≤10ms ≤5ms	
周囲湿度 動作時 保存時	Ambient humidity Operating Storage	Température ambiante En fonctionnement En stockage	Umgebungstemperatur Betrieb Lagerung	Temperatura ambiente Operación Almacenaje	周囲湿度 動作時 保存時	-25...55°C -30...70°C	
周囲湿度 動作時 保存時	Ambient humidity Operating Storage	Humidité ambiante En fonctionnement En stockage	Umgebungsfeuchtigkeit Betrieb Lagerung	Humedad ambiente Operación Almacenaje	周囲湿度 動作時 保存時	45...85% RH 35...95% RH	
使用周囲照度	Ambient operating illumination	Luminescence ambiante	Fremddlicht-Sicherheit	Illuminación ambiente de operación	周囲照度	≤300lx	
保護構造	Degree of protection	Indice de protection	Schutzart	Grado de protección	保護構造	IP64	

## ご使用に際してのお願い

北半球の環境で使用の場合は、定格 機能にしては余裕を持った使い方を  
フェールセーフなどの規定や取組への配慮をいたすことにも、当社営業担当  
までご相談ください。お問い合わせは、営業担当  
1)取扱説明書に記載のない条件や環境での使用。  
2)原子力施設、航空、車両、燃焼装置、医療機器、安全機器な  
りでの使用。  
3)人命や財産に大きな影響が与えられる用途への使  
用。

### RECAUTIONS IN USING THE PRODUCT

When the product is used under the circumstances or environment below, ensure adherence  
to the ratings and functions. Also, take countermeasure for safety precautions  
limitations of the ratings and functions. Also, take countermeasure for safety precautions  
ch as fail-safe installations.  
Use under circumstances or environment which are not described in the instruction  
manual.  
Use for nuclear power control, railway, aircraft, vehicle, generator, medical equipment,  
entertainment equipment, safety device etc...  
Use for applications where death or serious property damage is possible and extensive  
safety precautions are required.

### RECAUTIONS D'EMPLOI

Le produit est utilisé dans les circonstances ou environnements suivants, vérifier  
e son utilisation reste dans les limites de ces fonctions. Considérer aussi les précautions  
sécurité lors de l'installation.  
Utilisation dans des circonstances et environnements non décrits dans le manuel  
d'instruction.  
Utilisation en milieu nucléaire, ferroviaire, aérospatial, véhicule, générateur, équipement  
médical, équipement de divertissement, appareil de sécurité, etc...  
Utilisation dans des applications où la mort ou des dommages graves sont encourus  
et des mesures supplémentaires de sécurité doivent être prises.

### DRSICHTSMA P NAHMEN ZUM GEBRAUCH DES GERÄTES

Iten Sie bitte alle angegebene Grenzwerte ein, wenn das Gerät unter den folgenden Umst  
den oder Umgebungsbedingungen eingesetzt wird. Beachten Sie die Sicherheitsstandards  
tüblichen Installationsvorschriften.

Sie Anwendungen, die nicht im Katalog stehen.

### オムロン株式会社

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東京支店 / 03-3779-9031  
大宮営業部 / 048-647-7554  
横浜営業部 / 03-3779-9031  
東京営業部 / 045-411-7202  
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大阪営業部 / 06-282-2472  
中四国支店 / 082-247-0228  
九州支店 / 092-414-3211

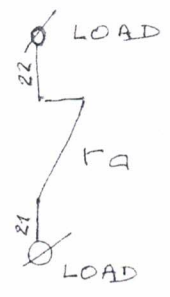
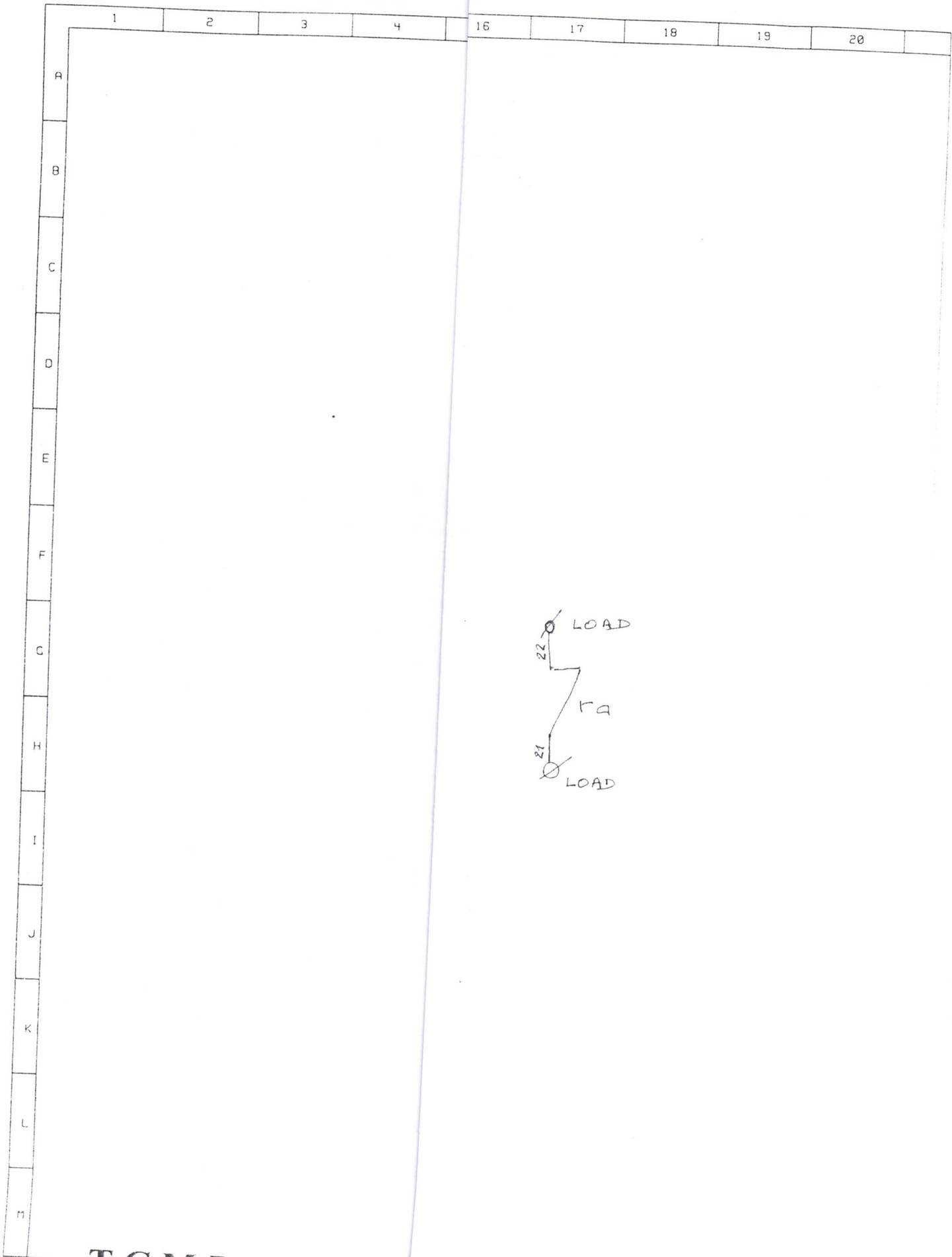
● 技術相談専用予しホンサービス  
三島0559-82-5000  
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西部06-253-0471  
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Norway (Phone: 47-22-65-75-00)

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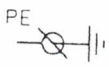
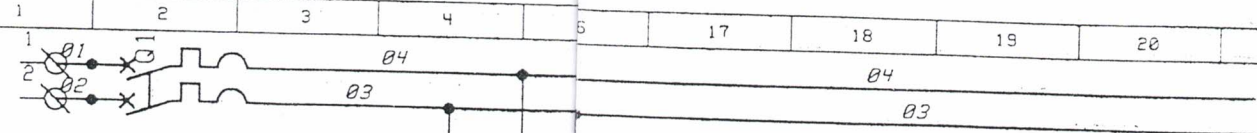
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OMRON Canada Inc.  
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(French language)





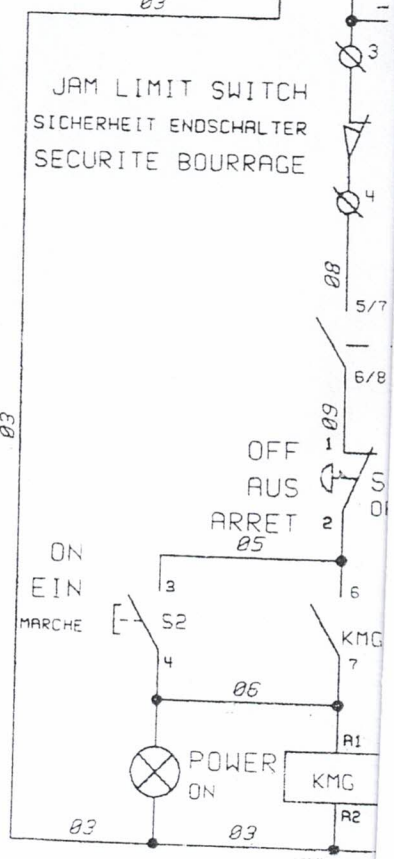
**TCMD**  
 10 rue PASTEUR  
 95410 GROSLAY  
 Tel :01 34 05 82 36  
 Fax :01 34 28 79 90

NE	ETUDE PAR: JEAN DELCAMPE	PRG REF:
	ETUDE CAO DAO: JEAN DELCAMPE	DAO N: OPFOL 1 DATE: 27/04/22 N : 167273



POWER:  
 NETZ:  
 SECTEUR:  
 220 V 50 Hz  
 SINGLE PHASE  
 EINPHASIG  
 MONOPHASE

OPTIONAL:  
 120 V 60 Hz  
 MOTOR CAPACITOR:  
 14 MF FOR 120 V



JAM LIMIT SWITCH  
 SICHERHEIT ENDSCHALTER  
 SECURITE BOURRAGE

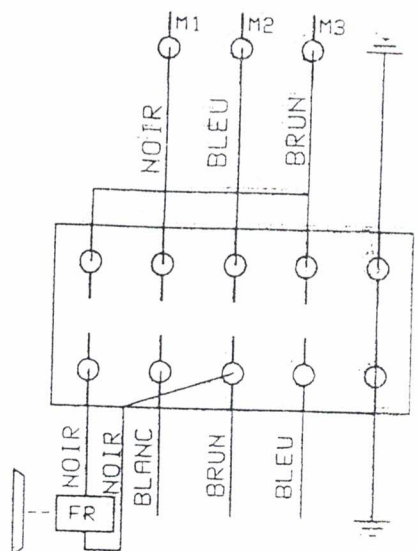
OFF  
 AUS  
 ARRET

ON  
 EIN  
 MARCHE

POWER ON  
 ON

CONTROL POWER  
 SIGNALISATION MARCHÉ  
 SPANNUNG MARCHÉ

POWER ON EIN  
 SOUS TENSION



BORNIER MOTEUR  
 MOTOR TERMINALS  
 MÖTOR ANSCHLUSS

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ETUDE PAR:  
 JEAN DELCAMPE

ETUDE CAO DAO:  
 JEAN DELCAMPE

PRO REF:  
 DAO N: TAPTR  
 DATE: 04/10/96  
 N : 16715