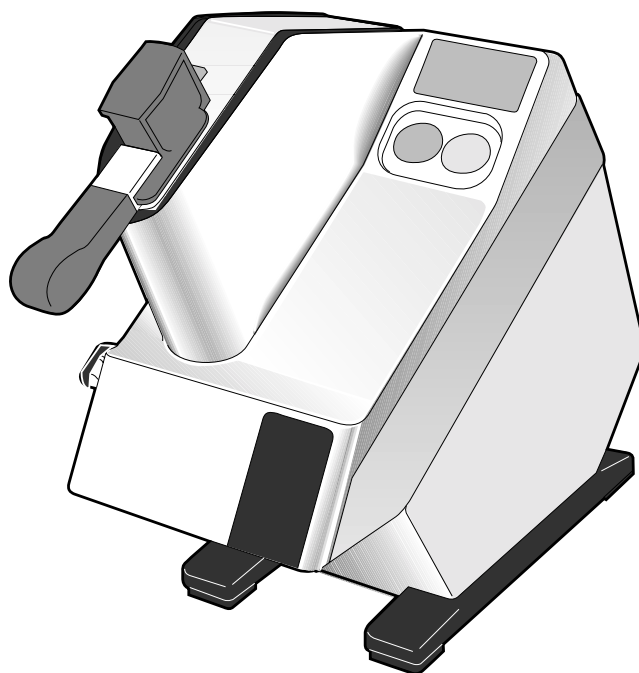


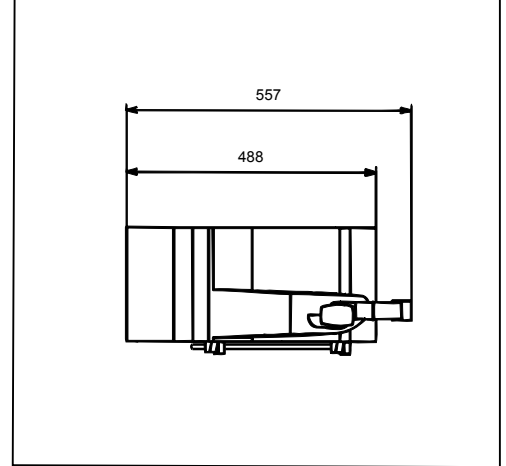
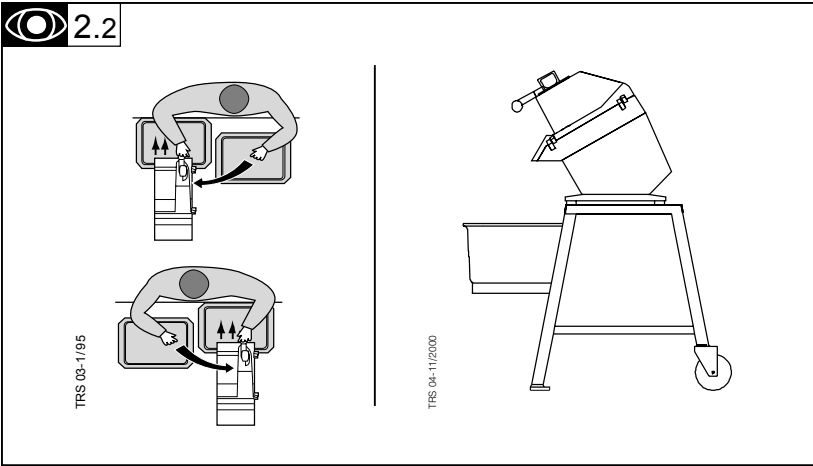
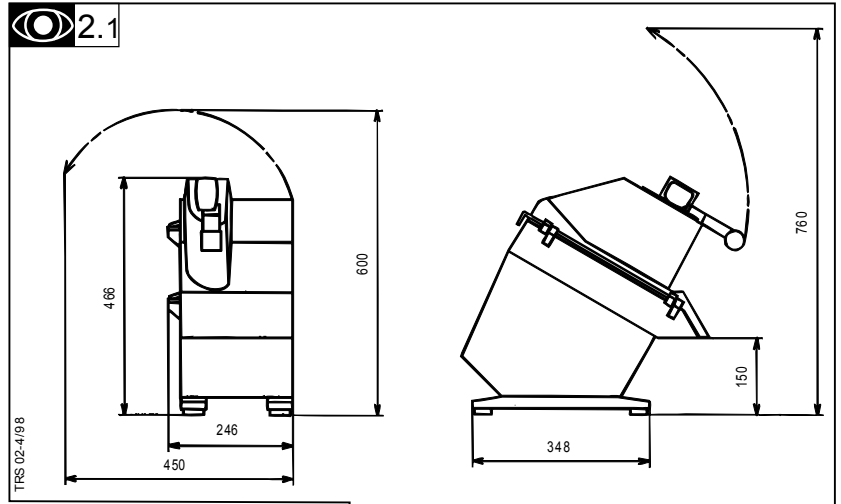
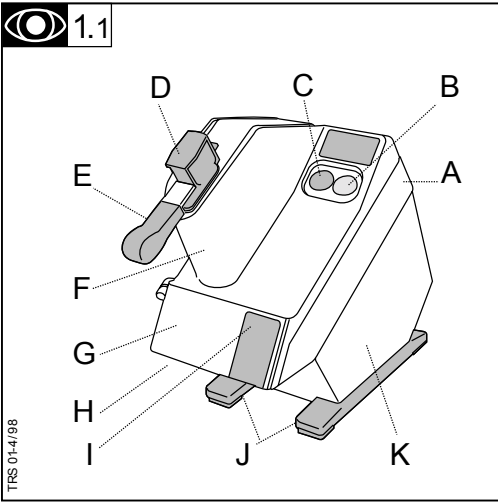
Coupe légumes
Vegetable
preparation
machine
Gemüseschneider



TRS

CE

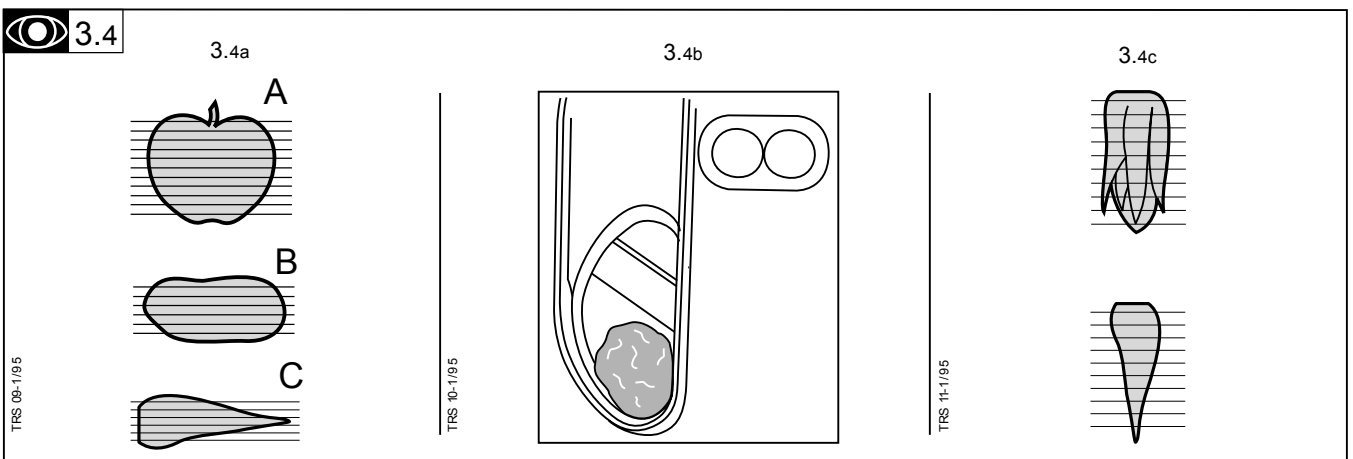
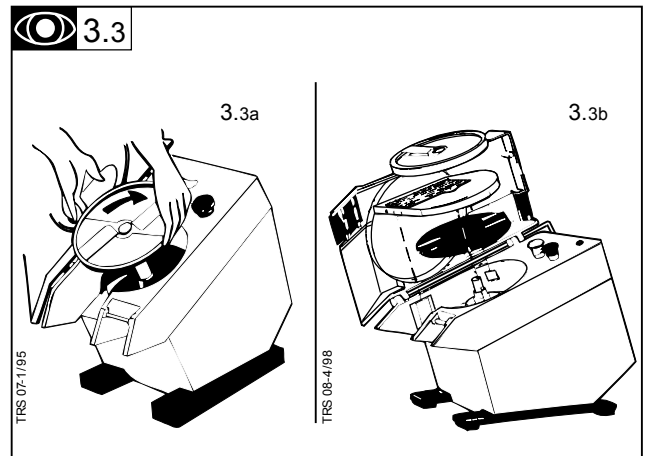
Notice d'instructions	■	(FR)
Instruction manual	■	(GB)
Bedienungsanleitung	■	(DE)
Manuale di istruzione	■	(IT)
Gebruiksaanwijzing	■	(NL)
Bruksanvisning	■	(SE)
Instruktionsbog	■	(DK)
Brusanvisning	■	(NO)
Käyttöohjeet	■	(FI)
Instrucciones	■	(ES)
Nota de instruções	■	(PT)
ΟΔΗΓΙΕΣ ΕΡΗΣΗΣ	■	(EL)



2.3

A	B	C (v)	D (hz)	E (w)	F (A)	G (A)	H (kw/h)
10425	1	100	50/60	370	6,2	16	0,6
				500	8,4		0,7
10422	1	115	60	370	6,3	16	0,6
				500	7,1		0,7
6404	1	220-240	50	370	2,5	16	0,6
				500	3,4		0,7
23800	3	220-240 / 380-415	50	370	1,8 / 1,1	16	0,5
				500	2,4 / 1,4		0,6

TRRS 06-11/2000



3.2a

C / CW

C1 C2 C3 C6 C8 C10 C14

C2W C3W C6W

TRS 26-1/95

3.2b

CC

C1C C2C C3C C5C

TRS 26-1/95

3.2c

AS

AS2 AS3 AS4

TRS 27-1/95

3.2d

J / P / K

J2 J3 J4 J7 P K

TRS 28-1/95

3.2e

FS

FS6 FS8 FS10

TRS 29-1/95

3.2f

MS

MS8 MS10 MS20

TRS 30-1/95

C+FS / CW+FS

+

C6 / C6W
+ FS6

C8
+ FS8

C10
+ FS10

TRS 31-1/95

C+MS / CW+MS

+

C8
+ MS8

C10
+ MS10

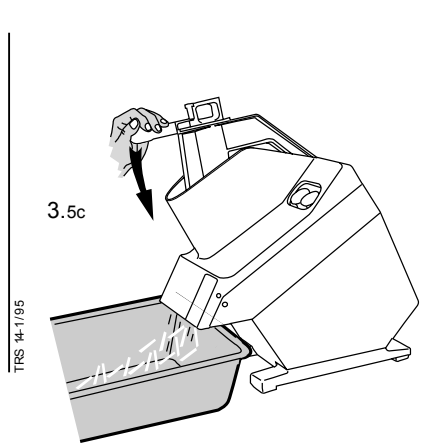
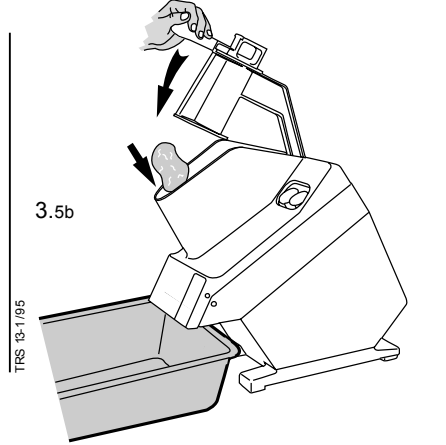
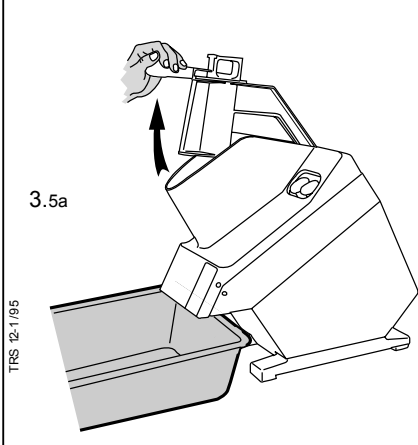
C / CW
+ MS8

C / CW
+ MS10

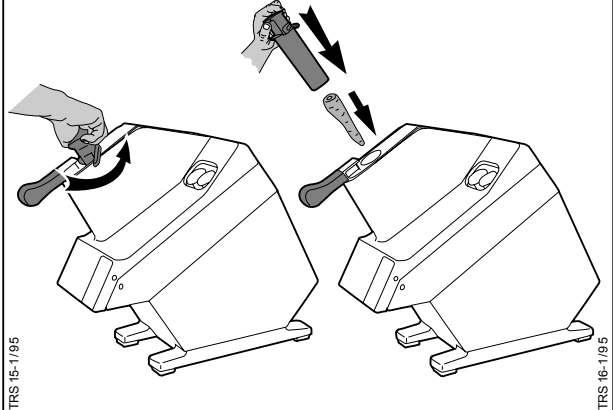
C / CW
+ MS20

TRS 32-1/95

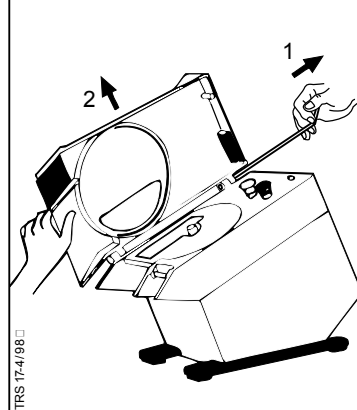
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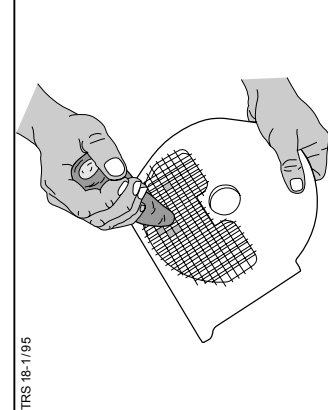
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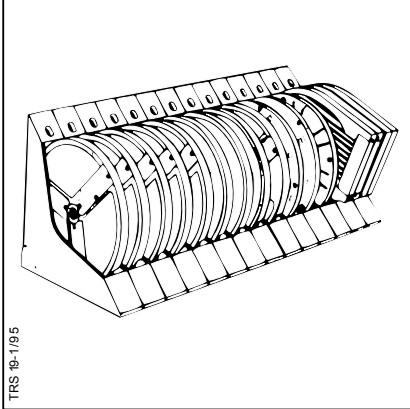
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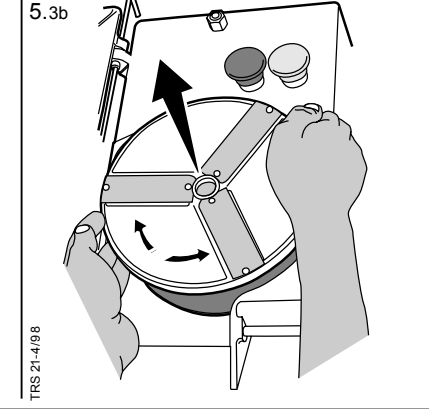
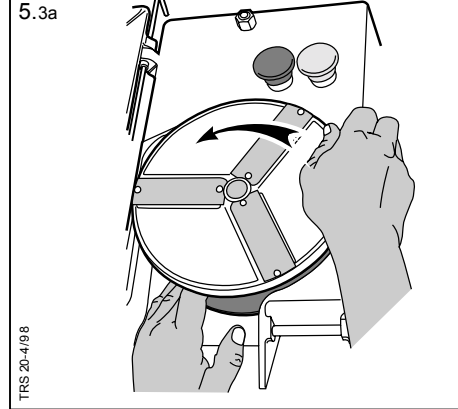
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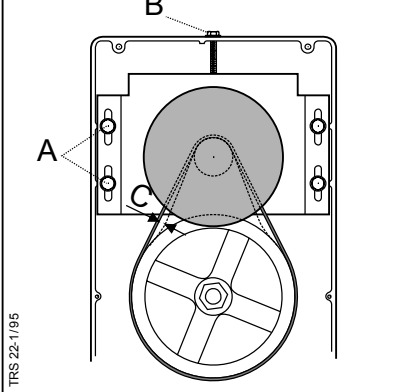
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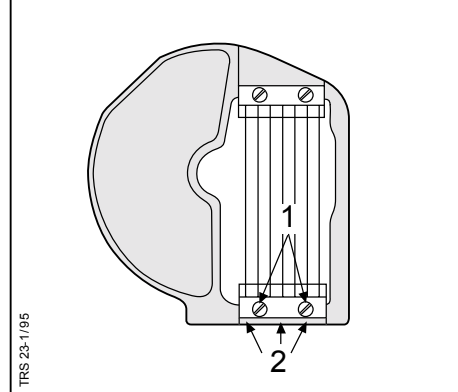
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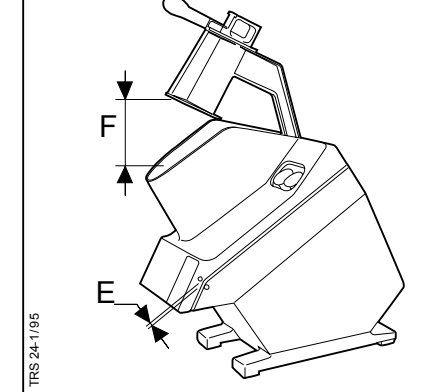
6.1



6.2



6.3





Contents

Introduction	1	Fault finding	4
Installation	1	Maintenance	4
Use, safety	2	Conformity with regulations	5
Cleaning, hygiene and storage	4		

Introduction

1.1 DESCRIPTION

The TRS multi-purpose vegetable cutting machine can slice, shred, grate, chip and dice various foodstuffs (for the preparation of raw and cooked vegetables, fruits and cheeses).

With its range of high output cutters, the TRS is the professional vegetable cutter for restaurants, large kitchens and small companies.



- A Body
- B Stop button (red)
- C Start button (black)
- D Feed stick
- E Feed arm
- F Large feed hopper
- G Cover
- H Discharge chute
- I Cover lock
- J Feet
- K Plastic of stainless steel housing, depending on models

Installation

2.1 DIMENSIONS - WEIGHT (for information only)

- Dimensions of packaging in mm :
L : 630 W : 270 h : 530

Gross weight when packaged : 20kg

Net weight when equipped : 18kg (excluding cutters)

- Dimensions of the machine :

2.2 LOCATION AND LAYOUT

The TRS may be :

- Fitted on a table of between 700 and 900 mm maximum in height and take a standard 150 mm high receiving bowl.

- Fitted on a mobile work base (available in option).
- For larger bowls, position the TRS on the edge of the table or use the mobile work base.

2.3 ELECTRICAL CONNECTION

- Before connecting the machine to the electrical power supply, check that the voltage of the electrical system is the same as that marked on the rating plate and the power cable.

- The machine must be protected by a differential circuit breaker and a fuse of the size given in column G of the characteristics table.

- Motor characteristics :

- A Motor code
- B Number of phases (1 single phase or 3 triple phase)
- C Nominal voltage in volts (value, range or commutation)
- D Frequency (Hertz)
- E Nominal power (Watt)
- F Nominal current (Amperes)
- G Size of fuse for protecting the electrical line (Amperes)
- H Indicative electrical consumption (KWh)

1) Three phase dual voltage motor.

- A 3 pin + earth standardised wall socket with a 20 A fuse is required, as well as a matching watertight plug for the power cable.



The machine must be earthed using the green and yellow wire

- Check the direction of rotation using the ejector fitted to the machine.

- Remove the feed pusher from the chute (anti-clockwise direction).

- Press the start button.

- Check the direction in which the ejector is turning by means of the chute. The ejector should be turning anticlockwise .

- If it is turning in the opposite direction, change over the two phase wires in the plug.

- The connection is pre-set for high voltage (e.g. 400 V). For use with low voltage (e.g. 230 V), proceed as follows :

- Disconnect the machine and turn it over.

- Remove the 4 screws fixing the casing.

- Change the wire on the integrated circuit board by moving the cable spade from the terminal connection marked at the higher voltage (400V) onto that marked at the lower voltage (230V).

- Change the connection of the motor wiring.

- Check the direction of rotation and refit the casing.

2) Single phase motor.

- A 2 pin + earth standardised wall socket with a 10/16 A fuse is required.

Use, safety

3.1 USER SAFETY is ensured by :

- The braked stoppage of the motor when the feed arm is opened so that there is no risk when loading.
- The motor not starting if the cover is missing.
- The size of the small feed hopper for long vegetables.
- The absence of risk of access via the discharge chute due to

the design of the ejector and the discs.

- Respecting the instructions of this manual for the use, cleaning and maintenance of the machine.

3.2 CHOICE OF THE CUTTERS

3.2a

- **C slicing discs** : for straight cuts from 1 to 14 mm.

Note : The C14 disc is only to be used with the FS or MS grids.

- **CW slicing discs** : crinkle cut from 2 to 6 mm for:
 - Vegetables: potatoes, carrots, aubergines, beetroot, celery, cabbages, mushrooms, cucumbers, courgettes, chicory, fennel, onions, leeks, radishes, etc.
 - Fruits : almonds, bananas, apples, etc.

3.2b

- **CC curved discs** : for fragile and stringy products from 1 to 5 mm.

- Recommended for tomatoes, citrus fruits, mushrooms, chiffonade salads as well as the other products mentioned opposite.

3.2c

- **AS shredding discs** : for cutting into chips of 2 to 5 mm.

- AS 2 : thin 2 x 2 mm } straw potatoes,
- AS 3 : medium 3 x 3 mm } celery, carrots
- AS 4 : large 4 x 4 mm for matchstick potatoes

3.2d

- **J - P - K grating discs**
- J 2 fine J 3 medium J 4 large J 7 extra large

- Vegetables : carrots, «doorstep» potatoes, grated celery, red cabbages, beetroots, horseradishes, rösti.
- Cheeses : gruyère, mozzarella.
- Other : almonds, breadcrumbs, chocolate, etc.
- **P** : for Parmesan, breadcrumbs, almonds, horseradishes, chocolate.
- **K** : special grating of raw potatoes (Knödeln).

3.2e

FS chip grids : for cuts from 6 to 10 mm in thickness when used with a C/CW disc of the same thickness.

3.2f

- **MS Dicing grids** : for square section cuts of 8 to 20 mm when used with a C/CW disc for :
 - Cubes or diamonds: macedoines of vegetables or fruits, jardinières, minestrone, sauted or braised potatoes, stews.

Indicative outputs (kg / h) :


Crisps with C 2	100
Potatoes C 3	150
Grated carrots J 3	150
Chips C 10 + FS 10	300
Sauteed potatoes C 14 + FS 20	400
Macedoine C 8 + MS 8	250

3.3 USE OF THE CUTTERS

- TRS is supplied with the ejector fitted to the drive spindle. Open the cover lock and lift the cover fully in order to remove the ejector.

Before starting work, always check the cleanliness of the cutting chamber, the drive spindle, the ejector, the cutting disc and the grid.

1) For slicing, shredding and grating 3.3a

- Fit the ejector onto the flat of the drive spindle.
- Fit the disc required (slicing, shredding or grating).
- Turn the disc in a clockwise direction  to insert the bayonet fitting, then continue in the same direction until it reaches the pin.

- To remove the disc, turn it in the opposite direction and lift it using the finger holes at the edges of the disc. If it does not come free, refer to § 5.3.
- Close the cover and lock it.


2) For cutting into chips or cubes 3.3b

- Fit the ejector (see above §).
- Fit the grid into its housing and check that it is seated correctly (seating area is clean). The upper face of the grid must be slightly below the top of the machine body.
- Then fit the chosen disc and close the lid.
- Tips for using an MS grid to cut products of differing hardnesses: begin with the softer products, as they cannot be used to push harder products that are already in the grid.

3.4 CHOICE AND FUNCTIONS OF THE FEED HOPPERS

1) The large feed hopper with and the feed arm 3.4a

A Slicing B Shredding C Grating


- Passage for large sized products (160 x 80 mm maximum, corresponding to 1/4 of a cabbage).
- Manual loading is carried out by inserting the products one at a time or in handfuls, taking care to position them correctly in order to avoid false cuts. Pack «fragile» products (tomatoes, citrus fruits) against the side.  3.4b

2) The small feed hopper with removable feed pusher 3.4c

- For slicing long products (carrots, chicory, cucumbers, leeks, etc.), the opening is dia. 52 mm maximum. To slice, always insert long products tip first.
- Manual loading is carried out by inserting the products vertically into the small hopper one at a time or in handfuls.
- *Tips for avoiding :*
 - *angled and irregular cuts: place thin products in «head first».*
 - *blockages, cut off the ends of the vegetables.*

3.5 USE OF THE LARGE FEED HOPPER AND THE FEED ARM

TRS will only operate if the cover is closed.

- Leave the feed pusher inside of the feed arm to prevent the products from coming back out.
- Press the black START button.
- Lift up the feed arm with one hand. 
- As soon as the feed arm is clear of the feed hopper, the motor stops immediately, thus allowing the products to be loaded in complete safety.

3.5b

- When the feed arm is lowered, the TRS will start up again automatically.


3.5c

- To slice or shred
- Using the feed arm, insert the products into the feed hopper until it reaches its lower stop, by progressively applying pressure to the arm.
- Raise the feed arm and begin a new cycle.
- When the work has been completed, press the red STOP button.

Note : The force applied to the feed arm depends on :

- *the product being used (soft product = less force)*
- *the cutter chosen (a grater requires more effort than a slicing disc).*

3.6 USE OF THE SMALL FEED HOPPER AND THE FEED PUSHER

- Leave the feed arm in its lower position and unlock the feed pusher (turn anticlockwise )
- Press the START button to start operation.
- Raise the feed pusher and insert the products with the other hand.

- Push the products using the feed pusher and start a new cycle.
- When the work has been completed, press the STOP button.




Never insert your hand or a hard object in the feed hopper when the machine is in operation.

Cleaning, hygiene and storage



Before dismantling the machine, disconnect from the power supply.

4.1 IN BETWEEN USE

- Open the cover and remove if necessary by pulling it backwards.
- Remove the cutting equipment (disc, grid, ejector) and the feed pusher. 

- Wash the equipment in hot water, rinse and dry.
- Wash the cutting chamber using a clean, damp sponge.

4.2 AFTER USE

- Refer to § 4.1.
- Clean the removable parts in hot water and detergent - degreaser - disinfectant compatible with the equipment.
- Rinse in clean water and leave to dry.

Tip : For the MS grids, push any cubes that are stuck with a carrot. Do not use metallic objects.

4.2

- Clean the body cutting chamber using a damp sponge and a detergent/disinfectant, then rinse.



Do not clean the machine with a pressure cleaner.

4.3 STORAGE

- After cleaning, carefully store all of the cutting equipment in the storage rack fixed to the wall.

Fault finding




5.1 THE MACHINE WILL NOT START, CHECK THAT :

- The machine is plugged in.
- The electrical power supply to the socket is correct.
- The cover is closed.
- The feed arm is in the feed hopper.


5.2 ABNORMAL NOISES :


- Stop the machine.
- Check that the disc, grid and ejector are fitted correctly.
- Dismantle, clean if necessary and refit.
- If the noise continues and the machine lacks power, check that :
 - the three phase motor is not operating on two phases.
 - the belt is not worn or needs to be tensioned (see §6.1).

5.3 BLOCKAGE OF A DISC :

- Unplug the machine,
- Place a hand flat on the ejector and block it so that it cannot turn,  5.3a
- With your other hand, hold the outside of the disc in the finger holes and turn sharply anticlockwise .
- Lift it whilst turning backwards and forwards.  5.3b


5.4 WORK QUALITY


- Before carrying out any work, stop the machine.
- If the products have not been cleared properly, check that :
 - The ejector is fitted correctly.
 - The products in the receiving bowl are not blocking the outlet.
 - There is not an accumulation of products in the cutting chamber.
- If the quality of the cut is not satisfactory, check :
 - The direction of rotation (anticlockwise  viewed from above).
 - That the correct cutting equipment has been chosen (see §3.2).
 - The condition of the cutting equipment (see §6.2).
 - The choice of the feed hopper.
 - The way that the products are in the feed hopper (see §3.4).

 If the problem persists, contact the service department of your local dealer.

Maintenance


6.1 MECHANICAL PARTS

- The TRS requires a minimum amount of maintenance (the motor and the bearings are greased for life).
 - It is recommended to check the tension and wear of the belt at least once a year.
- In order to check it, proceed as follows :
- Turn the machine upside down.
 - Remove the 4 screws fixing the casing.
 - **To tension the belt**  6.1
 - Unscrew (by 1 turn) the 4 retaining screws A of the motor mounting (8 mm socket).
 - Lightly screw the tensioning screw B at the back of the machine.
 - Check the tension of the belt by pushing it with your thumb, in between the motor mounting and the large pulley). There should be a deflection C of around 3 mm.
 - Tighten the four motor mounting retaining screws A.
 - Remove any belt dust from the inside of the casing and clean the ventilation holes.
 - Check the condition of the electrical connections.
 - Refit the casing.
 - **Access to electrical components.**
 - Unplug the machine.

 Residual voltage at the capacitor terminals.

- The capacitors may retain an electrical charge. To avoid taking any risks when carrying out work, we recommend discharging them by connecting their terminals with an insulated conductor (e.g. a screwdriver).

6.2 MAINTENANCE OF THE CUTTING EQUIPMENT

- **Slicing discs : sharpening of the blades**
 - Remove the attachment screws.
 - Sharpen with a grindstone, keeping the blade at the same angle.
 - **Chip grid : tension of the blades**  6.2
- When the chips are not all of the same size :
- Unscrew the two screws 1 of the grid mounting.
 - Gradually tighten the three 2 Allen screws (3 mm) to the required tension.
 - Firmly tighten the two screws 1.
 - If necessary, sharpen the blade with a soft grindstone.
 - **Dicing grids**

The blades cannot be changed as they are moulded in.

 - If necessary, sharpen using a small file, if the blades have been damaged by an impact.
 - **Graters**

The graters cannot be re-sharpened.

 - In the case of major wear of the grater teeth, change the cutter.

6.3 ADJUSTMENT OF THE SAFETY DEVICES 6.3

- Check that the safety devices are operating correctly on a regular basis. The motor should stop :
 - When the lid is opened, the gap E 10 to 20 mm.
 - When the feed arm is lifted, the gap F should be 45 mm maximum from the edge of the feed hopper.
- If either of the two safety devices does not work :
 - Do not use the machine.
 - Have it adjusted by the service department of your local dealer.

6.4 ELECTRICAL COMPONENTS



6.4 see electrical diagrams.

• Identification of the colours of the wires :

- Power circuit : black
- Control circuit : red
- Motor : (A) red - (B) green - (C) yellow - (D) white - (E) blue - (F) black / (G) orange / (H) violet / (J) brown
- Phases : L1 / L2 / L3
- Neutral : N
- Earth: J/V yellow and green.

• Identification of the components :

- O : stop button
- I : Start button

- S1 : Cover safety device
- S2 : Feed arm safety device
- S3 : Temperature probe (depending on model)
- M : Motor
- KM 1 : Contactor
- K 1A : Auxiliary relay
- BC : Additional contact
- CD : Start-up condenser
- CP : Permanent condenser
- CF : Braking condenser
- K : Start-up relay
- R : Resistance plates

6.5 ADDRESS FOR SERVICE REQUIREMENTS

We advise you to contact the dealer who sold you the machine.



For any information or orders for spare parts, specify the type of machine, its serial number and the electrical characteristics.

- The manufacturer reserves the right to modify and make improvements to the products without giving prior warning.

Dealer's stamp

Date of purchase :

Conformity with regulations

The machine has been designed and manufactured in conformity with :

- The machine directive 89/392 EEC.
- The CEM directive 89/336 EEC.
- To the European standards :
EN 60 204-1992 electrical equipment of machines,
EN 1678-1998 vegetable cutters, integrated safety devices.
- To the French standards :
XPU 60010-1998 hygiene rules.

This conformity is certified by :

- The CE conformity mark, attached to the machine.
- The corresponding CE declaration of conformity, associated with the warranty.
- This instruction manual, which must be given to the operator.

Acoustic characteristics :

- The acoustic pressure level measured in conformity with the EN 1678-1998 test code is less than 70 dBA.

Protection indices as per the EN 60529-1991 standard :

- IP55 electrical controls.
- IP34 overall machine.

Integrated safety :

- The machine has been designed and manufactured in compliance with the relevant standards and regulations, mentioned above.
- Before using the machine, the operator must be trained to use the machine and informed of any possible residual risks (personnel work station training obligation).

Food hygiene :

The machine is made from materials that conform to the following regulations and standards:

- Directive 89/109/EEC: materials and objects in contact with foodstuffs;
- Directive 90/128/EEC: plastic materials in contact with foodstuffs.
- prEN 601-1992 cast aluminium objects in contact with foodstuffs.

The surfaces of the food area are smooth and easy to clean. Use detergents that are approved for food hygiene and respect the instructions for their use.

The machine has been CNERPAC approved for food hygiene as well as conforming NSF standard 8.

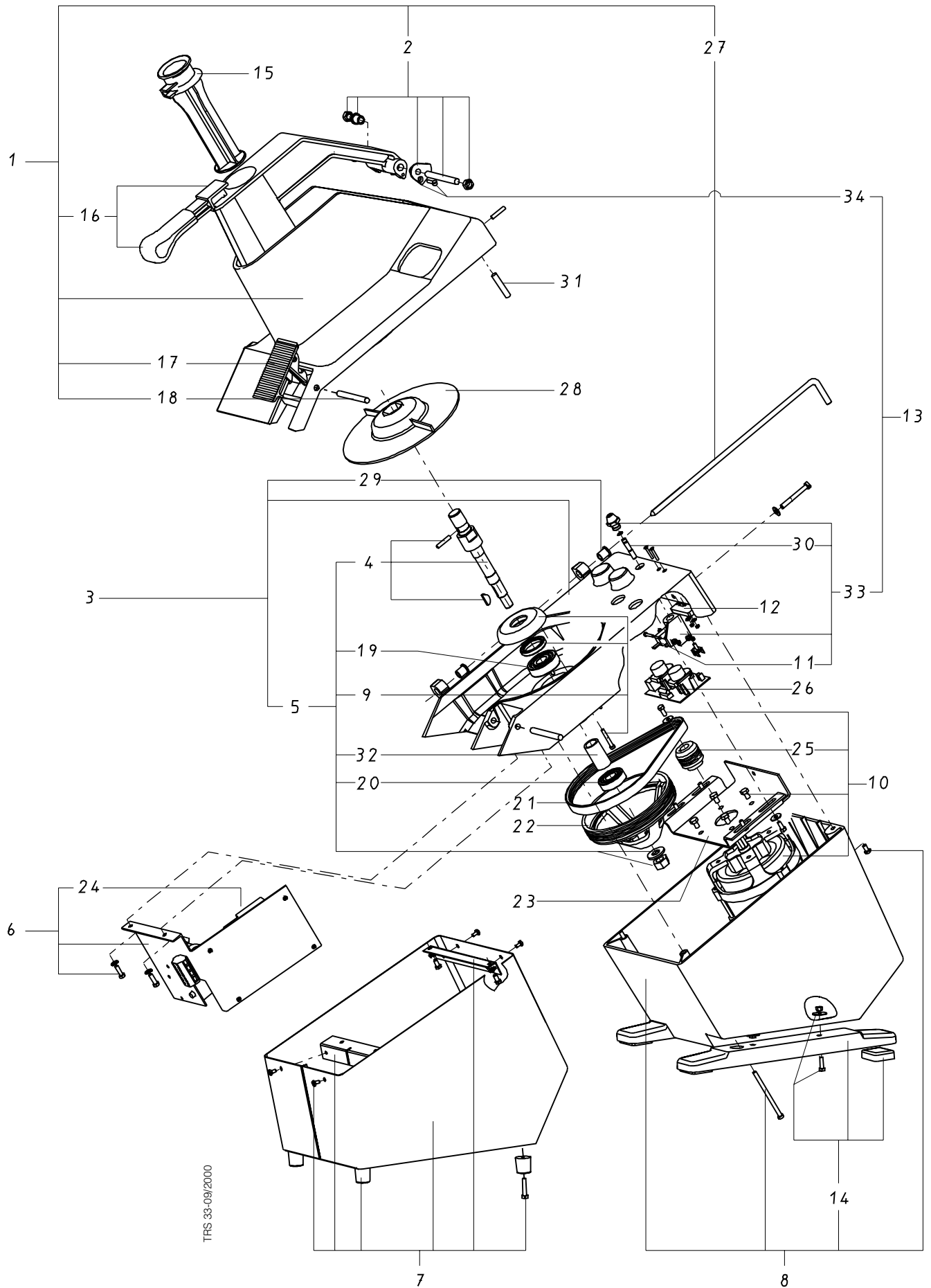
Nomenclature / Parts list

Rep. Item	Code Part N°	Désignation / Description
1	4990	Trémie équipée sans pilon / Hopper without feed stick
2	20702	Articulation fouloir / Feed arm hinge
3	4294	Corps équipé / Body assembly
4	4291	Arbre équipé / Shaft assembly
5	4290	Mécanisme équipé / Mechanism assembly
6	23528	Equipement électrique mono / Single phase electrical equipment / 110/240V-50/60Hz
	23801	Equipement électrique triphasé/ Three phase electrical equipment / 220/440V-50/60Hz
7	9827	Caisson inox équipé / Stainless steel casing assembly
8	4289	caisson plastique équipé / Plastic casing assembly
9	5993	Flasque équipé / Flange assembly
10	6404	Moteur monophasé / Single phase motor / 230V 50Hz
	23800	Moteur triphasé / Three phase motor assembly / 230-400V 50Hz
11	5190	Microrupteur contact positif / Positive contact micro switch
12	6171	Relais PLA / Relay PLA
13	11156	Kit sécurité fouloir / Feed arm safety kit
14	2749	Traverse avec patins / Support bar with feed
15	18272	Pilon / Feed stick
16	6289	Fouloir + poignée / Feed arm + knob
17	4257	Poignée de verrouillage couvercle / Cover locking handle
18	4258	Axe / Pin / ø8 LG 82
19	3047	Roulement / Bearing / 6303 2RS
20	3041	Roulement / Bearing / 6203 2RS
21	3020	Courroie / Belt / 559 J6
22	4266	Poulie réceptrice / Driven pulley
23	4270	Support moteur / Motor bracket
24	23394	Carte puissance frein monophasé / Single phase brake power supply card / 220/240V-50/60Hz
	23395	Carte puissance frein triphasé / Three phase brake power supply card / 220/440V-50/60Hz
25	4268	Poulie motrice / Drive pulley
26	23393	Carte commande / Control card
27	20486	Axe couvercle trémie / Hopper cover pin
28	4277	Ejecteur / Ejector
29	18153	Bague articulation couvercle / Cover hinge bush
30	1559	Tige de commande équipée / Command pin assembly
31	3398	Aimant / Magnet / 6x25
32	4264	Entretoise / Spacer / 18x25x40
33	1557	Boitier sécurité fouloir équipé / Feed arm safety box assembly
34	8047	Came équipée / Cam assembly

NB : Les vis, rondelles et écrous sont livrés automatiquement avec les sous-ensembles correspondants.

Screws, washers and nuts are automatically delivered with the corresponding sub-assemblies.

Vue éclatée / Exploded view

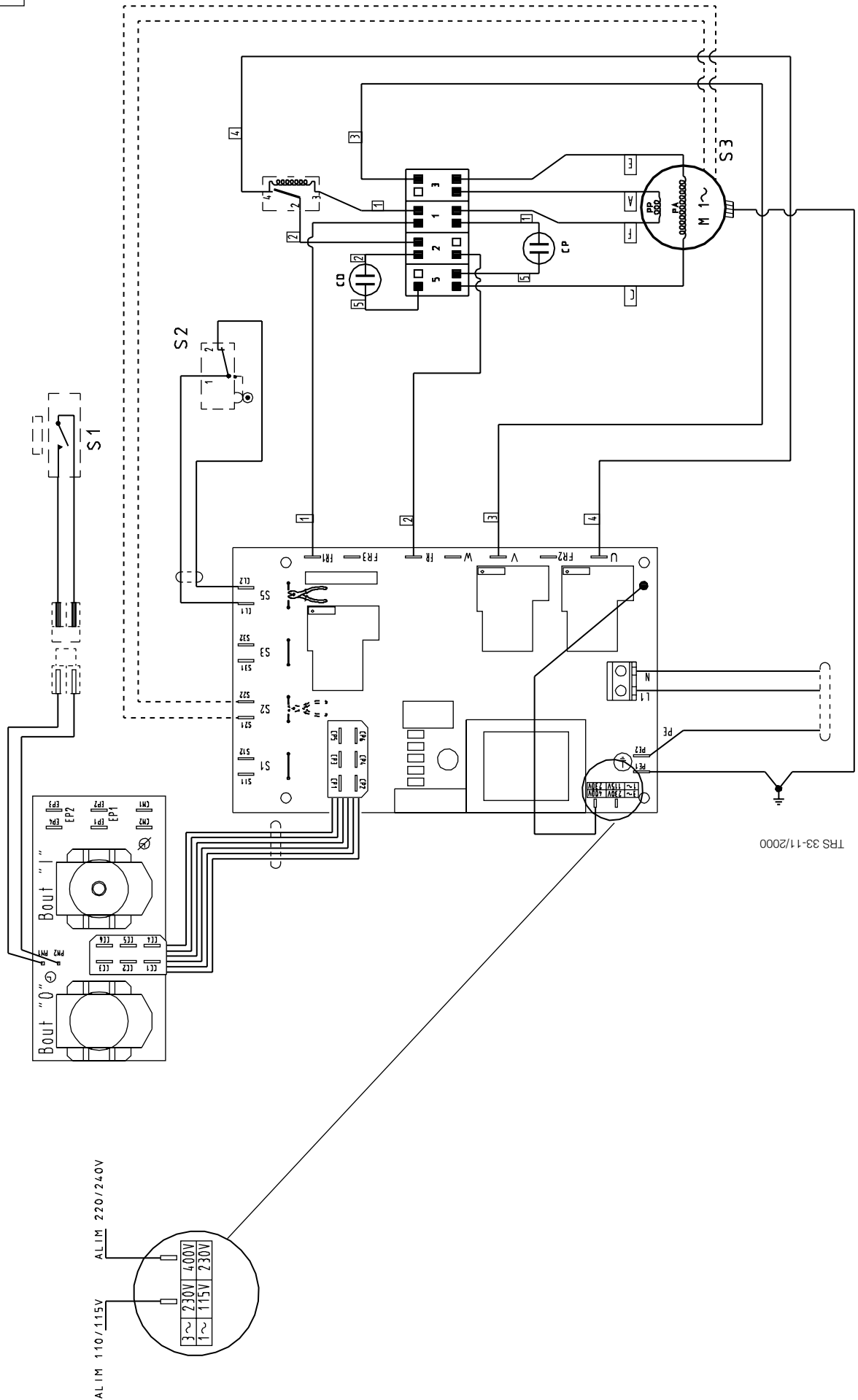


TRS 33-09/2000

Schémas électriques / Electrical wiring diagrams

BRANCHEMENT MONOPHASÉ / SINGLE PHASE CONNECTION / 230V

6.4



TRS 33-11/2000

BRANCHEMENT TRIPHASÉ / THREE PHASE CONNECTION / 400V

6.4

