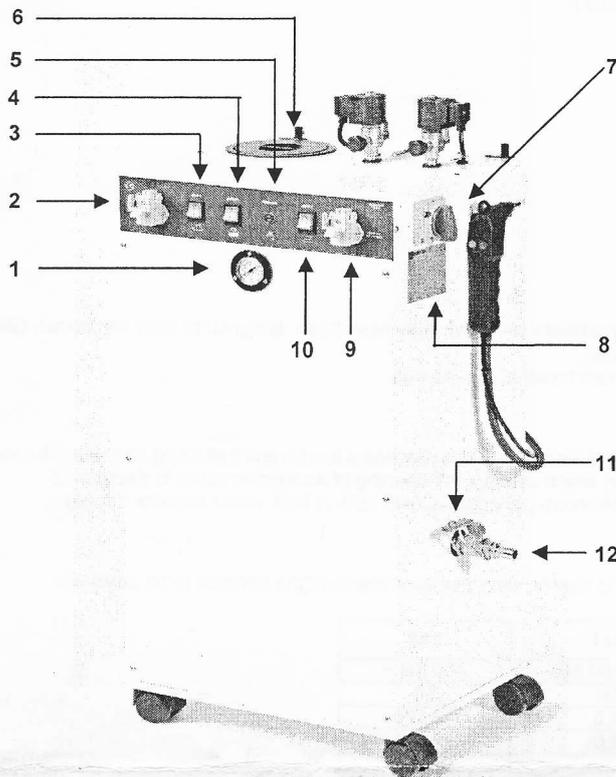


MAINTENANCE AND INSTRUCTION MANUAL STEAM GENERATORS SERIES 223 - 231



1	Pressure gauge
2	Iron 1 female connector
3	Iron 1 switch
4	Boiler switch
5	Warning light for water lack
6	Door of water tank
7	General switch
8	Identification plate
9	Iron 2 female connector
10	Iron 2 switch
11	Safety hook
12	Exhaust valve

Read carefully this manual before using the appliance

1 GENERAL INFORMATION

We congratulate you on your having chosen a **STIROVAP** product, and we would like to remind you that it has been designed and manufactured paying the utmost attention to the operator's safety, to the efficiency of the work and to environmental protection.

Knowledge of the product being a fundamental element to guarantee the above indicated, we recommend to carefully read this manual and to thoughtfully follow its advice. A particular attention should be given while reading "Safety warnings" and in general to every written Warning

STIROVAP is not to be held responsible for damages coming from :

Failure to comply with this manual recommendations; Use of the appliance other than what is indicated in paragraph 2.6 Intended purpose; Use of the appliance against current accident prevention regulations; Failure to carry out required maintenance.

Modifications or interventions not authorised by **STIROVAP**;

Utilisation of spare parts which are not original or not suitable to the appliance model;

Repairs carried out by an unskilled operator.

1.2 WARRANTY CONDITIONS

The validity of the warranty is 12 months, starting from the date indicated on the fiscal sale document (fiscal cash slip, invoice, etc.) .

The buyer has the right to ask for the replacing of defective parts, while the right of asking for the compensation for any direct or indirect damages is not included.

Manpower, packing and transport expenses are to be paid by the buyer.

The components which have been replaced under warranty are to be given back to **STIROVAP**.

This warranty does not provide for the replacement of the appliance and ends automatically if the buyer does not comply with date of payment agreed upon.

Not included in the warranty are :

Any direct or indirect damages caused by falling, incorrect use of the appliance and failure to comply with safety regulations and with the instructions relevant to installation, use and maintenance contained in this manual;

Damages caused by the fact that the appliance does not work because it has to be repaired;

All those parts which prove to be defective because of negligence and carelessness during use;

Damages caused by use of spare parts not original or not expressly approved by **STIROVAP** and damages caused by repairs carried out by an unskilled operator;

Damages caused by a wrong electric feeding.

Every tampering with the appliance, in particular to safety devices, will invalidate warranty and will relieve the manufacturer of any responsibility.

STIROVAP reserves the right to introduce changes at any time, in order to improve the product, and it is not obliged to introduce the same changes to the appliance previously manufactured, delivered or ready to be delivered.

1.2 MANUFACTURER'S ADDRESS

The manufacturer's address of the appliance is the following:

STIROVAP s.r.l. Via P. Colletta, 13 - Reggio Emilia - Italy

1.4 SYMBOLS AND DEFINITIONS CONTAINED IN THIS MANUAL

1.4.1 Symbols :

The symbol : **WARNING!** which characterises some parts of the text indicates a great possibility of damage of persons if relevant instructions and indications are not followed.

11. Before putting the appliance into operation make sure that the lever of the release valve (12) is locked by the safety hook (11).
12. Never move the lever of the release valve (12) when the generator is still hot.
13. During use, the appliance should be kept under control. Keep children away from the iron when in use. In particular, pay a special attention when using the appliance in kindergartens, nursing and rest-homes since there could be unguarded children, elderly or disabled persons.
14. Never put in the appliance in the water.
15. While refilling the inner tank make sure that water does not overflow. If this happens, wait at least 24 hours before starting the generator so that water within the appliance evaporates.
16. Always bring switches (3), (4), (10) (switches not shining) and the main switch (7) in OFF position (marked by the sign "0") and remove the plug from the socket (to be more simple, in this maintenance and instruction manual, we consider the appliance as always connected to the electric feeding system through a plug. If the appliance is connected to the electric feeding system in a fixed way, consider that : the switch disconnecting all poles in OFF position is equal to having the appliance unplugged from the socket; the switch disconnecting all poles in ON position is equal to having the appliance plugged to the socket:
Before leaving the room, even for a few minutes (as not to leave the appliance unattended); After use.
Moreover, wait for the appliance to be completely cold: Before doing any cleaning or maintenance; Before adding some water into the steam generator.
17. When you let the iron and the appliance cool, pay attention :
Not to leave the appliance unattended if there are unguarded children, elderly or disabled persons;
To put the appliance in a safe position, where there is no falling risk;
Do not put the appliance near inflammable materials.
18. Always call a **SKILLED OPERATOR** for repairs; in this way, you will be sure that only original spare parts are used. Incomplete repairs involve a serious danger for users.

4 UNPACKING

While performing these operations wear safety gloves and glasses, in order to avoid damages to your hands or eyes. All the material used for packing it is the recyclable type. Packaging (plastic bags, nails, staples, etc.) must be stored out of reach of children as they are potentially dangerous. For the disposal of packaging items follow local environmental protection regulations in force in the country where the appliance has been installed. In particular, do not leave plastic bags and plastic packaging in the environment since they are a damage to the environment. After having unpacked the appliance, check that it is not damaged. If in doubt, do not use it but call your retailer who will ask a **SKILLED OPERATOR** to inspect it.

5.1 INSPECTIONS AND CONNECTION TO THE ELECTRIC LINE

1. Ask a **SKILLED OPERATOR** to check that the feeding of your electric system is in accordance with the data shown on the identification plate (8) of the appliance (see also picture 1). In particular, voltage should not differ from what indicated in the plate by +/- 10%.
2. The socket to which the appliance is connected should be arranged by a **SKILLED OPERATOR** in accordance with law provisions in force in the country where the appliance is installed. In particular, the socket should be equipped with a ground conductor, with a suitable fuse and should be protected with a magnetic-thermal sensitivity differential switch not exceeding 30 mA.
3. If the appliance is to be connected in a fixed way to the electric feeding system, installation should be carried out by a **SKILLED OPERATOR** in accordance with law provisions in force in the country where the appliance has been installed. In particular, the following recommendations should be carefully followed: grounding, protection through a suitable fuse and magnetic-thermal sensitivity differential switch not exceeding 30 mA, sectioning of the electric system of the appliance with switch disconnecting all poles.
4. If the appliance is not to be connected to the electric system in a fixed way and the feeding cable is not equipped with a plug, ask a **SKILLED OPERATOR** to connect a plug in compliance with the regulations in force in the country where the appliance has been installed.
5. If the feeding cable is too short, ask a **SKILLED OPERATOR** to replace it.
6. Three-phase appliances should be connected to a three-phase line with neutral conductor

5.2 GETTING THE STEAM GENERATOR READY

WARNING! Ask a **SKILLED OPERATOR** to:

- 1 Fix the wheels at the base of steam generator;
- 2 Mount the safety hook onto the iron female connectors (2) and (9) ;
- 3 Connect the release valve (12) to the steam generator with a teflon tape;
- 4 Connect with clips the steam tubes to the electric valve rubber holders;
- 5 Check the functioning of the electric pump which refills the boiler with water .

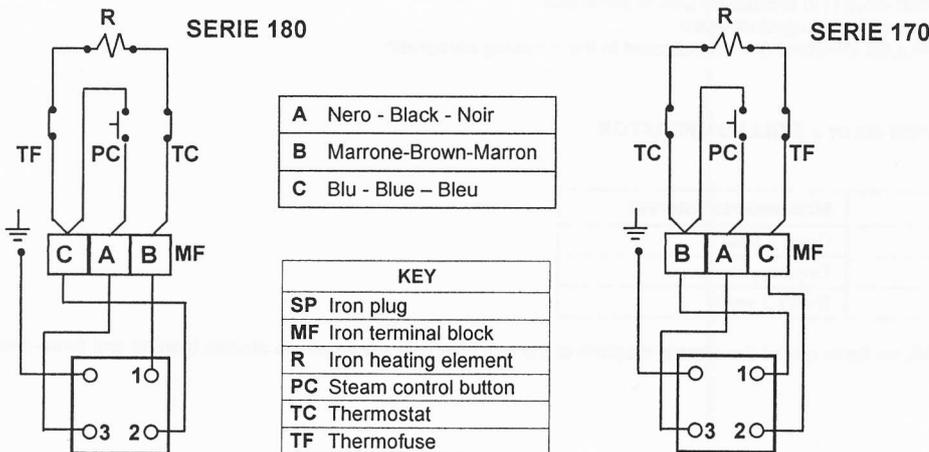
5.2.1 CONNECTING THE STEAM GENERATOR TO THE WATER LINE

The electric pump of the steam generator can be directly connected to the water line by making use of a suitable tube resistant at the pressure of 10 bar at least. Do not make use of the tube supplied connecting the inner tank to the pump. This operation should be carried out by a **SKILLED OPERATOR** only, in compliance with the norms in force in the country where the appliance is installed.

5.3 GETTING THE IRON READY

WARNING! Refer to the content of the maintenance and instruction manual of the iron you are using. If you do not use a **STIROVAP** iron, it is necessary to ask a **SKILLED OPERATOR** to check that :

The iron marked with the CE mark showing its conformity to European Directives relevant to irons; The iron's power does not exceed 1 kW; The iron is equipped with a three-polar male connector + ground by Harting company (or equivalent) and that it has been connected in compliance with the drawing shown



IRON OPERATING INSTRUCTIONS

The inlet steam tube can be suitably fixed to the steam outlet rubber holder of the electric valve. Set the required temperature of iron by positioning the thermostat handwheel on the Middle of the sector "●●●". Wait for 4 – 5 minutes that the steam iron gets working temperature. Before ironing, to avoid a possible condensate which may have formed along steam tube when cold, as condensate can wet and mark fabrics, the operator has to proceed as follows: by moving the iron away from the ironing area and by pushing for some seconds the button for steam outlet. When steam tube is hot, the operator can start ironing.

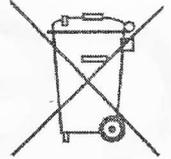
CAUTIONS:

When operator is not present, the steam iron must not be working.

Always put the steam iron on its ironing-iron stand in silicone or similar types of material, to avoid that the surfaces in touch with the iron can overheat.

9 SCRAPPING AND DISPOSAL

Scrapping the appliance is an operation which should be performed only by skilled workers especially trained for this activity and in compliance with the legislation in force in the country where the appliance has been installed. Before scrapping the appliance make sure it cannot be used anymore, for instance by cutting the feeding cable, and make those parts, which could be a danger for children using the appliance to play, harmless.



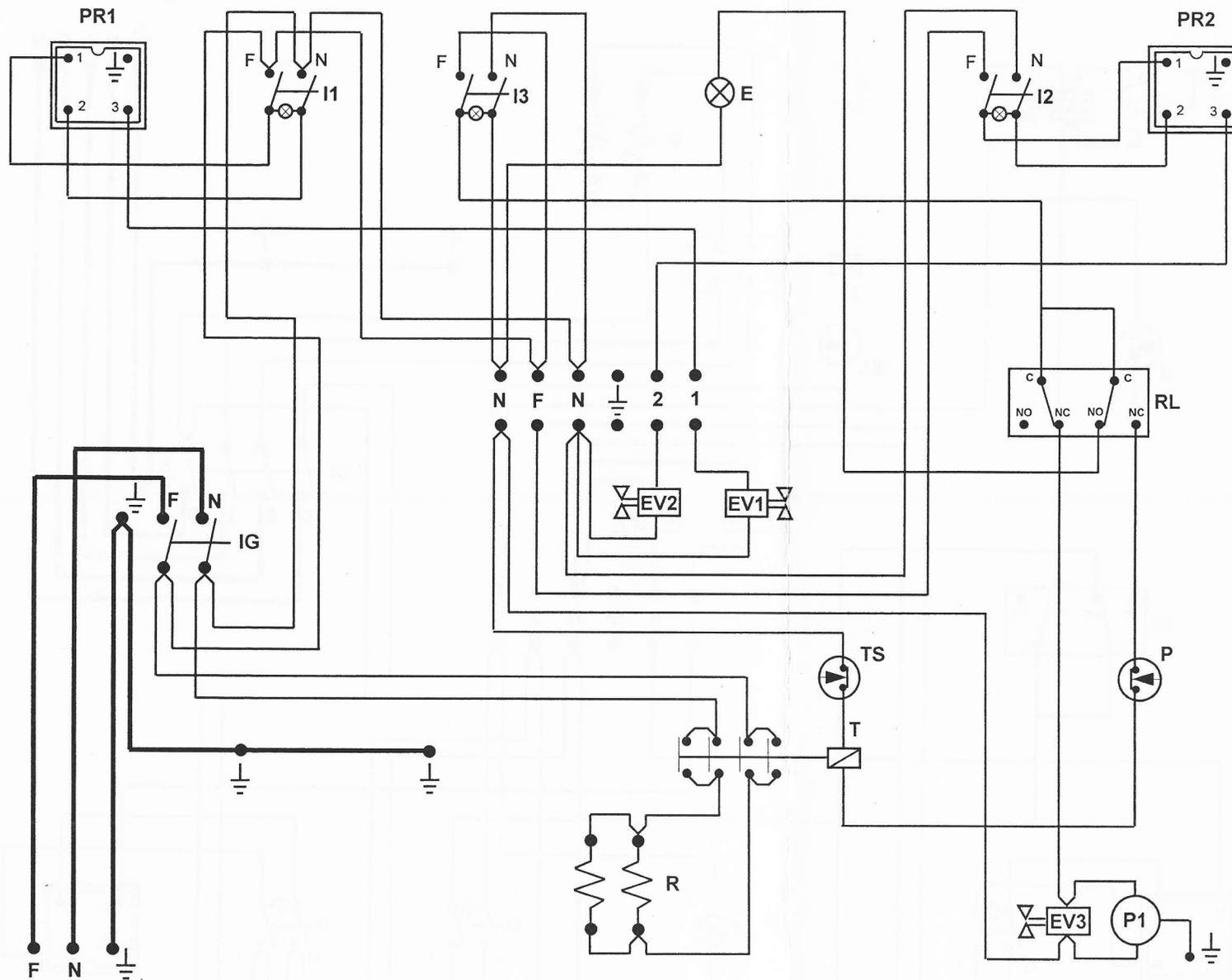
10 TROUBLE SHOOTING

WARNING! Before performing any interventions carry out the operations indicate in paragraph 7.1 "Stopping"

Trouble	Possible cause	Remedial measure
The general switch (7) is brought in ON position but the appliance does not switches on	The plug of the feeling cable is not plugged in correctly	Unplug the plug from the socket and plug it again in the right way.
	The fuse of the socket connected to the appliance has burnt out	Replace it with a suitable fuse. If the problem shows again, call a SKILLED OPERATOR
	The magnetothermal differential switch is protecting the socket to which the appliance is connected	Refit the switch. If the problem arises again, call a SKILLED OPERATOR
When the shining switch (4) is depressed, the generator does not warm up and from the gauge (1) you can read that there is no pressure	Breakdown in the thrust meter	Call a SKILLED OPERATOR
	Breakdown in the safety device against overheating	Call a SKILLED OPERATOR
	Breakdown in the level regulator	Call a SKILLED OPERATOR
	Breakdown in the boiler resistor	Call a SKILLED OPERATOR
	Breakdown and/or lock in the pump	Call a SKILLED OPERATOR
	The water level in the inner tank has decreased under the minimum level	Add some water in the inner tank
When the shining switch (4) is depressed, no water is introduced into the boiler	There are air bubbles in the suction hose of the pump	Carry out the operations explained in paragraph 7.1 and repeat the operations in paragraph 6
	The suction hose of the pump or the relevant filter are obstructed	Call a SKILLED OPERATOR
	Breakdown in the level regulator	Call a SKILLED OPERATOR
From within the generator some steam comes out	Breakdown in the water electric valve	Call a SKILLED OPERATOR
	Breakdown in the safety valve	Call a SKILLED OPERATOR
Your iron warms up but it does not give out any steam, even if the generator is warm and the gauge (1) shows that there is pressure	Breakdown in the thrust meter	Call a SKILLED OPERATOR
	Breakdown in one of the gaskets or in one of the tightening elements	Call a SKILLED OPERATOR
	There is a mistake in the connection of your iron to the generator	Call a SKILLED OPERATOR
Your iron does not warm up and it does not give out any steam, even if the generator is warm and the gauge (1) shows that there is pressure	There is an interruption in the electric wire of your iron to the generator	Call a SKILLED OPERATOR
	The electric valve does not function in the right way or is damaged	Call a SKILLED OPERATOR
Your iron does not warm up and it does not give out any steam, even if the generator is warm and the gauge (1) shows that there is pressure	There is a mistake in the connection of your iron to the generator	Call a SKILLED OPERATOR
	There is an interruption in the electric wire of your iron to the generator	Call a SKILLED OPERATOR
	There is a mistake in the connection of your iron to the generator	Call a SKILLED OPERATOR
Your iron does not warm up but gives out steam	There is an interruption in the electric wire of your iron to the generator	Call a SKILLED OPERATOR
	The thermal protection device of your iron is working	Call a SKILLED OPERATOR. See also the maintenance and instruction manual of your iron
The warning light (5) for lack of water in the boiler is ON	Lack of water in the inner tank	Add some water in the inner tank
	Breakdown in the level regulator	Call a SKILLED OPERATOR
	Breakdown in the water electric valve	Call a SKILLED OPERATOR
	Breakdown and/or lock in the pump	Call a SKILLED OPERATOR
When the generator is warm and under pressure, water from the boiler comes back to the inner tank	Breakdown in the non-return valve	Call a SKILLED OPERATOR
When the generator is warm and under pressure, as the steam outlet push-button on your iron, pressure immediately vanishes	The boiler is full of water because of a breakdown in the level regulator or in the water electric valve	Call a SKILLED OPERATOR

Mod. 223 MONOFASE

Mod. 231 MONOFASE



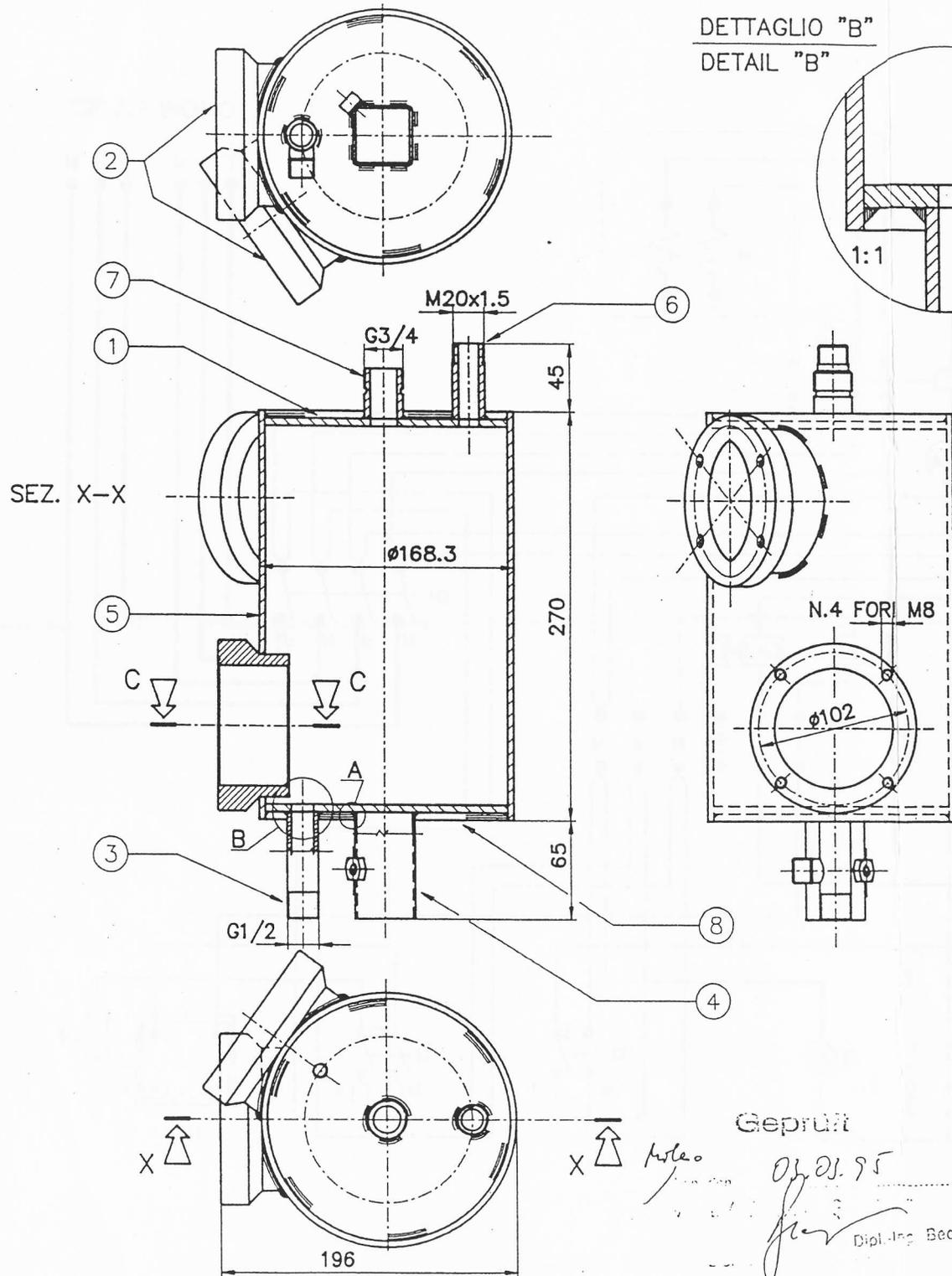
230 V ~ MONO

STIROVAP s.r.l.
Reggio Emilia Italy

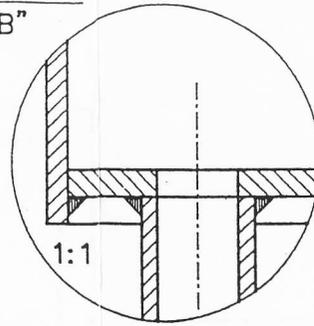
I1	Interruttore ferro 1 Iron switch 1 Interrupteur fer 1
I2	Interruttore ferro 2 Iron switch 2 Interrupteur fer 2
I3	Interruttore caldaia Boiler switch Interrupteur chaudière
IG	Interruttore generale Main switch Interrupteur general
R	Resistenze Heating elements Resistance
E	Spia emergenza Warning light Lampe émergence
PR1	Presse ferro 1 Iron socket 1 Prise fer 1
PR2	Presse ferro 2 Iron socket 2 Prise fer 2
EV1	Elettrovalvola vapore 1 Steam valve 1 Electrovanne vapeur 1
EV2	Elettrovalvola vapore 2 Steam valve 2 Electrovanne vapeur 2
EV3	Elettrovalvola acqua Water valve Electrovanne eau
T	Teleruttore Contactor Télerupteur
RL	Regolatore livello Level regulating Régulateur de niveau
P	Pressostato Pressure switch Mano contact pression
P1	Pompa Pump Pompe
TS	Termostato sicurezza Safety thermostat Thermostat de sécurité

Revisione 04.03
Dal N° 216807

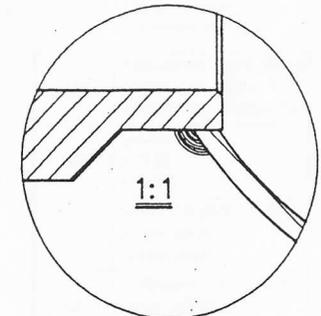
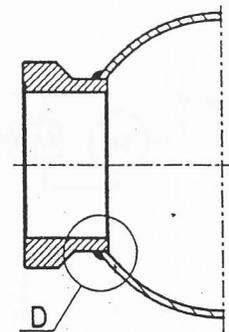
BOILER SERIAL NUMBERS FROM 020014



DETTAGLIO "B"
DETAIL "B"

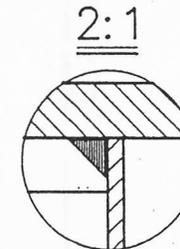


SEZ. C-C (parziale)



DETTAGLIO "D"
DETAIL "D"

DETTAGLIO "A"
DETAIL "A"



NOTA * ANMERKUNG * NOTA ** ANMERKUNG **

Fe360 B UNI 7070 S137-2 DIN 17100	Fe360 B UNI 7070 S137-2 DIN 17100
Fe360 D UNI 7092 S137-3 DIN 17100	Fe360 D UNI 7092 S137-3 DIN 17100
Fe360 1KW UNI 5069 H1 DIN 17155	Fe360 1KW UNI 5069 H1 DIN 17155
Fe 410 2KW Ast 41 DIN 17135	

*** SALDATURA MIG-MAG FILCORD C SIEV
*** SCHWEISSUNG MIG-MAG FILCORD C SIEV

POS.	DENOMINAZIONE BEZEICHNUNG	N. PEZZI	MATERIALE WERKSTOFFE	NOTE ANMERKUNG
8	FLANGIA INFERIORE UNTER ER FLANSCH	1	* vedi nota * siehe anmerkung	Press. di esercizio 4.5 bar Betriebsüberdruck 4.5 bar
7	MANICOTTO G3/4 MUFFE G3/4	1	95 Mn Pb 36 AVP 95 Mn Pb 36 DIN 1651	Press. di prova idr. 5.85 bar Prüfüberdruck 5.85 bar
6	RACCORDO ALIMENTAZIONE M20x1.5 ANSCHLUB SPEISUNG M20x1.5	1	TUBO Fe330 UNI 8863-85 Ust 34-2 DIN 2393	Press. di scoppio 27 bar Berstüberdruck 27 bar
5	CORPO PER CALDAIA KESSEL KÖRPER	1	** vedi nota ** siehe anmerkung	Capacità livello min. 2.8 lt. Minimalwasserinhalt (Nw) 2.8 lt.
4	SUPPORTO CALDAIA STÜTZE FÜR KESSEL 40x40x1.5x65	1	Fe360 D UNI 7092 S137-3 DIN 17100	Capacità totale 5 lt. Gesamthalt 5 lt.
3	RACCORDO DI SCARICO ABLAB VERBINDUNG	1	TUBO Fe330 UNI 8863-85 Ust 34-2 DIN 2393	Potenza installata 5 KW Elektrische Heizwiderstände 5 KW
2	SUPPORTO PER RESISTENZE E REGOLATORE DI UV. STÜTZE FÜR HEIZWIDERSTAND UND REGLER	2	Fe510 D UNI 5869 St 52-3 DIN 17100	
1	FLANGIA SUPERIORE OBERE ER FLANSCH	1	* vedi nota * siehe anmerkung	Saldature: *** vedere nota Schweißungen: *** siehe anmerkung

POS.	DENOMINAZIONE BEZEICHNUNG	N. PEZZI	MATERIALE WERKSTOFFE	NOTE ANMERKUNG
MATERIALE	DENOMINAZIONE ASSIEME CALDAIA SALDATA EXPORT SERIE 200 CE			N. PEZZI
STATO	GRUPPO GENERATORE EXPORT SERIE 200 CE			ASSIEME
TRATT. TERMICI	SCALA			DISEGNO N.
	DISEGN. PROGET.			CODICE
	DATA APR/94			2.01.200

Geprüft

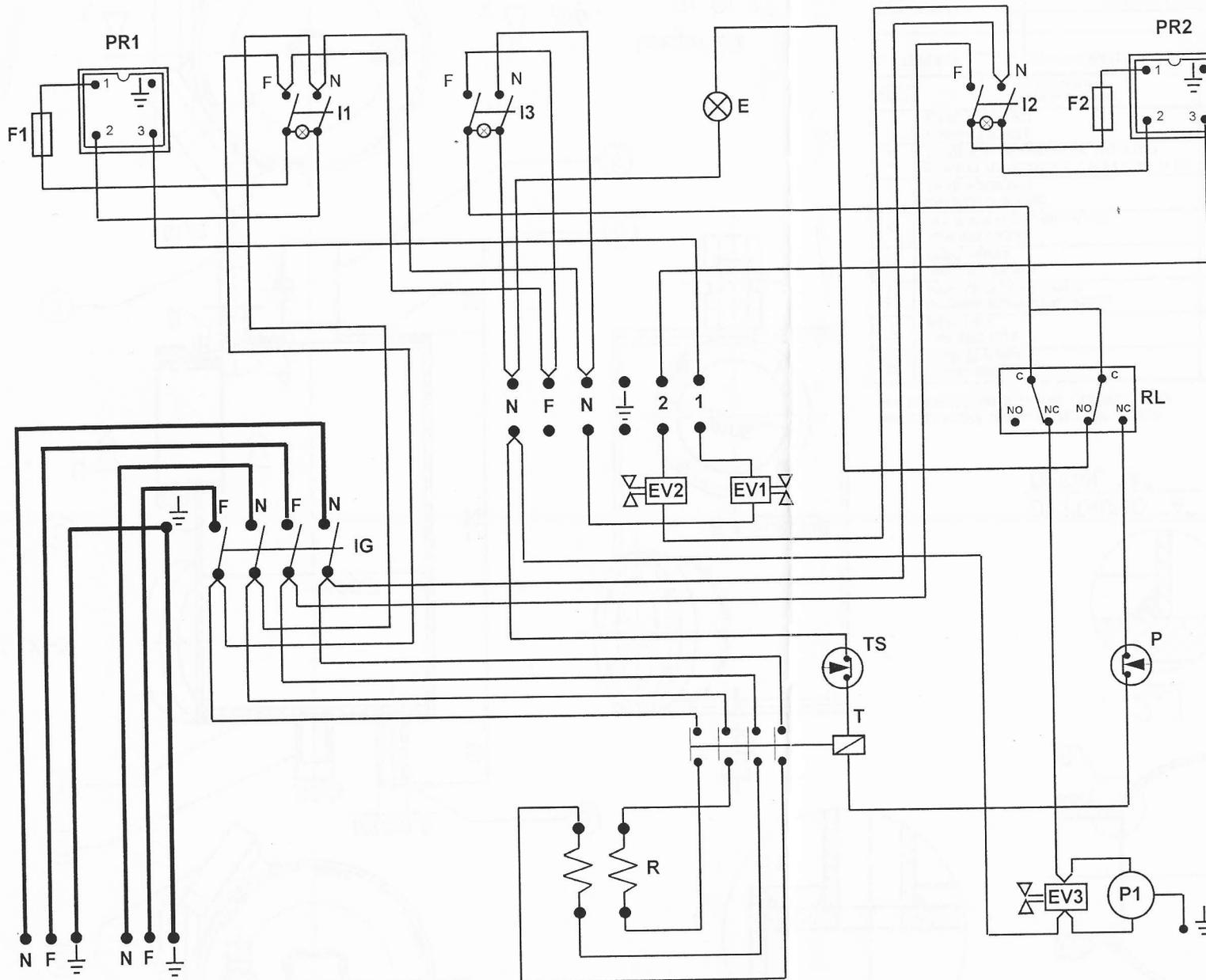
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Dipl.-Ing. Becker



STIROVAP s.r.l.
REGGIO EMILIA - ITALY

Mod. 223 Norris

Mod. 231 Norris

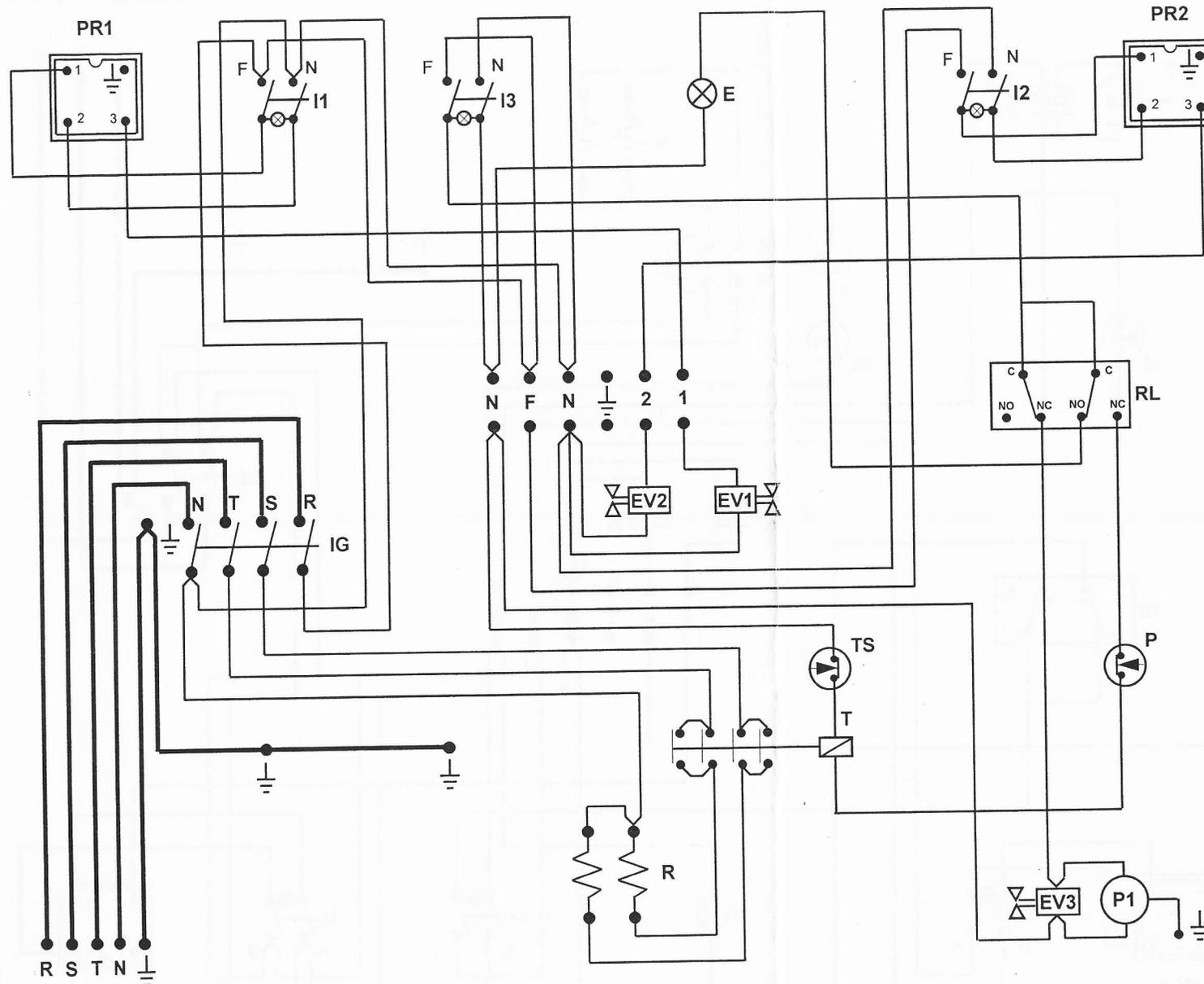


230 V ~ MONO

I1	Interruttore ferro 1 Iron switch 1 Interrupteur fer 1
I2	Interruttore ferro 2 Iron switch 2 Interrupteur fer 2
I3	Interruttore caldaia Boiler switch Interrupteur chaudière
IG	Interruttore generale Main switch Interrupteur general
R	Resistenze Heating elements Resistance
E	Spia emergenza Warning light Lampe émergence
PR 1-2	Presse ferro 1-2 Iron socket 1-2 Prise fer 1-2
F 1-2	Fusibili 1-2 Fuse 1-2 Fusible 1-2
EV 1	Elettrovalvola vapore 1 Steam valve 1 Electrovanne vapeur 1
EV 2	Elettrovalvola vapore 2 Steam valve 2 Electrovanne vapeur 2
EV 3	Elettrovalvola acqua Water valve Electrovanne eau
T	Teleruttore Contactor Télerupteur
RL	Regolatore livello Level regulatng Régulateur de niveau
P	Pressostato Pressure switch Mano contact pression
P1	Pompa Pump Pompe
TS	Termostato sicurezza Safety thermostat Thermostat de sécurité

Mod. 223 TRIFASE

Mod. 231 TRIFASE



400 V ~ 3 + N

STIROVAP s.r.l.
Reggio Emilia Italy

I1	Interruttore ferro 1 Iron switch 1 Interrupteur fer 1
I2	Interruttore ferro 2 Iron switch 2 Interrupteur fer 2
I3	Interruttore caldaia Boiler switch Interrupteur chaudière
IG	Interruttore generale Main switch Interrupteur general
R	Resistenze Heating elements Resistance
E	Spia emergenza Warning light Lampe émergence
PR1	Presa ferro 1 Iron socket 1 Prise fer 1
PR2	Presa ferro 2 Iron socket 2 Prise fer 2
EV1	Elettrovalvola vapore 1 Steam valve 1 Electrovanne vapeur 1
EV2	Elettrovalvola vapore 2 Steam valve 2 Electrovanne vapeur 2
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T	Teleruttore Contactor Télerupteur
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Revisione 04. 03
Dal N° 216973



DICHIARAZIONE DI CONFORMITA' ai sensi delle Direttive: 73/23/CEE, 89/336/CEE, 93/68/CEE, 97/23/CEE
CONFORMITY DECLARATION according to the Directives: 73/23/EC, 89/336/EC, 93/68/EC, 97/23/EC
DÉCLARATION DE CONFORMITÉ aux termes des Directives: 73/23/CEE, 89/336/CEE, 93/68/CEE, 97/23/CEE
KONFORMITÄTSEKTLÄRUNG entsprechend der Richtlinien: 73/23/CEE, 89/336/CEE, 93/68/CEE, 97/23/CEE

Reggio Emilia, 01. 06. 2002

Stirovap s.r.l.
Via P. Colletta 13 -
42124 Reggio Emilia - Italy

Dichiara sotto la propria responsabilità che i generatori di vapore serie:
Declares under its own responsibility that the steam generators series: **223 - 231 - 243**
Déclare sous sa seule responsabilité que les générateurs de vapeur série:

con matricola a partire dal N°:
with serial N° starting from: **09A1**
avec N° de série à partir de:

ai quali questa dichiarazione si riferisce, é conforme ai requisiti di cui alle Direttive :
73/23/CEE, 89/336/CEE, 93/68/CEE, 97/23/CEE
to which this declaration refers to, complies to the qualifications of the Directives:
73/23/CEE, 89/336/CEE, 93/68/CEE, 97/23/CEE
faisant l'objets de la présente déclaration, est conforme aux prescriptions des Directives :
73/23/CEE, 89/336/CEE, 93/68/CEE, 97/23/CEE

Per la verifica della conformità di cui alle Direttive sopra menzionate, sono state consultate le seguenti Norme Armonizzate:
For inspection of the conformity of Directives above mentioned, the following Harmonized Rules have been consulted:
La vérification de la conformité aux Directives, ci-dessus énoncées, a été faite en tenant compte des Normes Harmonisées suivantes:

EN 60335-1 (1994) EN 292-1 (1991) EN 55014 (1994) TRD 801 (1996) EN 61000-3-2 (1995) EN 60335-2-15 (1996)
EN 292-2 (1995) EN 55104 (1996) EN 1050 (1996) EN 61000-3-3 (1995)

Milesi Luigi

(Legale Rappresentante)
(Legal Representative)
(Représentant légal)

When the operator wants to increase temperature by positioning the thermostat handwheel on the sector "●●●" to iron special fabrics, take care, after ironing, to place the thermostat handwheel again on the middle of the sector "●●●"
 If the iron gets defective, the operator should not attempt to repair directly but he has to call the nearest authorized service centre where the fault can be repaired with original spares.
 Always refit the protective parts and components in their original position after having removed them for purpose of service.

6 FUNCTIONING

- 1 Make sure that the lever of the release valve (12) is closed and locked by the safety hook (11).
- 2 Connect male connectors of the iron to female connectors (2), (9) located on the front panel of the steam generator , paying attention to tighten safety hooks.
- 3 Through the door (6) and with the help of the decanter given in option, refill the inner tank of the steam generator with common or purified water. During this operation make sure that water does not overflow out of the tank (see also point 15 of paragraph 3 "safety warnings").
- 4 Make sure that the general switch (7) is in OFF position (marked by the symbol "0") and insert the feeling plug in the socket of the electric system.
5. Put the general switch (7) in ON position (marked by the symbol "I").
- 6 Put the boiler switch (4) in ON position (switch lit up). The electric pump which provides for the water refilling of the boiler will enter into function. The electric pump will automatically stop when water reaches the maximum level of water in the boiler.

IMPORTANT NOTE

- The starting of the electric pump can be hampered by a light oxidation caused by the appliance's inactivity. When it happens, put the general switch (7) many times from ON position (marked by the symbol "I") to the OFF position (marked by the symbol "0") and back, as to give more possibilities to the pump to start. To avoid any oxidation we recommend do not let inactive the pump for more 15 days. If the electric pump does not start by no means, ask a **SKILLED OPERATOR**.
- 7 Refer to the instructions accompanying the appliance and set the working required temperature on the iron connected to the connector (2) then put the iron switch (3) in ON position (switch lit up) and wait a few minutes to let the iron warm up.
 - 8 Lift the iron up and press the steam outlet push-button (always refer to the instructions accompanying the iron) for a few seconds, in order to previously warm the steam hose. During this operation keep the iron far from the ironing surface , in order to prevent any condensation onto the steam tube from dampening or staining the material.
 - 9 Repeat operations in points 7 and 8 for the iron connected to the connector (9) also. In this case the switch of the iron is (10).
 - 10 When the level in the inner tank has decreased to a point where only 10 cm. of water are left, refill the tank after having brought the general switch (7) in OFF position (marked by the symbol "0") and after having removed the plug from the socket.

7 STOPPING AND PUTTING AWAY

At the end of ironing follow these steps keeping also in mind to perform stopping and putting away operations recommended by the maintenance and instruction manual of the iron.

7.1 STOPPING

1. Put switches (3) (4) and (10) (switches not lit up) and the general switch (7) in OFF position (marked by the symbol "O") and disconnect the feeding plug from the electric system plug.
2. Wait for the steam generator and the iron to be completely cold.
3. During this phase pay attention that :
 Not to leave the appliance unattended if there are unguarded children , elderly or disabled persons; To put the appliance in a safe position, where there is no falling risk; Not to put the appliance near inflammable materials.

7.2 PUTTING AWAY

Put the appliance in a dry/clean place paying attention as not to damage electric cables and the steam inlet tube.

8 CLEANING AND MAINTENANCE

WARNING! Any intervention concerning :

Cleaning, routine maintenance, special maintenance, repairing should be carried out only after having performed the operations indicated in the above paragraph "stopping". Always keep in mind to carry out cleaning and maintenance operations recommended by the maintenance and instruction manual of your iron.

8.1 CLEANING

If you wish to clean your steam generator on the outside, use a damp cloth and, afterwards, run a dry cloth over.
 Do not use inflammable or aggressive substances to clean the appliance.

8.2 ROUTINE MAINTENANCE

The following routine maintenance can be performed by the user. Carefully follow these instructions:

Intervention	Maintenance intervals
Inspection of feeding cables, steam inlet tubes, connectors	Every time you use the appliance
Emptying the boiler from residual water	Every week, by carefully following the recommendations container in the following paragraph 8.2.1 "emptying the boiler from residual water "

8.2.1 EMPTYING THE BOILER FROM RESIDUAL WATER

We suggest to empty the boiler of the steam generator every week by following these steps:

WARNING!

1. Perform the operations indicated in paragraph " stopping "
 2. Lift the safety hook (11), thus releasing the lever of the release valve (12) located on side of generator .
 3. Work the lever as to open the release valve and empty the boiler from all residual water.
- Any other maintenance intervention should be carried by a **SKILLED OPERATOR**, as indicated in the following paragraph.

8.3 SPECIAL MAINTENANCE AND REPAIRING

WARNING! Special maintenance and repairing should be carried out by a **SKILLED OPERATOR**

The special maintenance programme is the following :

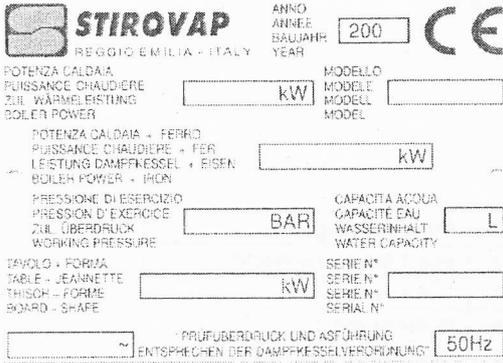
Intervention	Maintenance interval
Inspection of safety devices	Once a year
Inspection and cleaning of the suction filter of the pump	Once a year
Safety valve replacing	Every 3 years

To facilitate technical interventions by a **SKILLED OPERATOR**, we have added the electric diagram of the machine with single-phase electric feeding and three-phase electric feeding.

1.4.2 DEFINITIONS

SKILLED OPERATOR: a person, generally speaking coming from **STIROVAP** service shop or from a **STIROVAP** retailer, who has been expressly trained and authorised to carry out special maintenance operations and repairs on the appliance.

Operations on electric parts must be performed by a **SKILLED OPERATOR** being also a **QUALIFIED ELECTRICIAN**, that is a person professionally trained and made competent to inspect, to install and to repair electric appliances, "workmanlike" and in compliance with current regulations in force in the country where the appliance is installed.



1.5 IDENTIFICATION PLATE

The identification plate, with the main technical specifications, is located on the side of the appliance and may be easily seen. (see also the following paragraph " Identification of components)-

2.2 GENERAL DESCRIPTION

The appliances Mod. 223, Mod. 231 are steam generators to be automatically refilled with water, they have been designed to feed two irons¹. Given their manufacturing features they are particularly suitable for tailor's workshops, laundries, shops etc...

¹To be more simple, in this Manual, when we talk about the iron we mean a steam brush or gun as well.

2.3 HOW THE STEAM GENERATOR WORKS

The water container in the boiler is heated ,under pressure, by two electric plated resistors, until it reaches a temperature allowing saturated dry steam production. Steam gets to the user (iron, steam brush or gun) if a push-button on the user, which controls the opening of an electric valve, is depressed. Moreover, an automatic electric pump refills the boiler with water taken from the steam generator's inner tank or from water network directly.

2.4 TECHNICAL INFORMATION AND SPECIFICATIONS

Technical information and specifications are indicative. **STIROVAP** reserves the right to introduce all those changes deemed to be advisable.

MODEL		223	231	243
Voltage	V	230 / 400 3N ~	230 / 400 3N ~	400 3N ~
Frequency	Hz	50	50	50
Boiler power	kW	3,2 / 4,4 / 6,0	6,0	12 / 20
Power of boiler+ steam iron	kW	5,2 / 6,4 / 8,0	8,0	12 / 20
Electric pump power	kW	0,37	0,50	0,50
Water capacity	Lt.	5	7	12
Working pressure	Bar	3	5,5	4
Weight	kg	37	45	51

2.5 SAFETY DEVICES

The appliance is equipped with the following safety devices:

1. safety valve: it is made of a safety pressure valve, positioned on the boiler, which has to be suitably calibrated and which releases the exceeding over pressure if any trouble with the pressure control system occurs.
2. safety temperature control device (manual pace) : it is a device , sensitive to temperature, which stops the appliance in case of a breakdown in the pressure control system and in the safety valve occurs, thus avoiding dangerous conditions.
3. locking hook of the release valve lever: it is a device which prevent the accidental opening of the release valve, by working on the control lever of the release valve.

WARNING! If any intervention in the above described safety devices (see points 1 and 2) , **do not use any means** the appliance without having previously asked a **SKILLED OPERATOR** to inspect the appliance

2.6 INTENDED PURPOSE

The appliance is to be used to iron with steam only together with one or two irons not exceeding 1 kW in power.

All **STIROVAP** irons can be used together with this appliance.

If you are not working with a **STIROVAP** iron, it is necessary to ask a **SKILLED OPERATOR** to check if the conditions explained in paragraph "Getting the iron ready" are respected.

Your iron has been designed to work using ordinary or purified water.

We advise not to use water containing dressings, perfumes, detergents, etc. or distilled water.

The appliance is not suitable to be used in places showing special conditions as, for instance, an explosive or corrosive atmosphere, nor in moving vehicles.

ANY OTHER USE IS TO BE CONSIDERED IMPROPER.

THE MANUFACTURER SHALL NOT BE HELD LIABLE FOR DAMAGES CAUSED BY WRONGFUL OR IMPROPER USE OF THE APPLIANCE.

3 SAFETY WARNINGS

1. The use of this appliance requires attention and care. Do not give it to others without making sure, under your direct responsibility, that this chance user has carefully read this manual and therefore knows the appliance.
2. Pay a special attention to the content explained in paragraph 5.1 "Inspection and connection to the electric line ".
3. Pay a special attention to the content explained in the paragraph 5.3 "getting the iron ready "
4. Before putting the appliance into operation, be careful a to put it a dry place, level and safe, as to prevent falling or tilting.
5. Follow safety warnings contained in the maintenance and instruction Manual given with your iron. In particular, always lay your iron on a special silicone iron-rest or suchlike, to prevent surfaces coming in contact with the iron to overheat.
6. Do not use the appliance when: The appliance, electric cables or other important components, as the steam feeding tube, are damaged; The appliance has fallen down; The appliance is leaking; If so, ask a **SKILLED OPERATOR** to inspect the appliance.
7. Keep electric cables and plugs perfectly dry. Do not touch them with wet hands.
8. If electric cables are damaged, ask a **SKILLED OPERATOR** to replace them.
9. Do not put any reducer or adapter between the electric plug and the socket.
10. Do not remove the plug from the socket by pulling the feeding cable.