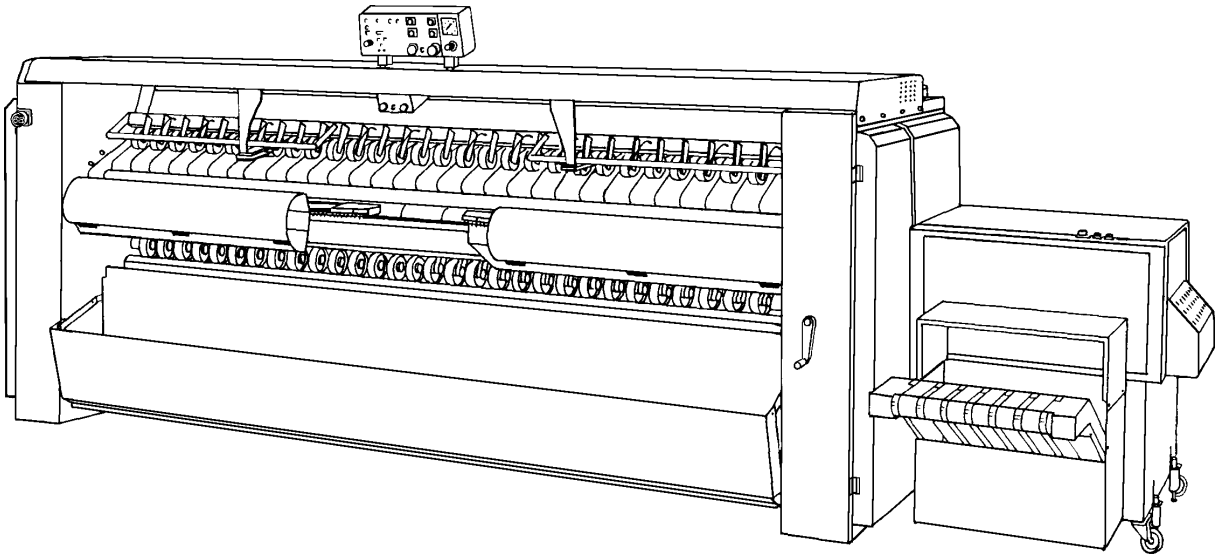
INSTRUCTION HANDBOOK

IC3 4819 FFS
IC3 4825 FFS
IC3 4831 FFS



Electrolux
Wascator

08100288gb

CHAPTERS

GENERALITIES 1
SAFETY RULES 2
HANDLING 3
PACKING 4
CHARACTERISTICS 5
INSTALLATION 6
PUTTING INTO SERVICE 7
UTILIZATION 8
SAFETY 9
MACHINE MALFUNCTIONS 10
MAINTENANCE 11
PNEUMATIC DIAGRAM 12
ELECTRIC DIAGRAMS 13
PROGRAMMABLE AUTOMATE 14
STACKER 15
APPENDICES 16

The machines described in this handbook have an ironing capacity of 190, 250 or 310 cm wide according to their type.

They carry out five different operations with a single operator ; the space required is very similar to the standard ironer's.

The ironing speed can be adjusted according to the degree of moisture of the linen.

The temperature of the ironing cylinder can also be adjusted by a thermostat (except for steam ; in this case, the temperature depends on the steam pressure).

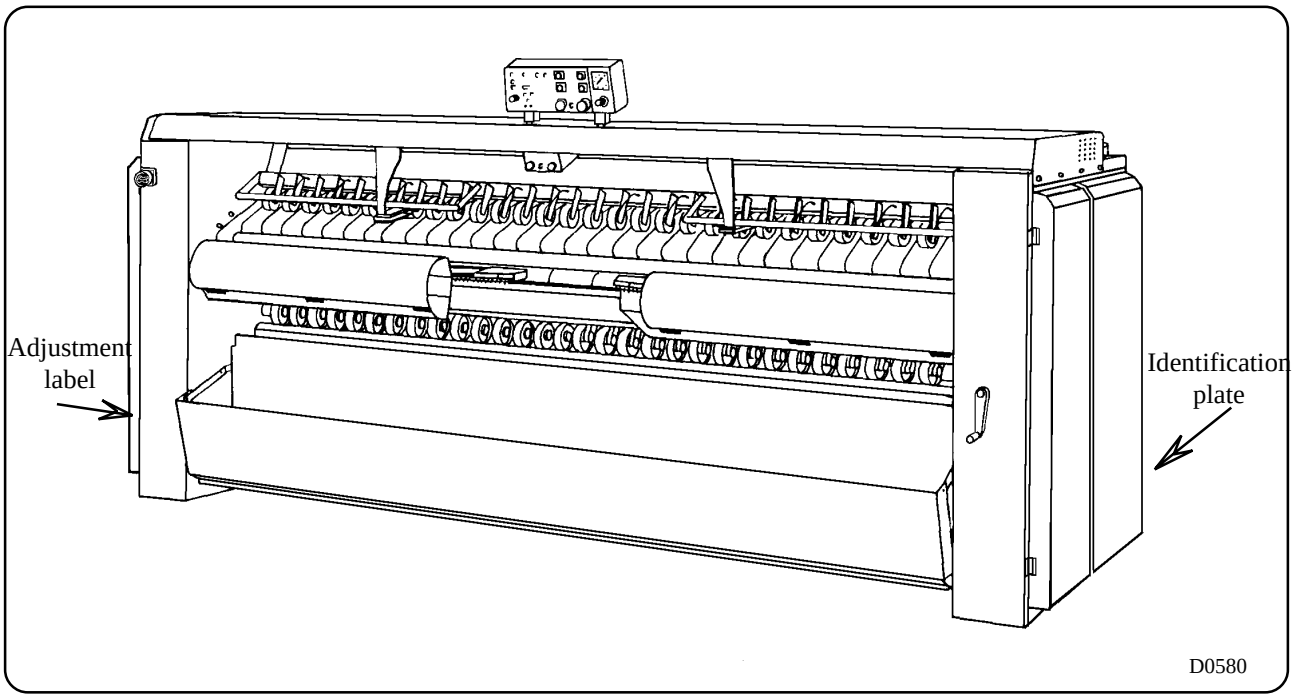
The ironing parameters that you have selected are permanently checked by a microprocessor.

These parameters are displayed in real time on an electronic control panel in front of the operator.

The feeding of the linen is completely automatized and includes smoothing ; a single operator is required ; the folding of the items is calculated for each item fed.

Several piles of linen can be stored in the stacker with centering and num bering of the folded items.

The machine can be used like a standard ironer with or without the automatic feeding.



WARNING

Before any use, it is advised to read the instruction handbook.

The identification plate is situated in the rear of the control board.

For safety reasons, never remove the protective casing while the machine is functioning.

Installation and putting into service must be carried out by trained staff.

The machine should not be used by children.

Any repairing or maintenance operation should be carried out by a specialist.

Disconnect all sources of energy and let the ironing cylinder cool down before any intervention on the machine.

The high temperature of the ironing cylinder may cause serious burns ; avoid touching the hot surfaces.

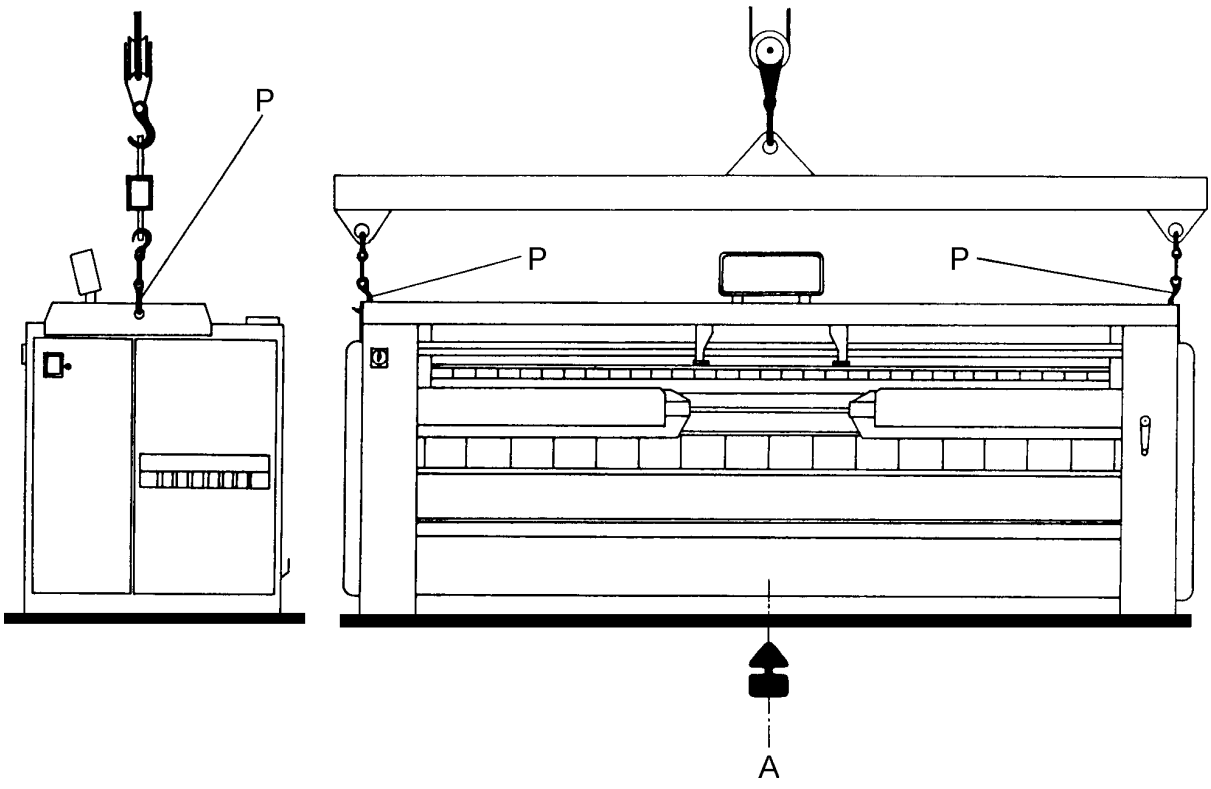
Never iron if the finger protection does not function.

In order to avoid any danger of fire or explosion, never use flammable products to clean the machine.

N.B. This machine has no part made of asbestos.

The machine should be installed in conformity with the regulations and standards enforced and situated in a correctly ventilated room.

If you detect gas smells, turn off the gas, open the windows, do not activate any switch and warn the maintenance service.



D0055

RECALL

All these operations must be carried out by handling specialists.

1. HOOK LIFTING

Any lifting in this way should be carried out using a suitable crossbar.

Handle with a crossbar using to the two hooking points (P).

2. LIFTING WITH A FORK-LIFT TRUCK.

This should be carried out at the centre of the machine (A) **(for machines of small dimensions only).**

3. GROUND MOVING.

The machine frame is made up of two parallel spars, making ground moving possible by means of rollers, grinding tracks or a trolley.

Stacker :

Small wheels are provided for ground moving.

t0024gb

WEIGHT OF MACHINE in kg			
Model	**Ironer**		
	Gas	Electric	Steam
19	1385	1385	-
25	1635	1635	-
31	1785	1785	2075
Stacker	225		

This page is left blank on purpose.

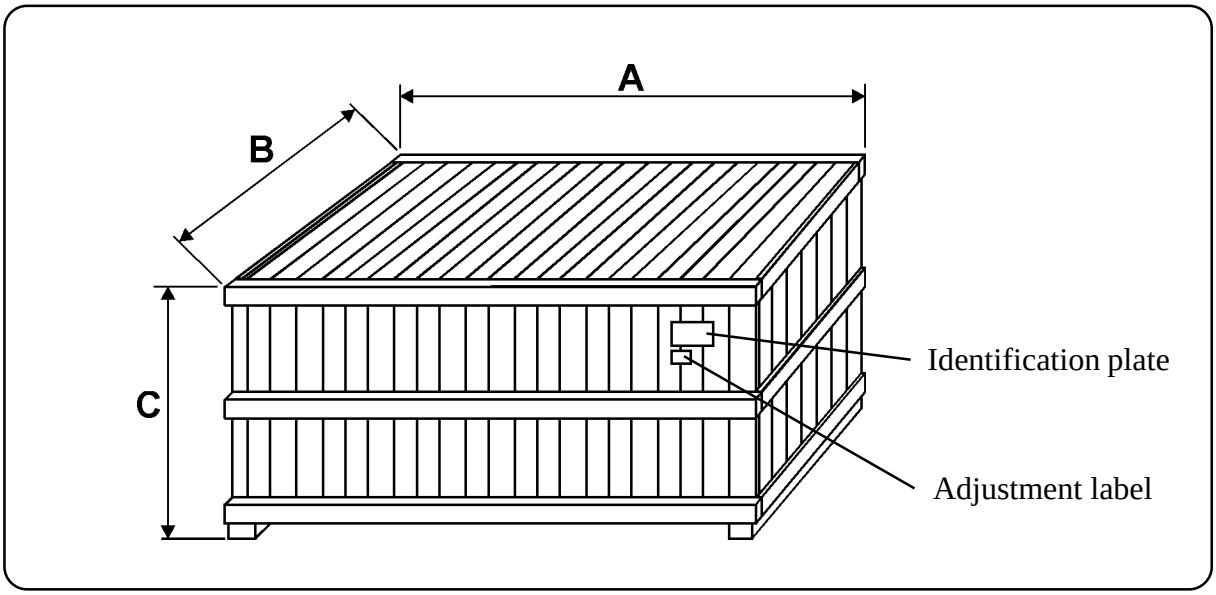
OUTER DIMENSIONS FOR SEAFREIGHT

t0026gb

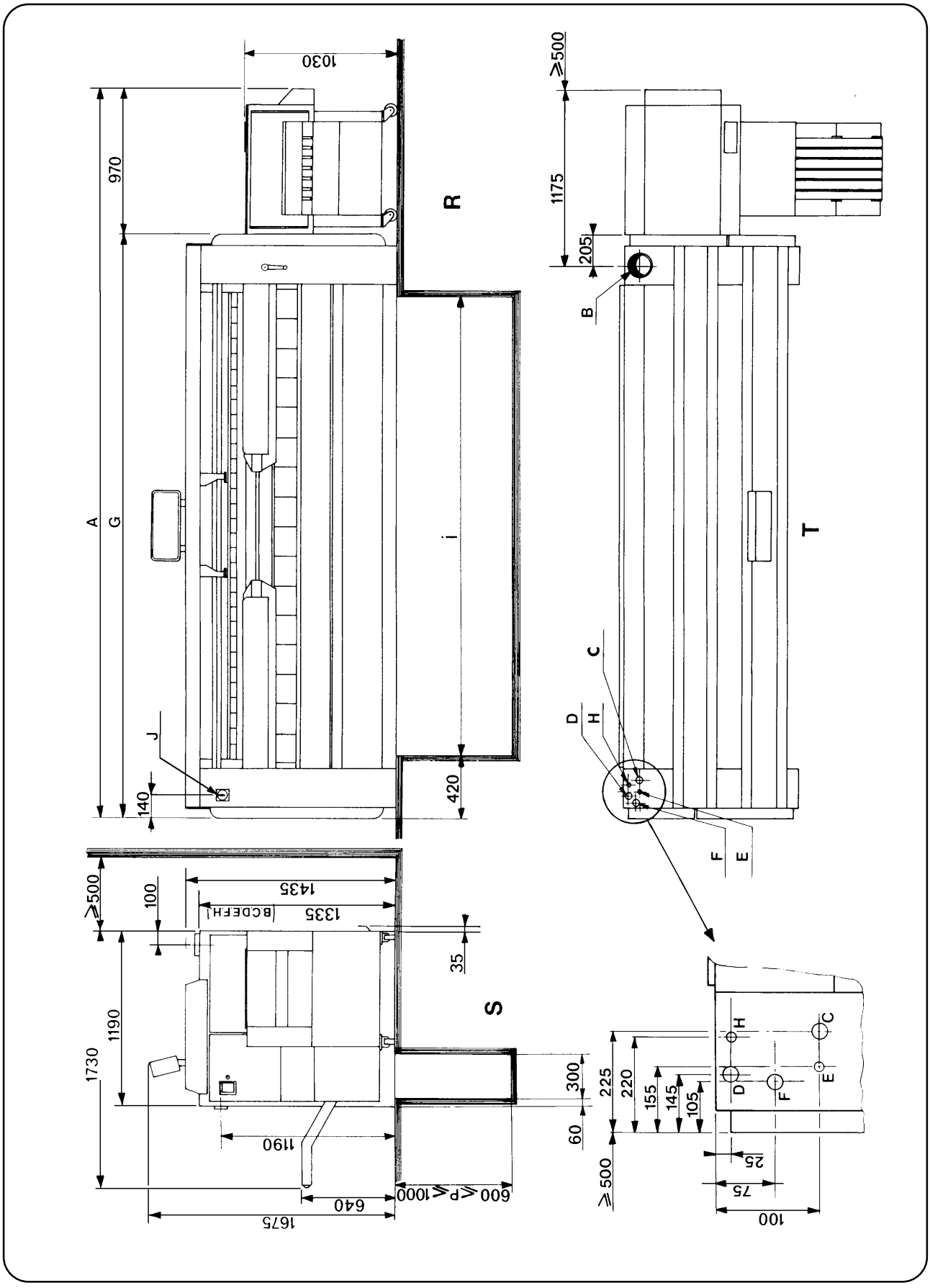
Model	Length A in mm	Width B in mm	Height C in mm
19	3010	1410	1900
25	3610	1410	1900
31	4110	1410	1900
Stacker	1850	1090	1320

t0025gb

Model	Weight of packing box in kg		Weight of crate in kg	
	Gas / Elect	Steam	Gas / Elect	Steam
19				
25				
31			2165	
Stacker			410	



07100011


R
T
S
1030
970
A
G
i
J
140
420
≥500
1175
205
B
C
D
H
F
E
≥500
100
1435
1335
BCDEFH
35
1190
1730
1190
640
1675
600 ≤P≤1000
300
225
220
155
145
105
60
≥500
25
75
100

We reserve the right to modify the characteristics of these machines.

BENCHMARKS

A OVERALL LENGTH WITH STACKER

B DRAIN OF VAPOUR OR BURNT GAS DIRECT TO OUTSIDE

C STEAM INLET : PRESSURE 9 BAR (CUSTOMER)

D GAS SUPPLY

E RETURN OF CONDENSATE

F ELECTRIC POWER SUPPLY

G OVERALL LENGTH (WITHOUT STACKER)

H COMPRESSED AIR INLET : PRESSURE 8 BAR (CUSTOMER)

I LENGTH OF FEEDING PIT

J MAIN SWITCH AND ELECTRIC CONNECTION (EARTH CONNECTION COMPULSORY)

P DEPTH OF FEEDING PIT

R FRONT VIEW

S SIDE VIEW

T TOP VIEW

t0027gb

dimensions in mm			19			25			31		
			Gas	**Elect**	**Steam**	**Gas**	**Elect**	**Steam**	**Gas**	**Elect**	**Steam**
A	mm		3810	3810	3810	4410	4410	4410	4910	4910	4910
B	inner diameter		160	160	160	160	160	160	160	160	160
C	diameter		-	-	20/27	-	-	20/27	-	-	20/27
D	diameter		20/27	-	-	20/27	-	-	20/27	-	-
E	diameter		-	-	12/17	-	-	12/17	-	-	12/17
F	Amperes	230 V	16	125	16	16	160	16	16	180	16
		400 V	12	80	12	12	100	12	12	125	12
F	cable section in mm²	230 V	4x2.5	4x50	4x2.5	4x2.5	4x70	4x2.5	4x2.5	4x70	4x2.5
		400 V	4x2.5	4x25	4x2.5	4x2.5	4x35	4x2.5	4x2.5	4x50	4x2.5
G	mm		2840	2840	2840	3440	3440	3440	3940	3940	3940
H	diameter		15/21	15/21	15/21	15/21	15/21	15/21	15/21	15/21	15/21
I	mm		2000	2000	2000	2600	2600	2600	3100	3100	3100

t0028gb

ELECTRIC HEATING			
Model	**19**	**25**	**31**
Maximum power installed in kW	42	53.7	65.4
Maximum consumption for 1 hour use in kWh	42	53.7	65.4

t0029gb

STEAM HEATING			
Model	**19**	**25**	**31**
Maximum electric power installed in kW	3	3	3
Maximum electric consumption for 1 hour use in kWh	3	3	3
Consumption in kg/h steam 9 bar	50	65	80
Inner volume steam cylinder in dm^3	12.7	16.4	19.5

t0030gb

GAS HEATING			
Model	**19**	**25**	**31**
Maximum electric power installed in kW	3	3	3
Maximum electric consumption for 1 hour use in kWh	3	3	3
Nominal calorific capacity (NCV) in kW	39	52	65

Airborne noise given out by the machine : sound level at work place : 62 dB (A).

COMPRESSED AIR CONSUMPTION AND OUTPUT

Screw-type compressor : 20 m³/h output on a 200 litres container
Piston compressor : 25 m³/h output on a 500 litres container
Instantaneous output : 25 litres/second
Maximum consumption :

1,90 m = 18 Nm³/h
2,50 m = 19 Nm³/h
3,10 m = 20 Nm³/h

The air should be perfectly dry and oil-free.

t0171gb

SIZE OF A FOLDED SHEET (in mm)			
MODEL	**19**	**25**	**31**
Sheet	2nd fold	3 rd fold	3 rd fold
3.10 m x 3.10 m	-	-	80
2.40 m x 3.10 m	-	80	64
1.80 m x 3.10 m	40	80	48

t0172gb

CHARACTERISTICS OF THE FLAT LINEN FOLDING					
NATURE	**WEIGHT**	**DIMENSION**	**19**	**25**	**31**
SHEET	130-140 gr / m²	standard	yes	yes	yes
SHEET	160 gr / m²	2.40 m x 3.10 m	no	yes	yes
SHEET	180 gr / m²	2.40 m x 3.10 m	no	no	yes
SHEET	200 gr / m²	1.80 m x 3.10 m	yes	no	yes
DRAW-SHEET	200 gr / m²	-	yes	yes	yes
FEEDING LENGTH		mimimum	1.10 m	1.10 m	1.35 m
		maximum	1.90 m	2.50 m	3.10 m
FOLDING LENGTH (sheet dimension)		minimum	0.90 m	0.90 m	0.90 m
		maximum	3.50 m	3.50 m	3.50 m

You must have found, together with this handbook, a crank for the manual drive of the cylinder, a set of keys to open the side casing and a shunt socket to make the machine work without stacker.

Depending on its destination, the ironer is delivered bare or placed on a transport pallet and packed with a transparent plastic film.

In certain cases, it may be packed for ocean shipment.

For any handling operation, see the handling chapter, page 2 chapter 3 of this handbook.

Take off the protection paper, and remove the transport flanges with an appropriately designed key in order to lift the machine from the transport pallet.

Check for damage caused during transport.

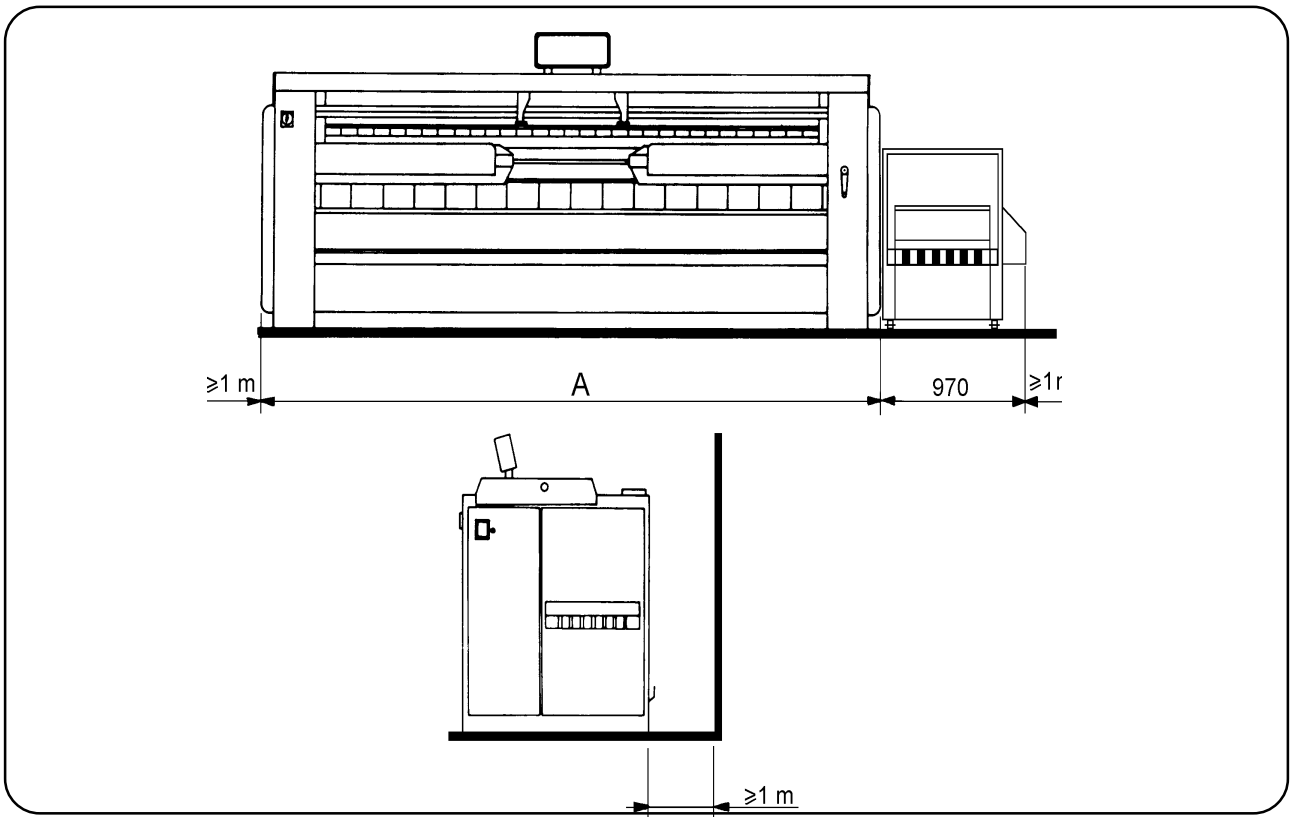
Leave at least 1 m between the machine and the wall or another machine on the left side in order to be able to carry out the necessary interventions in the caisson.

In order to avoid a displacement of the machine during an intervention on the heating box, it is advised, if possible, to provide sufficient space on the left side of the machine, minimum length A.

Leave at least 1 m between the machine and the wall against which it is placed.

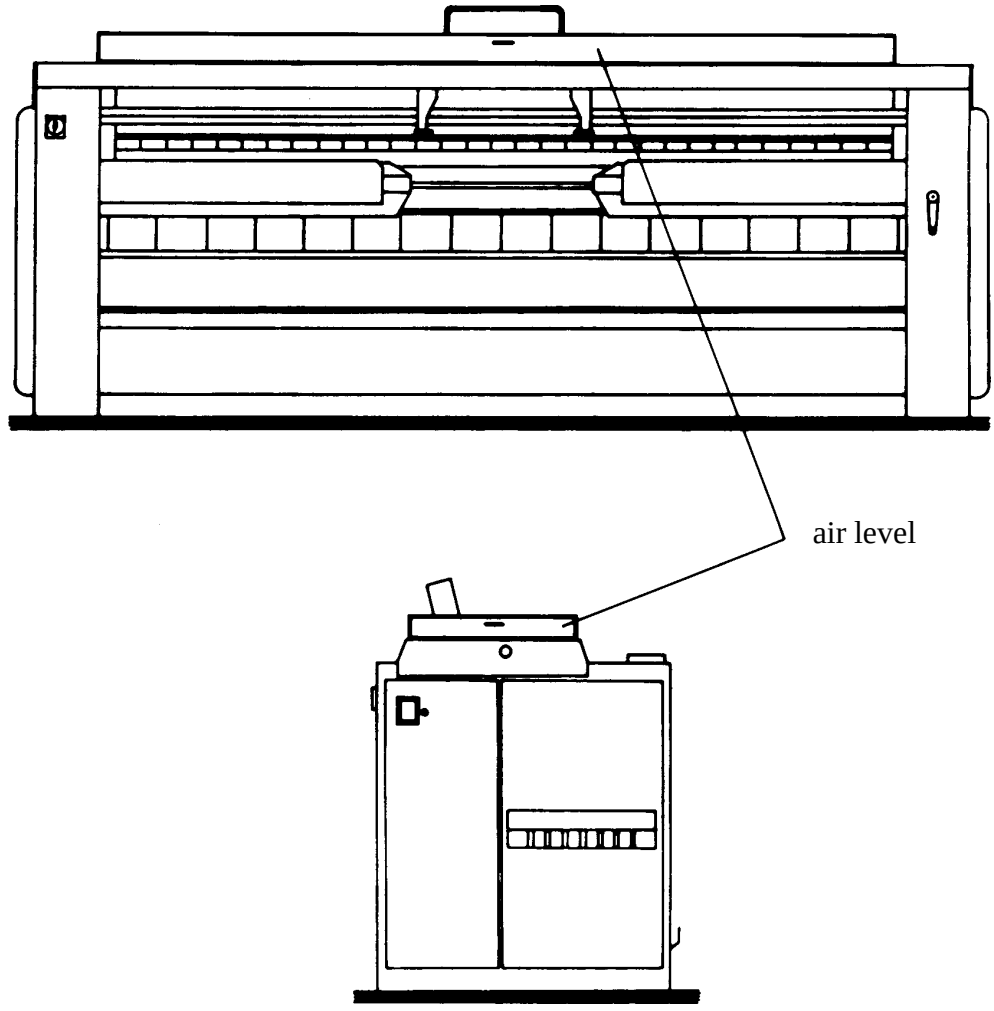
Leave at least 1 m between the machine and a wall or another machine on the right side in order to be able to carry out the necessary interventions in the caisson.

D0057



The ironer should be put on a perfectly plain and level ground. Check this using to an air level placed on the upper hood of the machine (see photo P0058).

D0058



The frictional electricity may hinder the good working of the machine.

Earthing is compulsory.

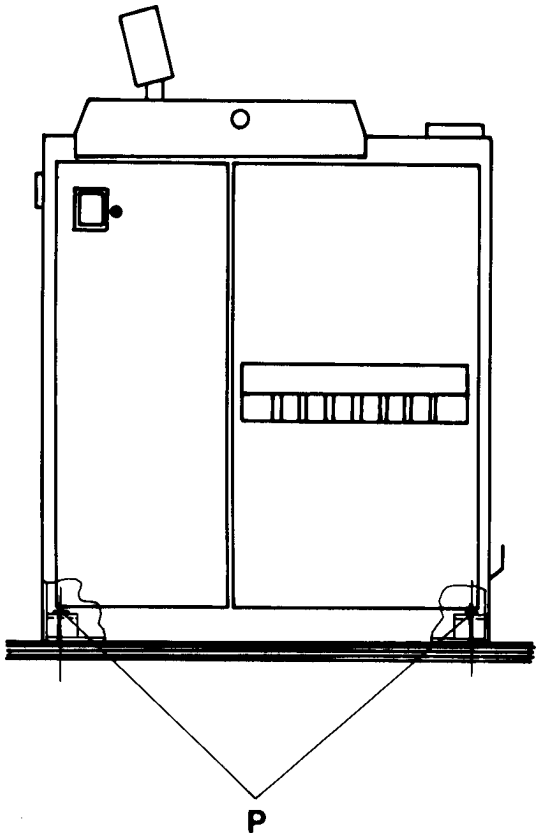
It is specially advised not to install the machine on a synthetic floor covering.

The warranty might be cancelled if these instructions are not complied with.

Dismantle the side casing in order to be able to reach the adjustment bolsters (P).

Turn the screws with a 22 mm wrench to level the machine. Lock the screws once the adjustment has been achieved.

The technician should remove the protection paper from the cylinder just before putting the machine into service.



D0064

Gas connection

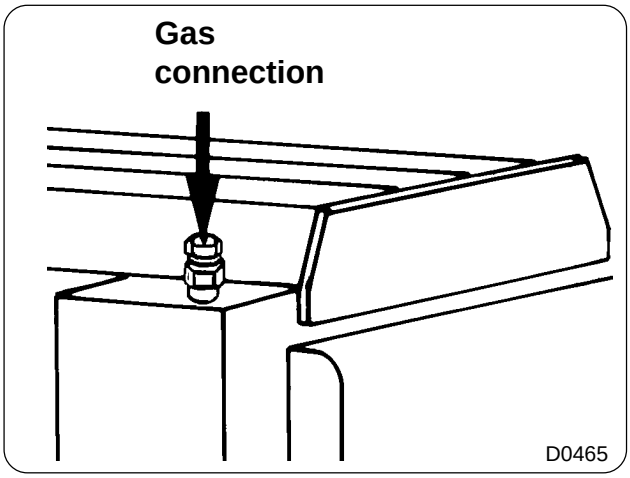
The installation, connection and gas arrival adjustments for the machine must be done by qualified personnel only.

Gas supply DN 20 (¾" BSP)

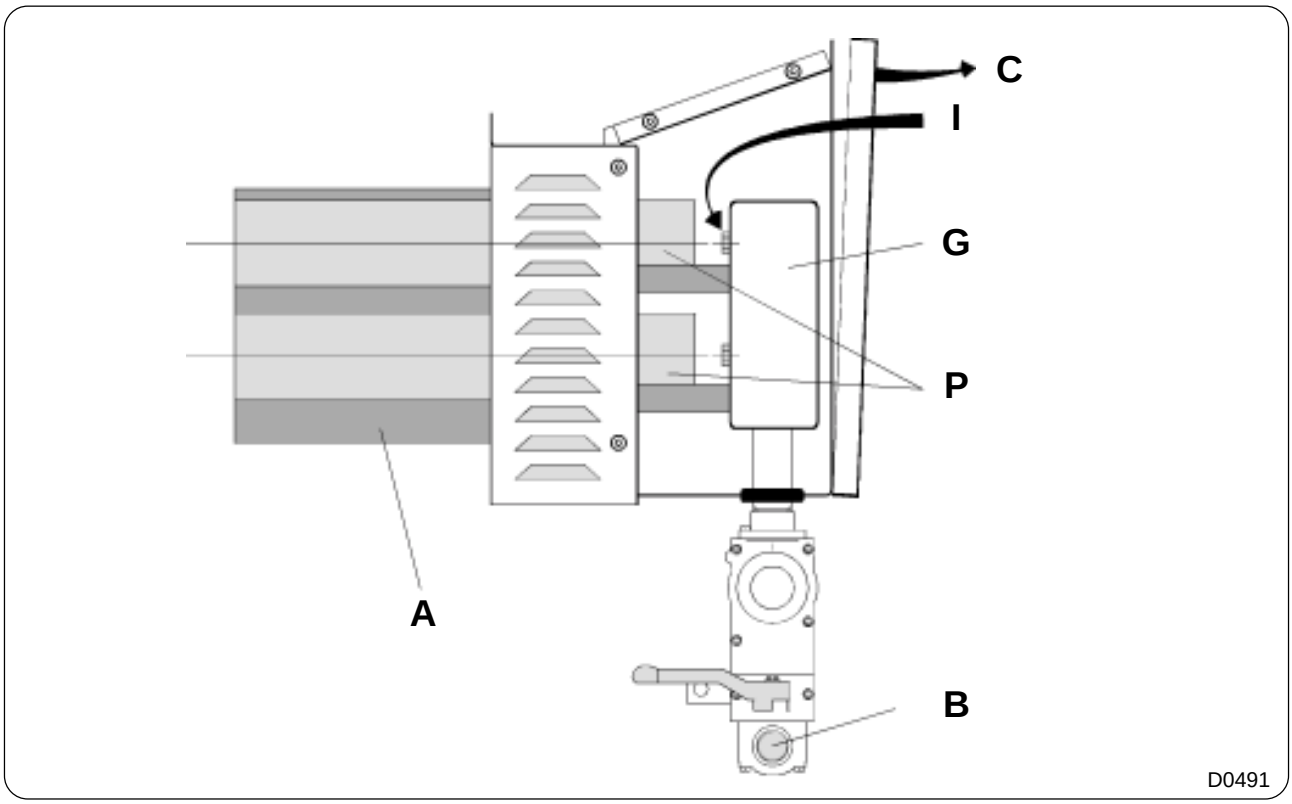
The customer must install a filter and a manual stop valve on the supply side of the machine if natural gas is used.

For butane or propane, the customer must install a filter, a manual closing valve and a pressure reducer.

Connect the installation above the machine.



A : Gas burner
B : Gas inlet
C : Air filter
I : Injectors
G : Service tank
P : Venturis



The machine is adjusted at the plant to be suitable for the kind of gas specified on the order. If you have to supply your machine with gas in a family different from the gas for which your machine was adjusted, proceed as follows:

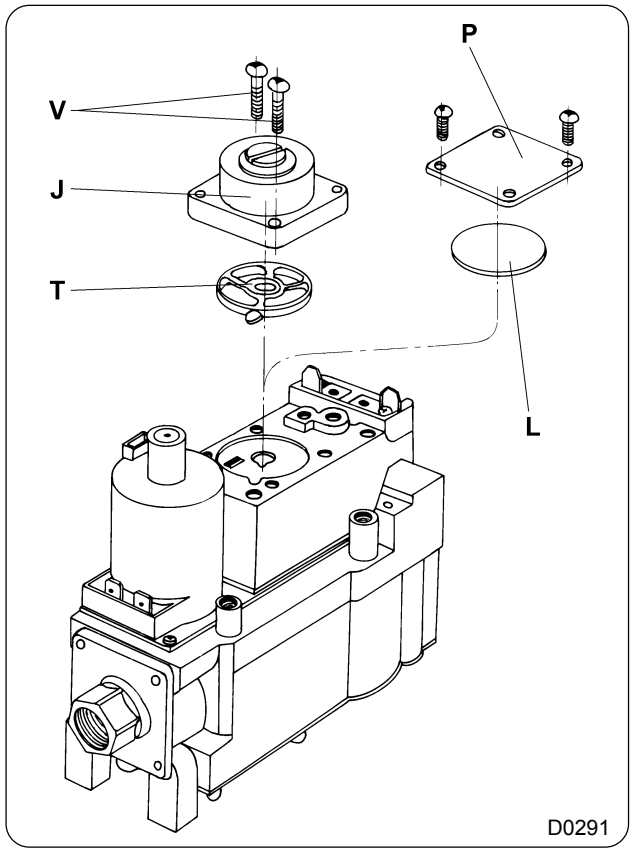
Check that the diameter of the injectors is adequate for the kind of gas of your installation (see table of injectors). The machine is delivered with extra injectors in a plastic envelope.

Testing pressures

According to the EN 437 standard, the values of the testing pressures mentioned in our various documents are values for static pressures taken at the gas inlet connection of the machine; the heating of the machine being on.

Changing to a gas in the same family (type H or L)

- Change the 3 injectors with joints and if necessary, adjust the air flow (see tables of correspondences).
- Adjust the gas outlet pressure (see correspondence in the tables).



Changing to a gas in a different family (from type H or L to butane or propane)

- Change the 3 injectors with joints (see correspondence in the tables).
- Unscrew the fixing screws (V) and remove the adjusting head (J) as well as its cork (T), keep these parts in case a change would be necessary.
- Replace it by the cork (L) and the plate (P).
- Screw the two screws and block.
- Adjust the air flow (see correspondence in the tables).

Changing to a gas in a different family (from butane or propane to type H or L)

- Change the 3 injectors with joints (see correspondence on the tables).
- Unscrew the fixing screws (V) and remove the plate (P) as well as the cork (L), keep these parts in case a change would be necessary.
- Set the cork (T) and the adjustment head (J).
- Screw the two screws (V) and block.
- Adjust the air flow (see correspondence in the tables).

IMPORTANT

Adjustments should be made by qualified personnel only.

Adjustment and checking of the outlet pressure

The gas outlet pressure of the solenoid valve is adjusted at the factory. If you have to make another adjustment, proced as follows.

A Inlet

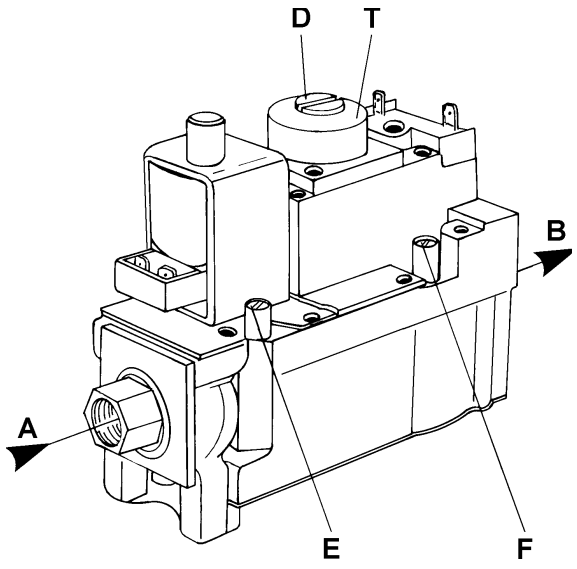
B Outlet

D Outlet pressure regulator adjustment screw plug

E Inlet pressure tapping

F Outlet pressure tapping

T Head regulation



D0290

1/ Close the gas inlet and remove the binding screw from the pressure tapping (F) and connect the manometer tube.

2/ The electricity supply must be energized otherwise gas will not be supplied to the burner.

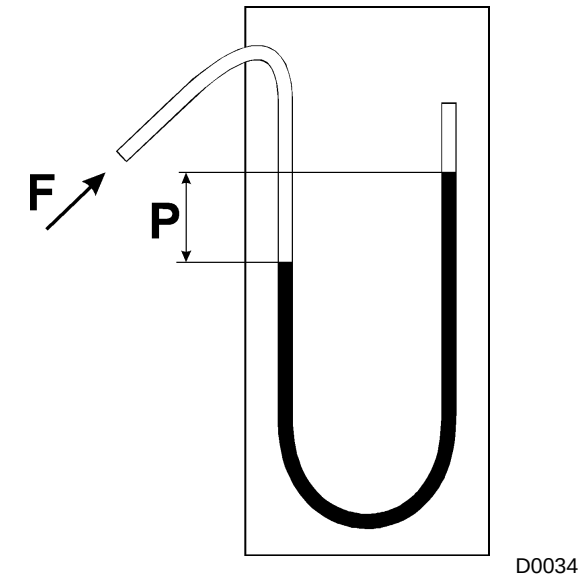
3/ Open and check the gas inlet main burner using the manometer on the pressure tapping (F).

4/ Remove pressure regulator cap (D).

5/ Using a screwdriver, slowly turn the adjustment screw until the required pressure (P) is indicated on manometer (see tables on the following pages).

Turn the adjustment screw clockwise to increase and counter-clockwise to decrease gas pressure.

6/ Reset the pressure regulator cap, close off the gas inlet, remove the manometer tube and put the binding screw back in (F).



D0034

t0183gb

TABLE OF CORRESPONDENCES - Ironer 1.9 m

Category index	Type of gas	Working supply pressure in mbar	H i	Ø of injectors in mm	Pressure at injectors (mm H2O)	Heat emission Qn in kW (H i)	Consumption Mn in kg / h	Consumption Vn in m³ / h
* 2E, 2H, 2ESI	G 20	20	in MJ/ m³ 34.02	3.30	97	39	-	4.13
2 L, 2ESI	G 25	25	in MJ/ m³ 29.25	3.30	133	39	-	4.8
3 +	G 30 G 31	28-30/37	in MJ/ kg 45.65 46.34	1.85	-	39	3.07 3.03	-
3 B / P	G 30 G 31	50	in MJ/ kg 45.65 46.34	1.60	-	39	3.07 3.03	-
3 B / P	G 30 G 31	30	in MJ/ kg 45.65 46.34	1.85	-	39	3.07 3.03	-
3 P	G 31	50	in MJ/ kg 46.34	1.70	-	39	3.03	-

* for Belgium, no work is allowed between G20 and G25.

Note : G20 = natural gas, Lacq type **G25 = natural gas, Groningue type**
G30 = butane gas **G31 = propane gas**

t0185gb

TABLE OF CORRESPONDENCES - Ironer 2.5 m

Category index	Type of gas	Working supply pressure in mbar	H i	Ø of injectors in mm	Pressure at injectors (mm H2O)	Heat amission Qn in kW (H i)	Consumption Mn in kg / h	Consumption Vn in m³ / h
* 2E, 2H, 2ESI	G 20	20	in MJ/ m³ 34.02	3.70	100	52	-	5.50
2 L, 2ESI	G 25	25	in MJ/ m³ 29.25	3.70	135	52	-	6.40
3 +	G 30 G 31	28-30/37	in MJ/ kg 45.65 46.34	2.10	-	52	4.10 4.04	-
3 B / P	G 30 G 31	50	in MJ/ kg 45.65 46.34	1.85	-	52	4.10 4.04	-
3 B / P	G 30 G 31	30	in MJ/ kg 45.65 46.34	2.10	-	52	4.10 4.04	-
3 P	G 31	50	.in MJ/ kg 46.34	2.00	-	52	4.04	-

* for Belgium, no work is allowed between G20 and G25.

t0397gb

TABLE OF CORRESPONDENCES - Ironer 3.1 m

Category index	Type of gas	Working supply pressure in mbar	H i	Ø of injectors in mm	Pressure at injectors (mm H2O)	Heat emission Qn in kW (H i)	Consumption Mn in kg / h	Consumption Vn in m³ / h
*** 2E, 2H, 2ESI**	**G 20**	20	in MJ/ m³ 34.02	4.00	114	65	-	6.87
2 L, 2ESI	**G 25**	25	in MJ/ m³ 29.25	4.00	160	65	-	7.99
3 +	**G 30 G 31**	28-30/37	in MJ/ kg 45.65 46.34	2.30	-	65	5.12 5.05	-
3 B / P	**G 30 G 31**	50	.in MJ/ kg 45.65 46.34	2.05	-	65	5.12 5.05	-
3 B / P	**G 30 G 31**	30	.in MJ/ kg 45.65 46.34	2.30	-	65	5.12 5.05	-
3 P	**G 31**	50	in MJ/ kg 46.34	2.10	-	65	5.05	-

* for Belgium, no work is allowed between G20 and G25.

Note : G20 = natural gas, Lacq type **G25 = natural gas, Groningue type**
G30 = butane gas **G31 = propane gas**

IMPORTANT

Tightness test after installation

The gas leak test is performed as follows:

1/ Paint pipe joints, pilot gas tubing connections and inspect outlets with rich soap and water solution; do not use an aggressive soap.

2/ Put the machine into service. Bubbles indicate a gas leak.

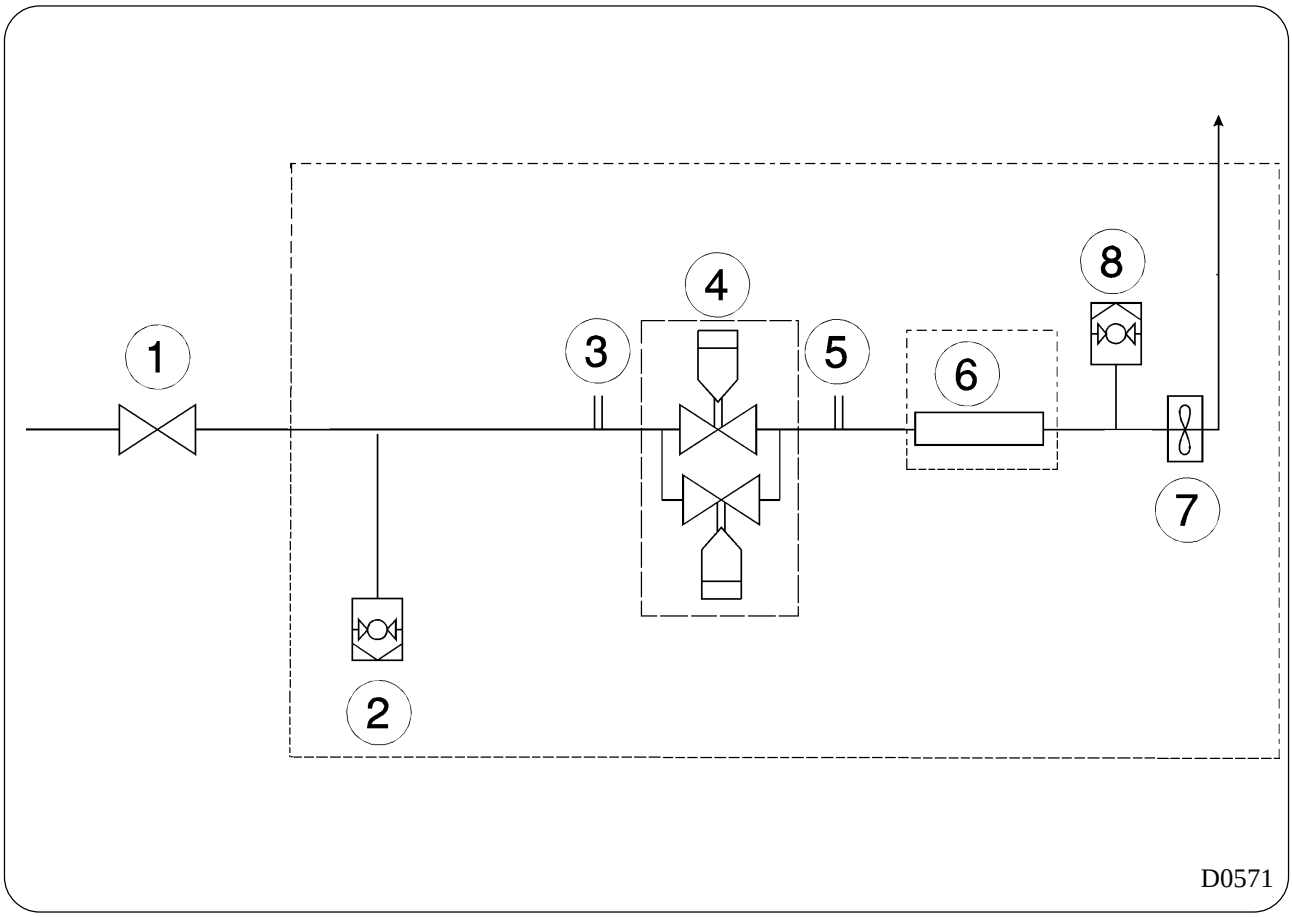
3/ Eliminate this leak.

Check-out

Before leaving, put the appliance into operation and allow to run a complete cycle. Watch to ensure that all burner system components function correctly.

GAS TRAIN
IM 48 FFS

AUSTRALIA



1 - Shutt-off value 3/4"
2 - Pressure control gas min
3 - Inlet pressure TAP
4 - Combination gas controls
5 - Outlet pressure TAP
6 - Burner
7 - Fan
8 - Pressure control air

List of components

Quantity	Designation	Ref.	Manufacturer
2	Pressure control gas min	GW50 A4	Dungs
4	Combination gas controls	VR4925	Honeywell
-	Electronic flame safeguards	S4560	Honeywell
8	Pressure control air (vaccum)	C6065A	Honeywell
7	Fan	LS63E 0.3 kW	Leroy Sommer

Connection of the dryer evacuation system

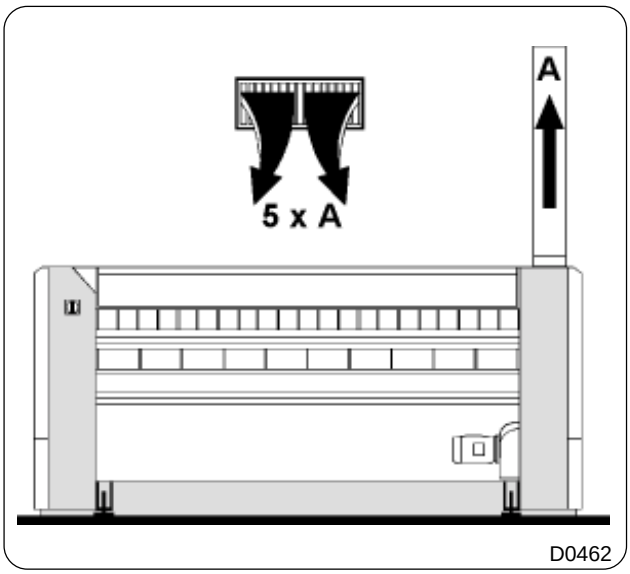
Fresh air inlet

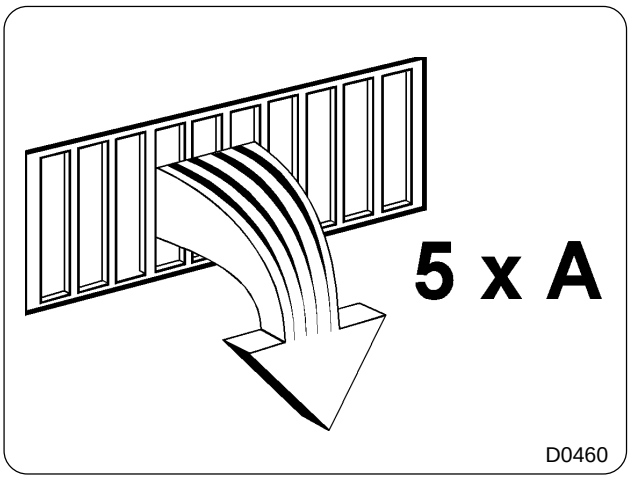
To allow the dryer ironer to work at its best, it is important that the laundry air inlet passes through an opening from the outside.
The fresh air arrival must be equivalent to the volume of evacuated air.
In order to prevent drafts in the room, the best solution is to place the air inlet behind the machine.

In the case of a machine with gas heating, it is essential that the rooms should be ventilated.

The free section of the air inlet must be 5 times greater than the section of the evacuation pipe.

Do not forget to allow for the fact that grills often occupy half the total area of the free air opening.





Evacuation duct

It is recommended that a separate smooth-walled evacuation duct should be connected to each dryer, providing the least possible resistance to air.

Check that the shaft flow is at least twice the capacity of the ironer exhaust fan.

It is essential that the diameter of the evacuation pipe should be selected as a function of each installation so that the pressure loss never exceed 200 pa (value measured at ambient temperature).

These conditions are **ABSOLUTELY ESSENTIAL** for correct working of the ironer.

Electric and steam heating specification :

Exhaust air max. with no pressure (alt 15 °C)

- either 780 m³/h a 1.90 m machine
- or 900 m³/h for a 2.50 m machine
- or 1000 m³/h for a 3.10 m machine

Fan maximum flow rate with no pressure : 740 Pa.
Average temperature of exhaust at the machine outlet : 70 °C

Gas heating specifications.

Evacuation of vapour from a dryer ironer with gas heating must never be connected to the evacuation used for a gas heating machine and a dry cleaning machine or other machine of the same type.

Exhaust air max. with no pressure (alt 15 °C)

- either 780 m³/h a 1.90 m machine
- or 900 m³/h for a 2.50 m machine
- or 1000 m³/h for a 3.10 m machine

Fan maximum flow rate with no pressure : 740 Pa.

Average temperature of exhaust at the machine outlet for gas heating : 115 °C

For gas heating, the required combustion fresh air supply should be not less than 2 m³/h per kW:

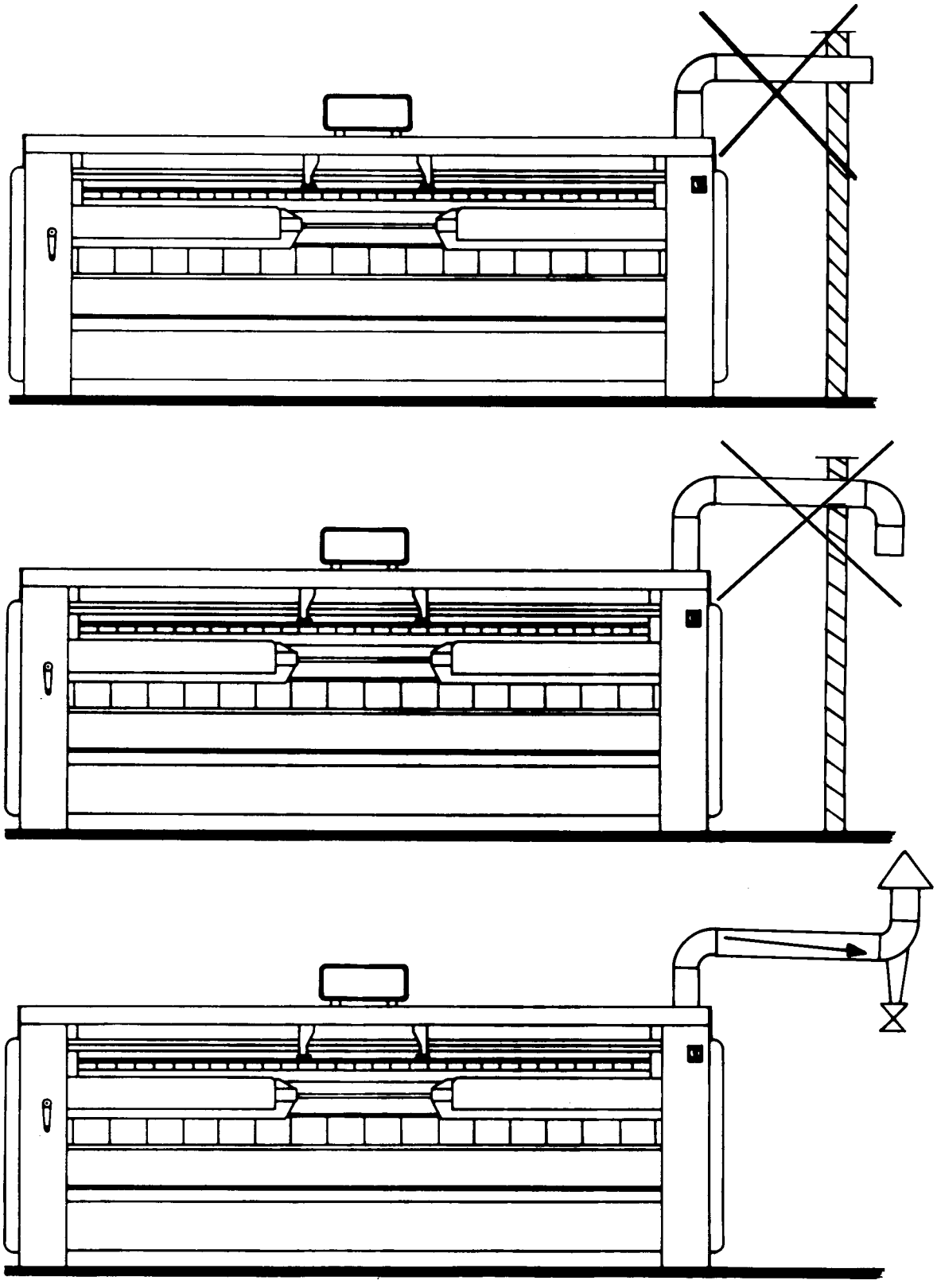
- either 78 m³/h a 1.90 m machine
- or 104 m³/h for a 2.50 m machine
- or 130 m³/h for a 3.10 m machine

NOTE : if the flow is insufficient due to an excessive pressure loss, a safety pressure switch will automatically switch the heating off.

Values of the adjustment of safety pressure switch :

- either 18 mmH_2O for a 1.90 m machine
- or 10 mmH_2O for a 2.50 m machine
- or 6 mmH_2O for a 3.10 m machine

The duct must lead to the outside and must be fitted with protection against the weather and foreign bodies.



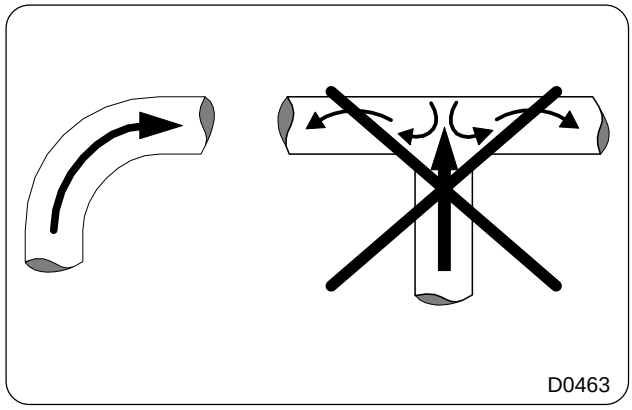
D0059

Evacuation system if several dryers are connected to a common evacuation duct (except for the gas haeting machines).

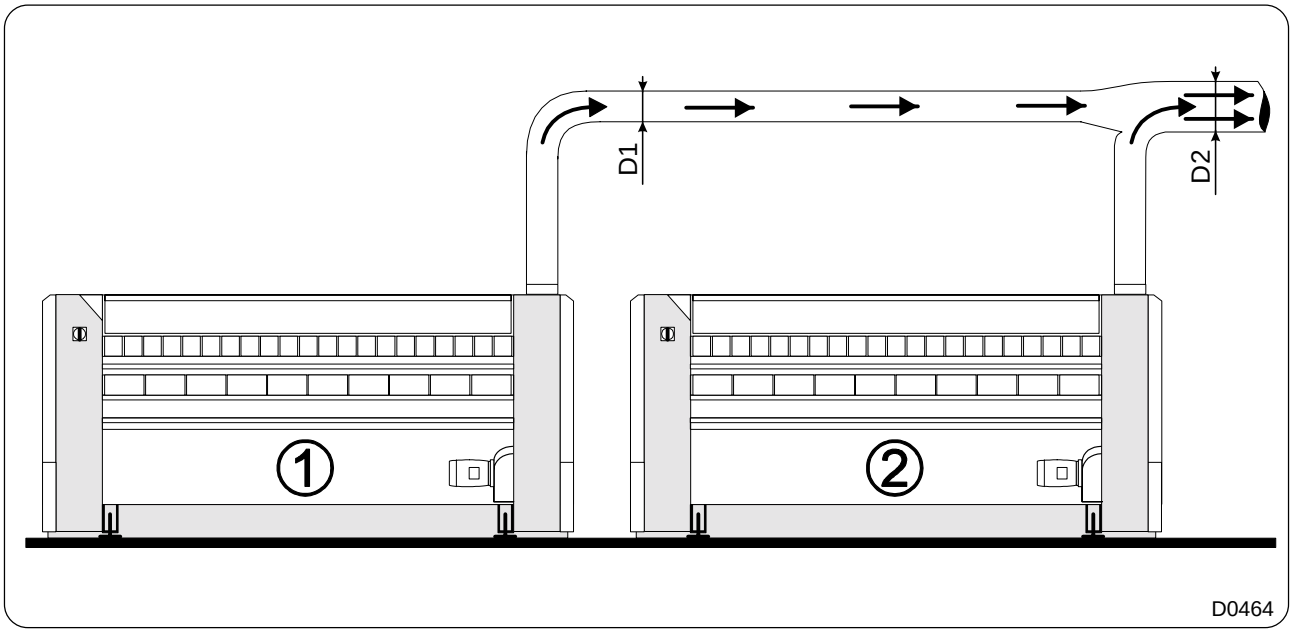
If several dryer ironers are installed with a common evacuation duct, the cross-section of the evacuation duct must increase as a function of the number of installed machines so that each of them operates at the same value of air resistance.

Use elbows (and not Tees) to allow the air to pass forwards.

The simplified figure below shows the principle on which the evacuation duct shape is designed.



Number of ironers	**1**	**2**	**3**	**4**
Outlet diameter (D) of the exhaust pipe in (mm)	160	225	315	450
Ventilation aperture required section	2 dm²	4 dm²	8 dm²	16 dm²



The indicated evacuation diameter is the dryer outlet diameter.

Cross-sections of ducts between dryers and the outside of the building must be designed taking account of the flow and the allowable pressure loss on each machine and the routing of ducts (elbows and lengths).

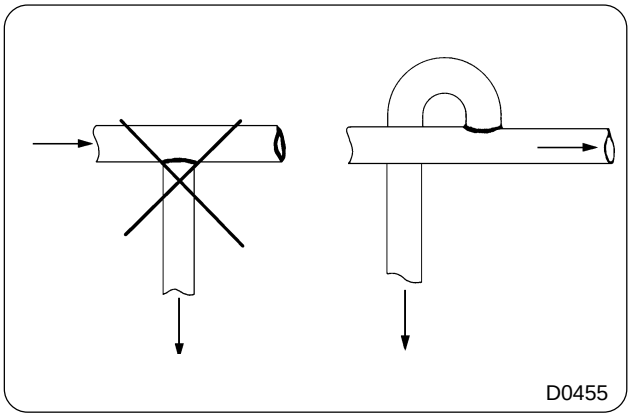
Please call us if you are in any doubt about the layout of your exhaust device if you are modifying an existing installation.

STEAM HEATING

Steam always presents the risk of transporting a certain amount of water.

Water in that case will be transported on the lower part of the feeding pipes, and steam on the upper part.

To prevent this water from harming the heating of the machine, the single vapour will be recovered with to a throat-type connection piece as indicated on diagram D0455.



STEAM CONNECTION AND RETURN OF CONDENSATES DIAGRAM IRONER

Admissible steam pressure : 9 bar maximum

A Ironer

B Steam admission diameter 20/27

C Y-shaped cast-iron filter with flanges

D Manual stop valve with flanges

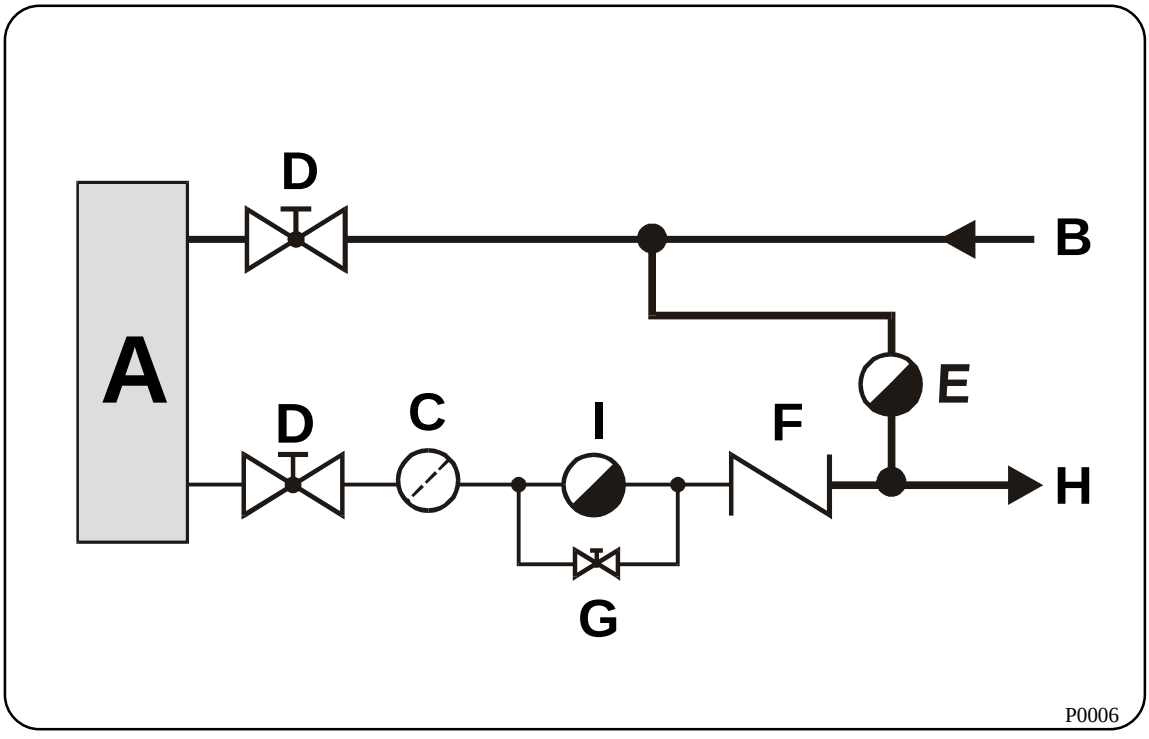
E Drain cock to be provided before feeding the machine

F Non return valve with flanges

G By-pass with flanges

H Return of condensates diameter 12/17

I Steam trap



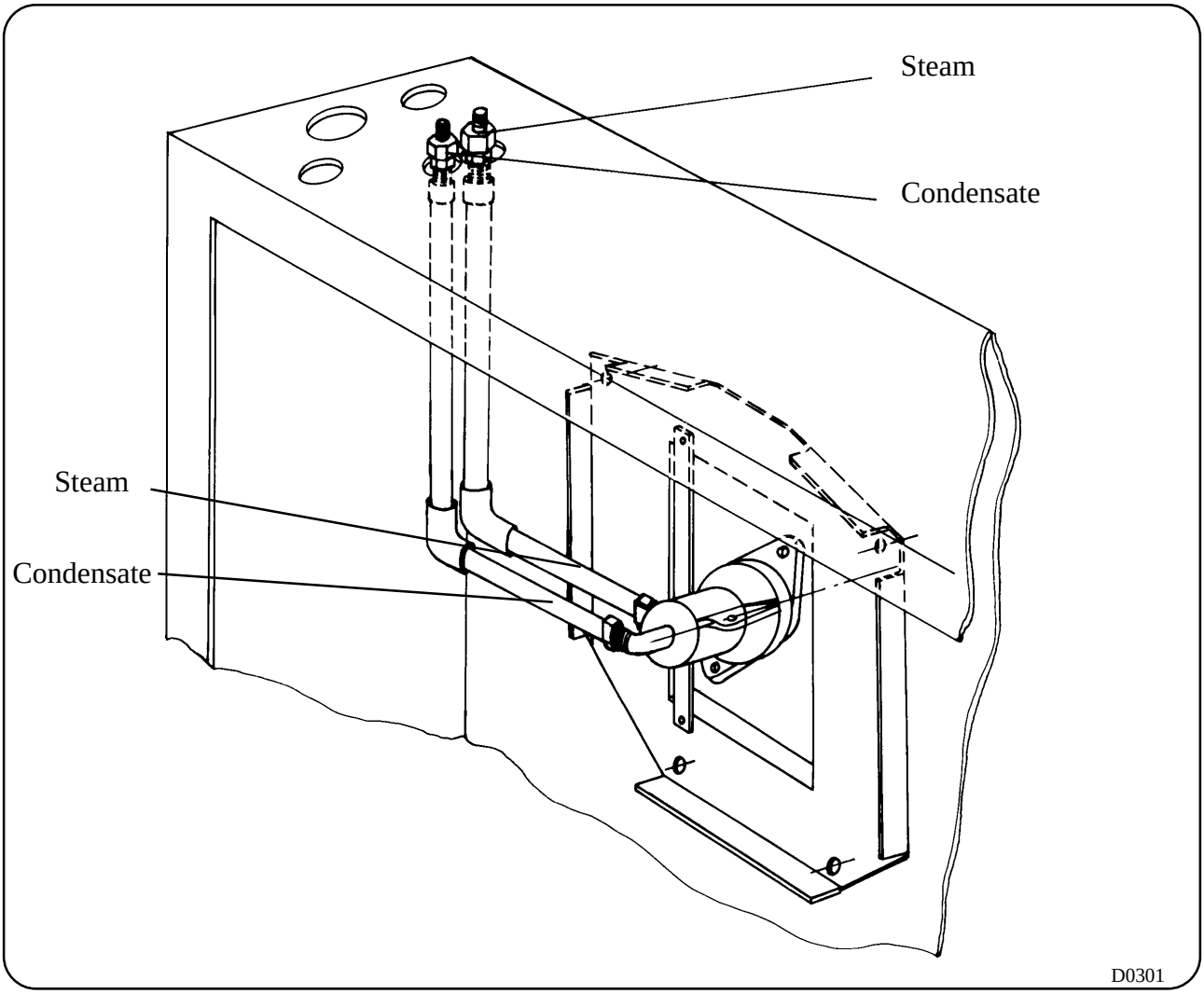
STEAM CONNECTION (for steam-heated machines only)

Admissible steam pressure : 9 bar maximum.

Provide a manual shutt off valve (quarter turn valve forbidden).

Return of condensates : To be forecasted by the customer : a trap with closed ballcock with a device to remove all the no-condensable and with an against-steam top (example of recommendation ; Sarco Ref. FT10C-12/17-pn25, maximum condition of use at extraction 45 l/h), a by-pass, a non-return valve, a manual stopping valve and a filter.

Connect the installation at the back of the machine to diameter 20/27 for the admission and to diameter 12/17 for the return of condensates.



POWER SUPPLY (for electric heating).

Provide a breaker in the general switch cabinet or HPC fuses.

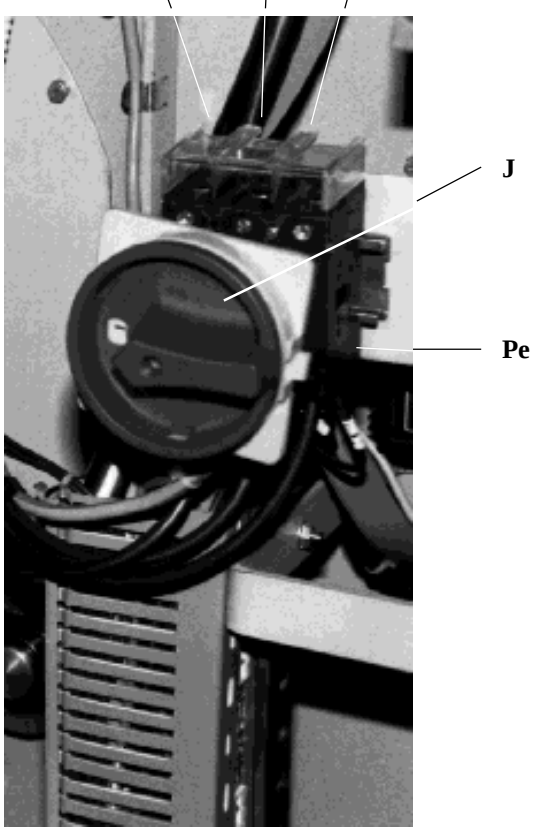
Pass the feeding cable of the machine through the grommet (F on the foundation plan). Connect this cable to the main switch of the machine (J).

POWER SUPPLY (for gas and steam heating).

Provide a breaker in the general switch cabinet or HPC fuses.

Pass the feeding cable of the machine through the grommet (F on the foundation plan). Connect this cable to the main switch of the machine (J).

IMPORTANT : Check that the mains voltage is correct and that your installation is powerful enough before connecting the machine (see chapter 5 for the cross sectional areas of cables).



COMPRESSED AIR SUPPLY

Provide a manual stop valve

Admissible pressure 5 bar mini
8 bar maxi

The air should be perfectly dry and oil-free.

COMPRESSED AIR CONSUMPTION AND DEBIT

Screw-type compressor : 20 m³/h output on a 200 litres container

Piston compressor : 25 m³/h output on a 500 litres container

Instantaneous output : 25 litres/second

Maximum consumption :

1,90 m = 18 Nm³/h
2,50 m = 19 Nm³/h
3,10 m = 20 Nm³/h

Before the very first starting operation, it is necessary to take off the protective paper rolled round the heating cylinder.

To do so, you have to install the crank (V) that you have found in the caisson together with this instruction handbook (see photo).

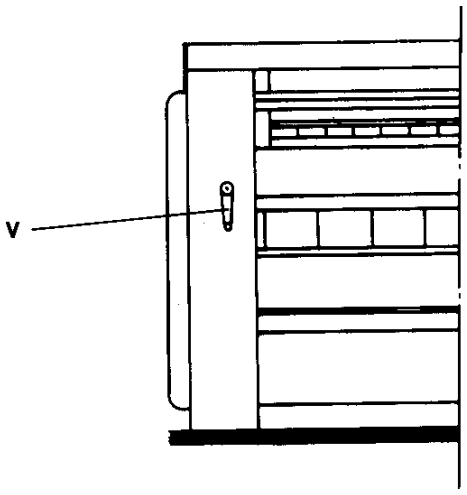
Turn the crank to make the cylinder rotate and remove the protective paper.

IMPORTANT

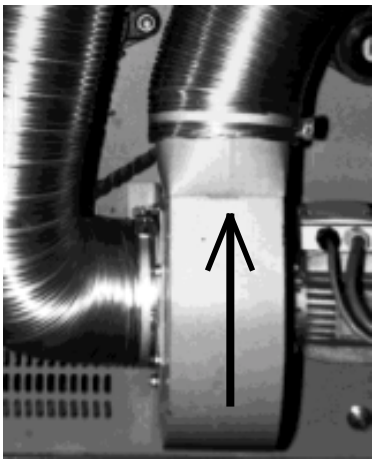
The ironing cylinder always rotate in the right direction thanks to the converter, but the fan may rotate in the wrong direction.

Check the direction of rotation of the fan. If the fan of the ironer rotates in the wrong direction when the machine is three-phased, two of the three phases must be inverted on the supply section switch in order to change the direction of rotation of the fan.

P0063



P0024



When the side casings have been reassembled, please follow the instructions below :

Check that the installation is correct (see chapter «Installation»).

1. Turn main section switch to I «ON». The LED (1) «voltage» lights.
2. Turn the potentiometer (6) to the minimum speed.
3. Press key (4) «ON». The machine sets to the position «without folding» (the feeding clamps spread, the feeding strip goes back, the evacuation table tilts after about thirty seconds).

In case of gas heating, do not press key (9) «HEATING ON» immediately after key (4) ; the fan must first exhaust the combustion chamber in case of gas heating.

LED (3) lights.

The cylinder and the guiding bands rotate.

The fan works and draws the air out of the machine outside the building.

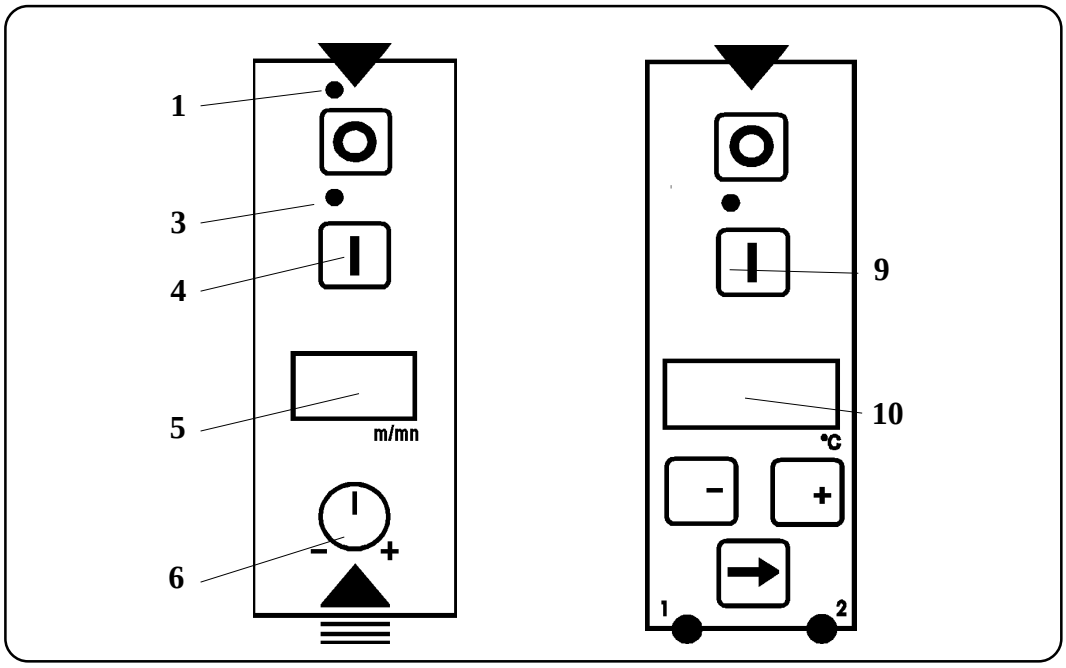
The indicator (5) of ironing speed lights.

The indicator (10) of cylinder temperature lights.

The indicator (19) «front longitudinal folding» lights.

Check that the finger protection is working. The finger protection must stop the ma chine when it is touched. LED (1) «voltage» is the only one that remains light. To restart the ironing process, carry out again the starting operations.

The machine will not start if the premises where it is installed have a temperature of less than 10°C.



START-UP GAS HEATING.

1. Open the fuel gas valve on the gas supply line.

2. Press key (13).

3. Select the regulating temperature with keys (11) and (12).

4. Put this value in memory with key (13). The temperature measured on the cylinder is displayed. Usual ironing temperature is around 150 to 170°C.

5. Press key (9) to activate heating. Indicator (8) lights and blinks.

Indicator 14 signal to indicate that the burner is lighting.

If indicator (14) blinks for more than 6 seconds, there may be a misfire or an opening omission of the gas valve.

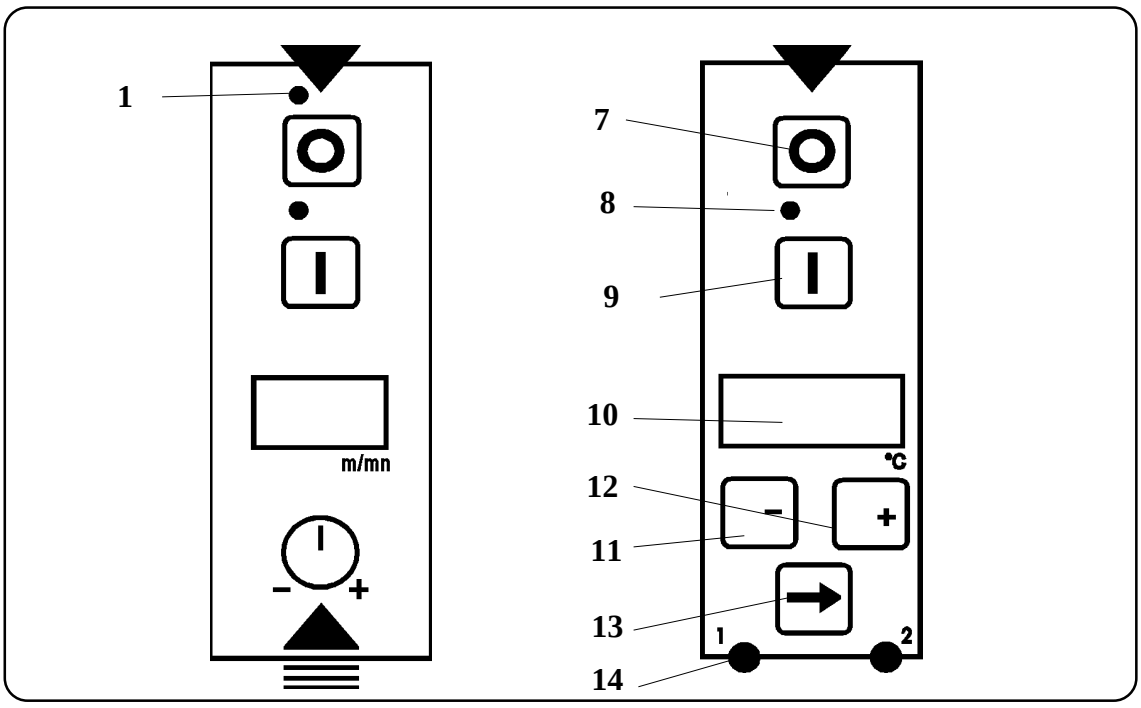
6. Check the ironing temperature on indicator (10).

7. The required temperature is reached when indicator (8) remains lit without signaling.

8. At any time, by pressing key (13), the measured temperature indicated changes into the temperature required during operation n° 3 and vice versa.

9. The required temperature is reached when indicator (8) remains lit without signaling.

10. The temperature stops rising after approximately 15 minutes.



USE OF THE PUSH-BUTTON ON THE CASING (next ignitor) (AUSTRALIA) :

The yellow push-button (on the casing) to re-initialize the gas burner.

SHEETS FEEDING

The positionning of the sheets on the feeding table has to be done with care.

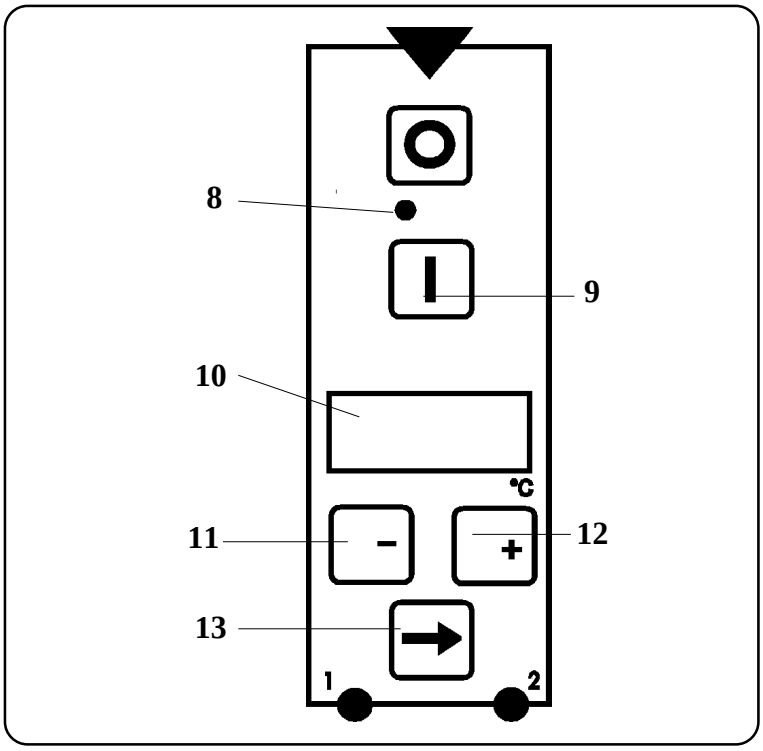
The sheet has to be positionned in front of the detection cell, in the middle of the feeding table, so as the machine can measure the lenght of the piece to be ironeed.

If you put the sheet on the detection cell, the lenght measured will be unaccurate and the folding will be defective.

START-UP STEAM HEATING

1. Open the by-pass or the return of condensates cock to drain the pipes for one minute approximately ; the temperature of the cylinder will rise more quickly.
2. Slowly open the steam valve and check the temperature on indicator (10).
3. Press key (9) «HEATING ON».

NOTA : keys (11, 12 and 13) have no action when the machine is steam heated.



t0012gb

CORRESPONDENCE BETWEEN STEAM PRESSURE / TEMPERATURE									
Manometric pressure in bars	1	2	3	4	5	6	7	8	9
Temperature in °C	119	133	143	151	158	164	169	174	179

START-UP ELECTRIC HEATING

1. Press key (13).

2. Select the regulating temperature with keys (11) and (12).

3. Put this value in memory with key (13). The temperature measured on the cylinder is displayed. Usual ironing temperature is around 150 to 170°C.

4. Press key (9) to activate heating.

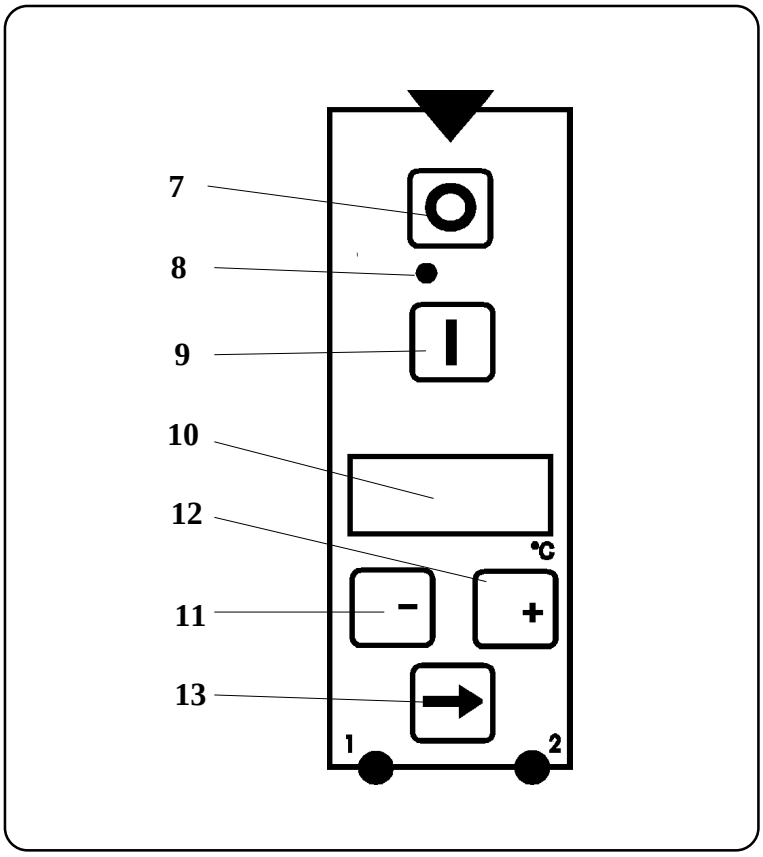
5. Indicator (8) lights and signals during the rise in temperature.

6. Check the ironing temperature on indicator (10).

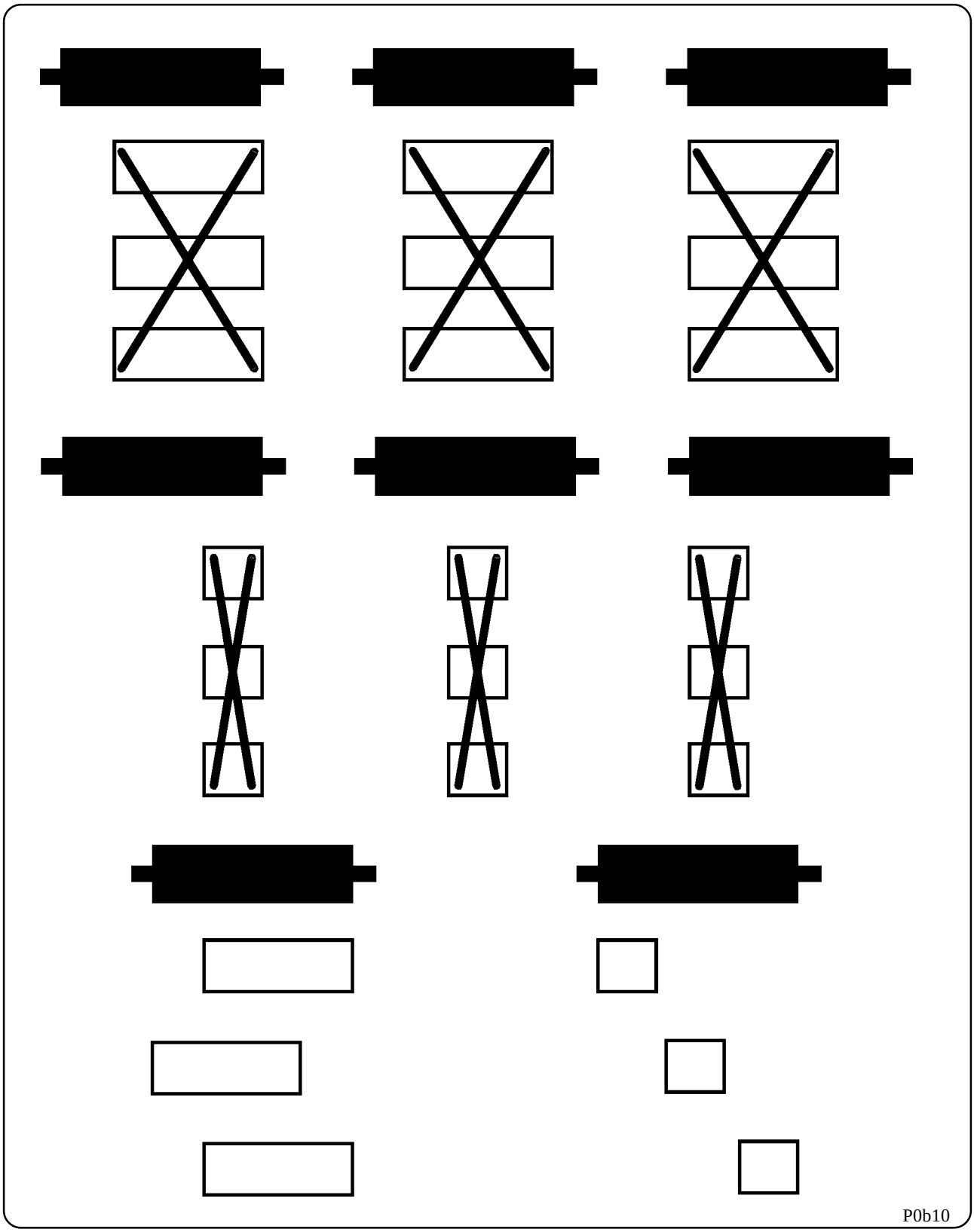
7. The required temperature is reached when indicator (8) remains lit without signaling.

8. At any time, by pressing key (13), the measured temperature indicated changes into the temperature required during operation n° 2 and vice versa.

9. The temperature stops rising after approximately 15 minutes.



If you want to use the machine manually (without folding), alternate the ironing as indicated below.



P0b10

NOTA : All our machines are tested in the factory. However, when starting up the machine, a modification in the folding parameters may have to be done by a technician. This depends on the nature and texture of the customer's pieces of linen.

-The linen should be well-rinsed to avoid it from becoming discoloured and also to prevent any soiling of the drum.

- Proceed to iron when the temperature has reached approximately 160 °C.

- Blankets should not be ironed.

- Check that the linen tolerates ironing, and at which temperature.

- Be careful with synthetic linen and also with linen having prints on. They can melt and stick on the cylinder.

- In order to obtain the highest ironing quality, we advise that you feed the flat items (towels, sheets etc...) starting by the hem.

- If the linen must be ironed twice to get dry, there is a risk of yellowing, and likewise if the speed is reduced.

- If the linen is not dry after one ironing, it may be due to :

    * a washing machine having a low extraction capacity (below 300 G) ; if this is so, a short pre-drying (5-10 min) in a tumble dryer is advised

    * the thickness of the linen

    * a too high ironing speed.

- Do not iron pieces of linen folded in 4 given in this precise case and due to the considerable thickness, it is impossible to get the quality of drying/ironing/folding you may expect from your machine.

- If linen coming out of the ironer is still damp, the ironing speed should be reduced (turn potentiometer 6 of the control panel) until a proper quality of ironing is achieved.

- If the linen is starched, there is a risk of deposit on the cylinder because the linen sticks on the cylinder.

- Check the quality of the main wash water (TH/TAC).

- Check the washing and rinsing cycles (see running incidents "phenolphthalein).

- Check the fur up in the linen (quantity of ash).

Productivity and quality of the ironing/folding depend on the quality of the washing. Make sure that all these condition are met.

Linen should not be too much extracted to allow a correct running of the machine.

IN CASE OF MANUAL IRONING.

- Feed carefully the item to be ironed, because it is impossible to remove a piece of linen that has not been properly fed.
- Leave 30 cm between the items to be ironed.
- Check that the pieces of linen are not wider than the guiding bands.
- If possible, use the whole ironing width (see fig. P0010).
- If small sheets or other small items are to be ironed, these should be fed alternately left and right of the heating drum (see fig. P0010).

PRACTICES TO AVOID :

- Sheets folded double.
- Draw-sheets or any other double-layer sheet or sheet pulled into the machine side by side.
- Fitted-sheet ❶: *May cause problem to smooth out; Measurements altered.*
- Comforter cases with flap ❷
- Linen ≤ 80 gr /m² : *gravitational pull difficult at lengthwise folding*
- Linen ≥ 200 gr/m².
- Linen < 0,90m x 1,10m on type 19-25.
  0,90m x 1,35m on type 31.

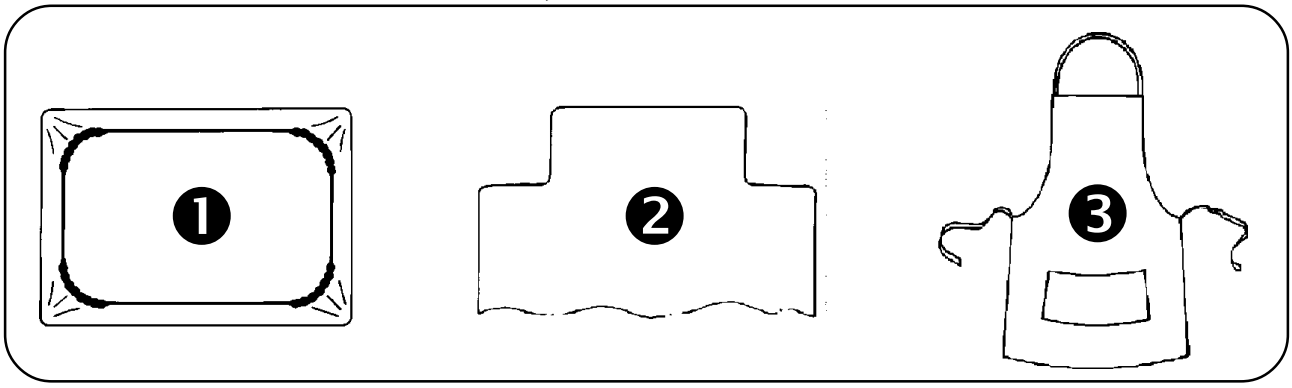
PRACTICES NOT ADVISABLE :

- Folding of tableclothes (of poor quality).
- Sizes not fitting the cylinder working length (partial use of the cylinder) except with steam heating.
- Worn polycotton sheets (cotton worn away) : *get out of shape when smoothed out, uneven finish look when folded, high static electricity.*
- Large cotton or flax-made sheets > 200 gr/m² *(80mm layers after the 3rd cross fold < or = 80 mm high!).*
- Linen other than flatwork : (butcher's apron ❸ : watch that the cords do not slide between the feeding belts).
- Sheets of 1m80 x 2m80 processed on type 25 - 2m50 - *(gas heating : problem of heating regulation with gas; gas burners cannot be modulated).*

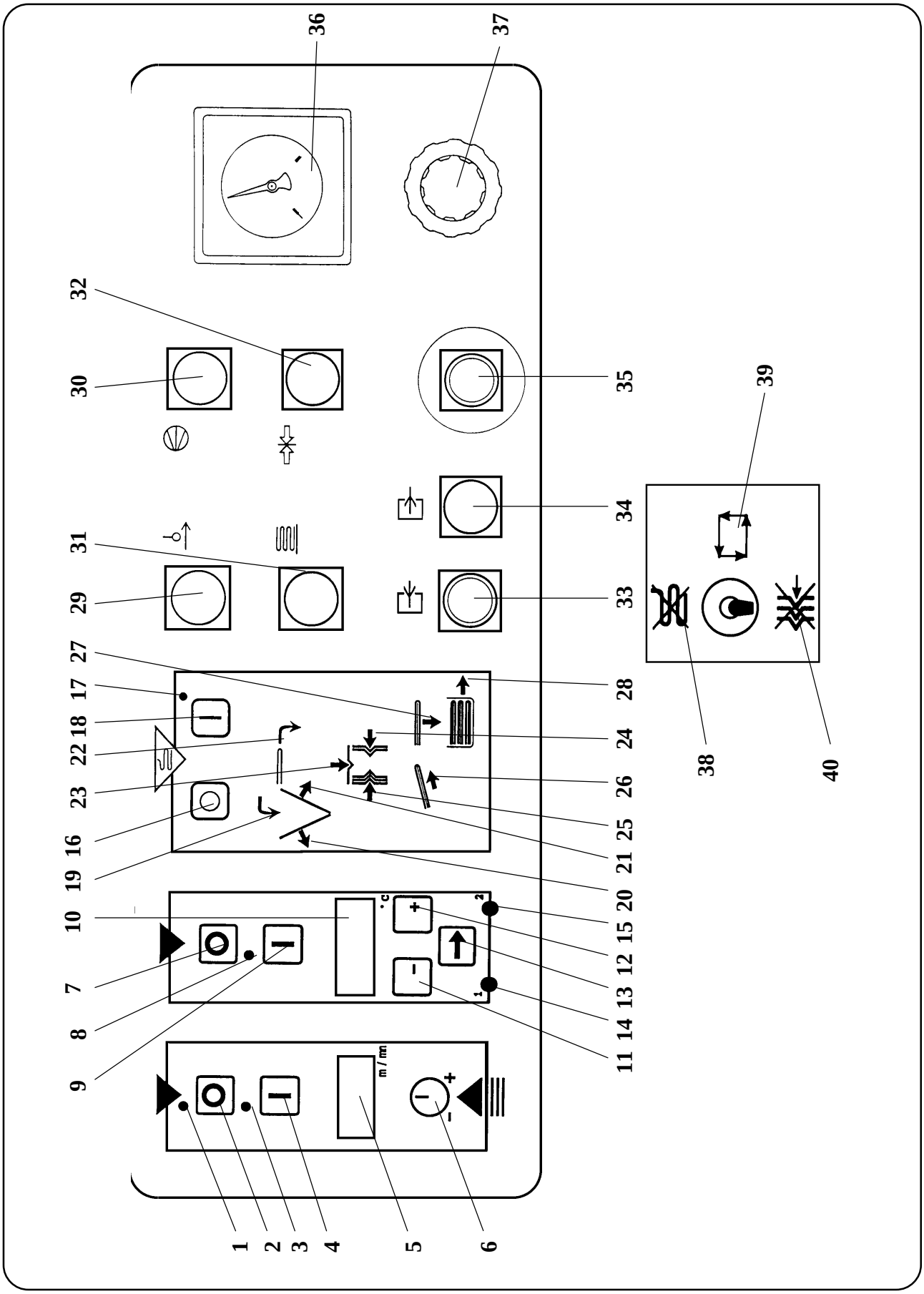
CAUTIONS :

- Prepare the large sheets before feeding : *ironing and folding defects, risks of jamming at cross folding.*
- Avoid the torn, worn or holed sheets : *that may hook and alter the measurements hampering proper lengthwise folding (back clearing).*
- Comply with the mini-maxi sizes.
- Avoid when running, too low or bad adjusted temperatures as consequence of :
  - A too high ironing speed with high moisture content in sheets : *bad sliding on metallic parts.*
  - A partial use of the ironing length of the cylinder creating overheating : *(be careful especially, to the risk for the polycotton sheets to loose their shape, generally stabilized at 200 °C).*

D0411



D0065


36
37
32
30
35
39
34
31
33
29
27
28
17
18
24
22
26
23
25
16
21
19
20
10
15
12
7
13
8
14
9
11
38
40
1
2
3
4
5
6

SCHEDULER LEGEND

A/ GENERAL CONTROL AND MOVEMENT

1. Voltage indicator
2. «OFF» key
3. «ON» indicator
4. «ON» key
5. Ironing speed indicators
6. Ironing speed adjustment button

B/ HEATING CONTROL

7. «HEATING OFF» key
8. «HEATING ON « indicator
9. «HEATING ON» key
10. Ironing temperature indicators
11. Temperature programming key (reduce). Does not work in case of steam heating
12. Temperature programming key (increase). Does not work in case of steam heating.
13. Storage of temperature or display change key
    (temperature measured)
    (temperature required)
    Does not work in case of steam heating
14. Faulty pipe burner n° 1 indicator
15 Faulty pipe burner n° 2 indicator

C/ FOLDING CONTROL

16. «FOLDING OFF» key
17. «FOLDING ON» indicator
18. «FOLDING ON» key
19. Lengthwise folding sheet detector.
20. Lengthwise folding arm indicator - front position
21. Lengthwise folding arm indicator - back position
22. Sheet back clearing indicator
23. First cross fold indicator
24. Second cross fold indicator
25. Third cross fold indicator
26. Transfer onto stacker indicator
27. Transfer onto stacker indicator
28. Stack delivery indicator
29. Dirty cell indicator
30. Air short supply indicator
31. Full stacker indicator
32. Sheet jam security indicator
33. Automatic feeding button
34. Sheet back clearing indicator
35. Emergency switch
36. Manometer
37. Sheet stretching tension knob
38. Alternative function switch for automatic feeding without folding
39. Standard FFS function switch
40. Two cross fold-section switch

* Automatic feeding without folding

A - FOLDING MODE

1/ To set the machine to work, proceed as indicated on page 1, paragraph 7.

2/ Press key (18) «FOLDING ON». The machine sets to the folding position (the feeding clamps draw nearer, the feeding strip moves forward, the evacuation table tilts vertically).

3/ Indicator (17) lights.

B - UTILIZATION

The spreading tension of the feeding clamps can be adjusted thanks to the pressure reducing valve (37).

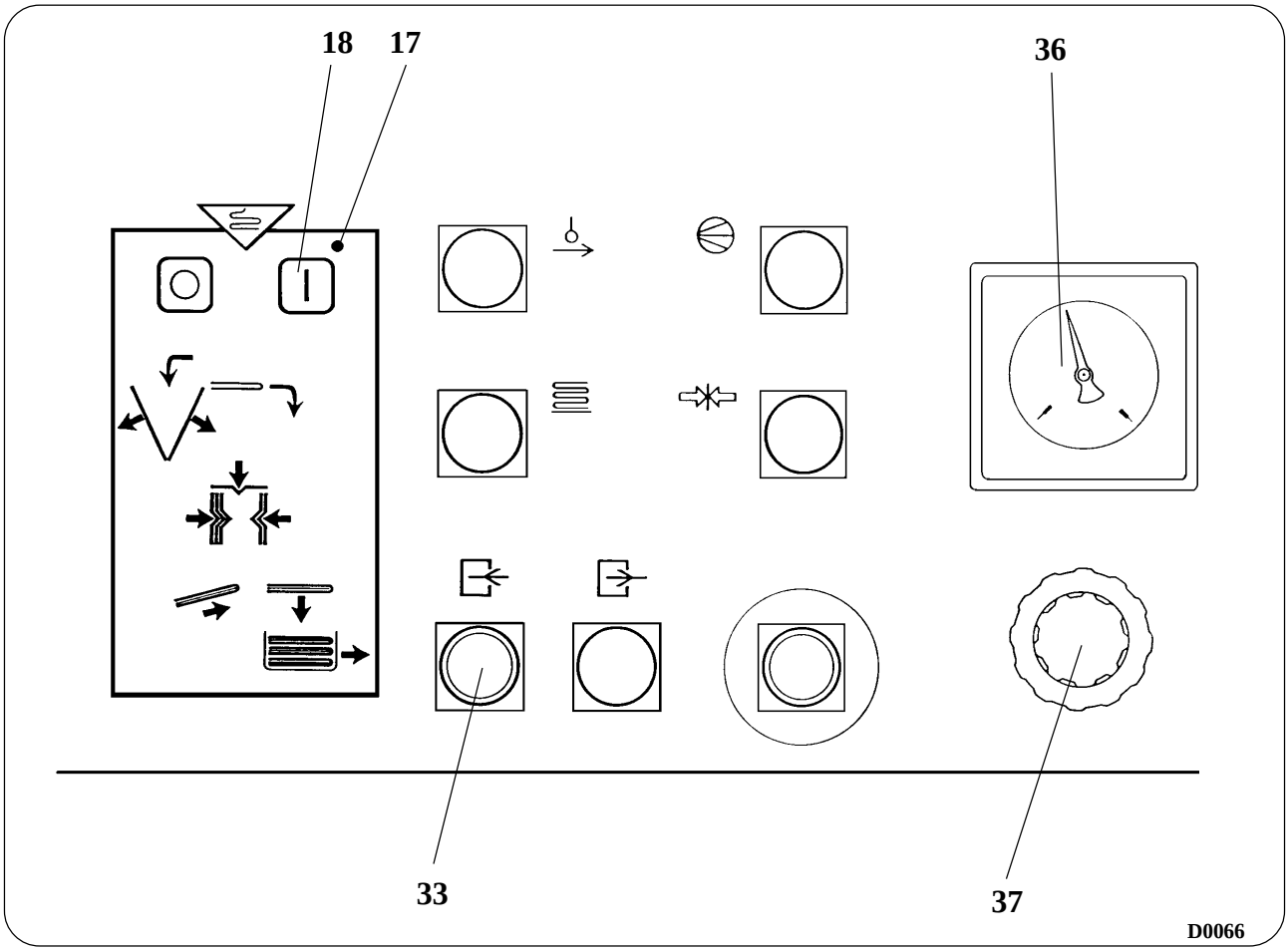
The manometer (36) displays the required tension. A working pressure between 1 and 2 bar is advised.

1/ Take the sheet (by a long side) and insert its extremities in the feeding clamps.

2/ Press the feeding button (33) ; the clamps spread, stretch the sheet, the smoothing operation starts and the clamps place the sheet on the guiding bands.

A display on the control panel shows the progression of the sheet.

Nota : the ironing process can be carried out even when the folding mode is not used.



HOW TO STOP THE MACHINE

In order to extend the lifetime of your machine and its components, observe the following instructions to stop the heating.

Shut the steam inlet valve or the fuel gas valve.

Press key (7) «HEATING OFF» and only that one. Keep on feeding linen to lower the cylinder temperature down to approximately 120 °C.

Do not use the folding mode during the cooling process.

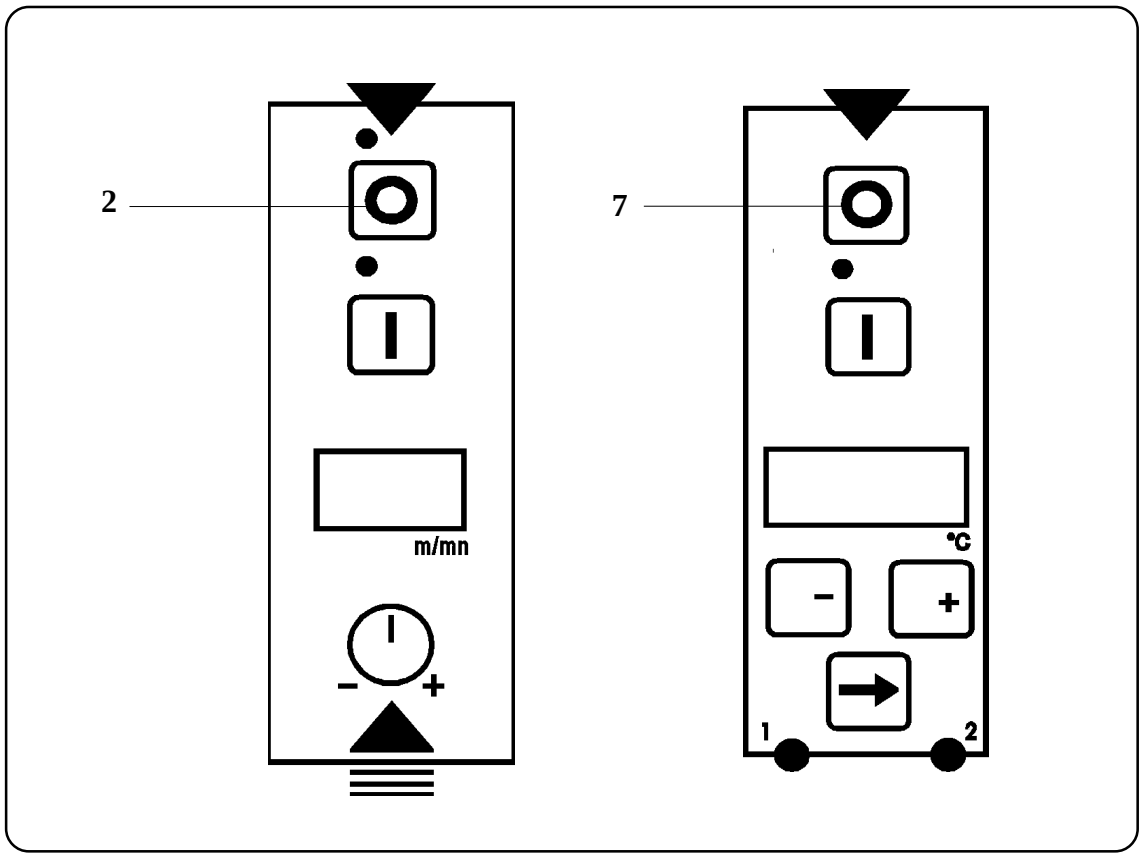
The machine will automatically stop when the temperature falls below 70 °C.

To obtain the automatic stop at 70 °C, it is essential not to press key (2) «GENERAL STOP» ; otherwise, the automatic temperature lowering function would be cancelled.

When the machine is stopped :

Turn the general switch situated on the left casing to O (OFF).

At any time, it is possible to stop the machine by pressing key (2) - GENERAL STOP. (Careful : a high temperature of the ironing cylinder may damage the ironing strips).



SAFETY DEVICES

Safety feeding device.

It is not possible for hands to be inserted into the space between the safety feeding flap and the conveyor strips. The machine stops immediately when the flap is pushed down.

Safety positive device.

If a sheet fed is not transferred to the stacker, the jam indicator (32) signals. The feeding cycle is interrupted. It is then absolutely necessary to evacuate the jammed sheet (see chapter «MACHINE MALFUNCTIONS»).

Safety dirty cells device.

When indicator (29) «DIRTY CELLS» blinks, clean the detection cells and the dirty reflectors.

Safety air short device.

When the compressed air supply pressure is lower than 4 bar, indicator (30) «AIR SHORT» signals.

Safety longitudinal folding device.

When a sheet is not correctly folded longitudinally, it is evacuated in the reception vat at the rear of the machine.

Safety cross-folding device.

When a sheet is not correctly cross-folded, it is evacuated at the right side of the stacker.

Motor protection.

Motors are protected against overheating by thermal protections and a breaker.

Re-starting of the machine.

After any interruption of the machine, power failure, emergency stop, action on the safety feeding device, the machine can only be re-started by pushing the «ON» button (key 3).

Safety gas-heating device.

The ignition of burners and the control of the flame are ensured by an electronic box that provides a full safety in case of bad draught or gas admission cutoff for instance.

On the control panel, the indicator light up when the safety device is in function.

Accessibility.

All protective casing can be dismantled with a specially designed tool or with key locks.

Heating safety device.

In all cases, a safety thermostat prevents the drum from over-heating (except for a steam-heated machine on which the temperature is given by the steam pressure).

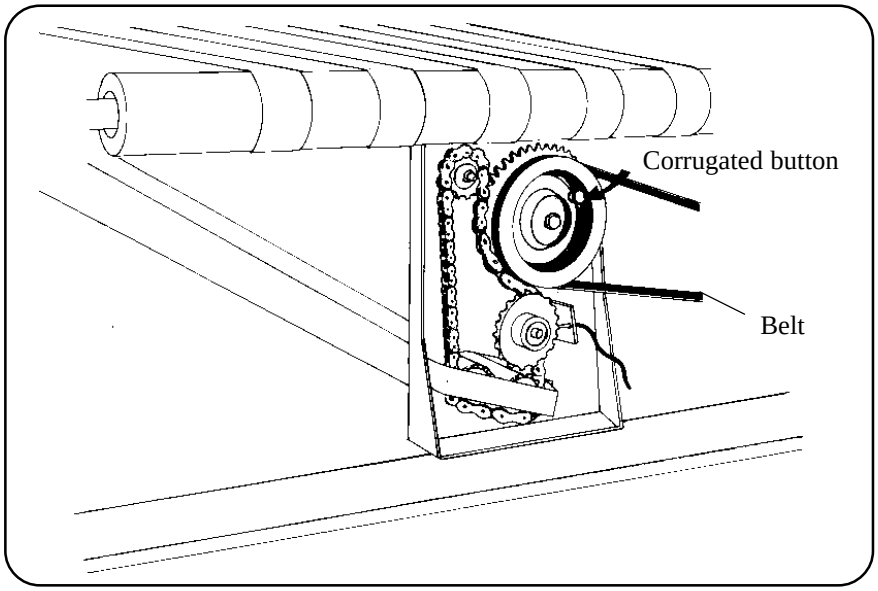
Power failure.

In case of power failure, the piece of linen, if any, should be removed with the crank (on the right side of the machine).
If the temperature is too high, it is possible to feed a piece of damp linen to protect the ironing strips.

Safety positive device.

If a sheet fed is not transferred to the stacker, the jam indicator (32) signals. The feeding cycle is interrupted.
Check that a sheet is not jammed in the cross-folding device at the rear of the machine. If it is the case, it is absolutely compulsory to evacuate it.
Unlock the locking of the driving pulley by pulling the corrugated button and turning it quarter turn to make the pulley idle **(Do not use the corrugated button as a handle)**. Act **only and slowly** upon the driving belt to evacuate the sheet.
Lock the pulley again (reclose the corrugated button) and check that it works.
Reset the safety jam button until the jam indicator (32) switches off.

D0068



The linen gets stuck on the cylinder.

* Check the rinsing result with a 1% phenolphthalein solution diluted in alcohol. If this colourless liquid turns pink on the linen coming out of the machine, your linen is not properly rinsed and detergents remain.
* Check the doses of detergent, starch etc. The linen has not been properly rinsed. Increase the number of rinses if necessary or decrease the doses of products.
* Check that the temperature of the cylinder is correct.
* The linen is not properly extracted.

The folding device works uninterruptedly.

* Check that the photocells are opposite their reflectors.
* Check their cleanliness and clean if necessary.

The folding system is faulty.

* Check that the photocells and their reflectors are clean.
* Check the limit switches of the folding arm.
* Check that the linen is completely dry after the ironing. If it is not, vapours coming from the linen still wet will disturb the detection photocell working.

The linen is not dry when it comes out of the ironer.

* Check the ironing speed.
* Check the extracting quality of your washer-extractor. The residual moisture ratio should be approximately 50 %.
* Check that the heating works properly.
* Check the working and cleanliness of the induction device.
* Check the condition of the ironing strips (calcareous fibers).
* Check the pressure of the roller on the ironing cylinder.

Discoloration.

* The brown coloration arises from washing powder slurries ; it will disappear in the following wash.
* The coloration caused by a too high temperature cannot be removed.

The heating does not work or does not work properly.

* Check the preset temperature.
* Check the thermostats.
* Check the probe of the thermostatic control system.

a) Gas heating.

* Check the gas admission.
* Clean the filters of the pressure reducing valves.
* Check the electronic ignitor.
* Check the position of the ignition electrodes and of the flame control.
* Check the gas electrovalve.

If the flame is yellow.
* Check that the vapour exhaust fan works and rotates in the right direction.
* Check that the air admissions are not sealed.
* Check the vapour extraction chimney.
* Check the calibration of the injectors.
* Clean the air admission filters.

b) Electric heating.
* Check the heating contactors KM10 to KM17
* Check the breakers
* Check the heating resistors.
* Check the connections of the resistors.
* Check the phases.

c) Steam heating.
* Check the vapour admission and the pressure at the boiler.
* Check the steam quality.
* Check the drain cock.
* Check the nonreturn valve and steam trap.

The ironer is overheated.
* Check the probe of the thermostatic control system.
* Check the accuracy of the thermostat by measuring the temperature of the cylinder with a thermometer.
* Check that the adjustment shoe is in contact with the cylinder.

The feeding strips do not turn :
* That kind of malfunction is normal when it only affects some strips.
* When the pieces of linen can not be fed into the machine anymore, it is necessary to change the tension of every strip in acting on the adjustment of the satellite feeding bearings.
* Take care that you do not tighten the strips too much. The strip must stop turning with the pressure of one finger. It must restart when the finger stops the pressure.

The machine suddenly stops.

Check the switches I14 and I15 of the finger protection flap.

Check the motion and fan motors.

Check the breakers.

Check the fuse of the variable speed drive.

Check the fuse of the control panel.

Check of the control unit.

Press key (2) «GENERAL STOP».

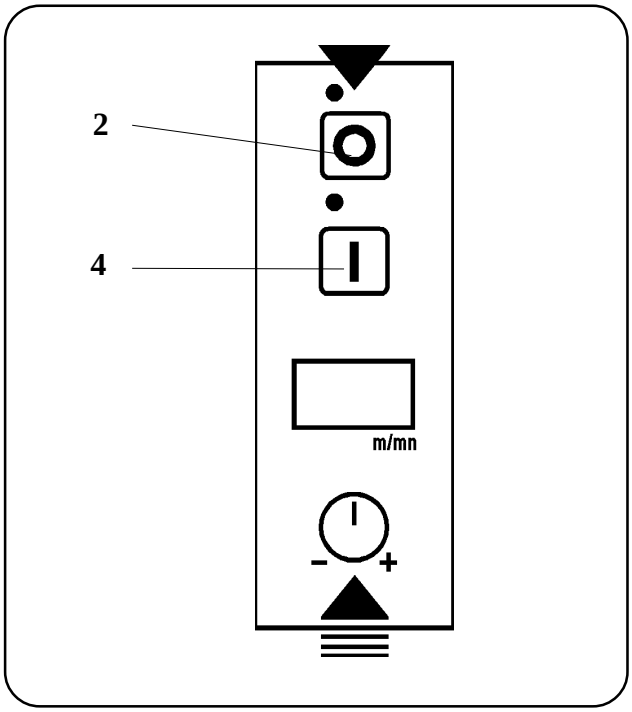
Press key (7) «HEATING OFF» to cut off the heating.

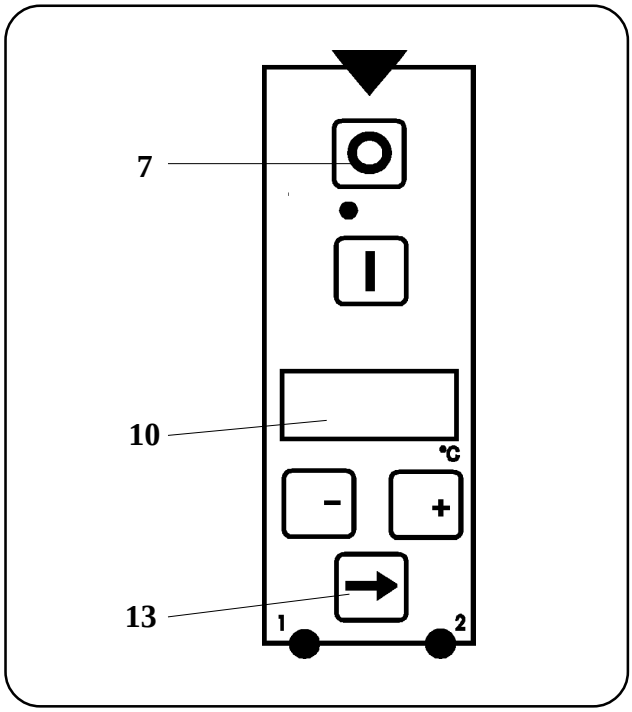
Then press at the same time key (7) «HEATING OFF» and key (4) «ON».

The temperature of the cylinder can now be read on the indicator.

Then press key (13) «STORAGE OF THE IRONING TEMPERATURE» ; the figure 100 should be displayed. If it is not the case, repeat the sequence.

Should if fail again, there is probably a breakdown on the printed circuit of the control unit.





GET IN TOUCH WITH YOUR AFTER SALES'SERVICE.

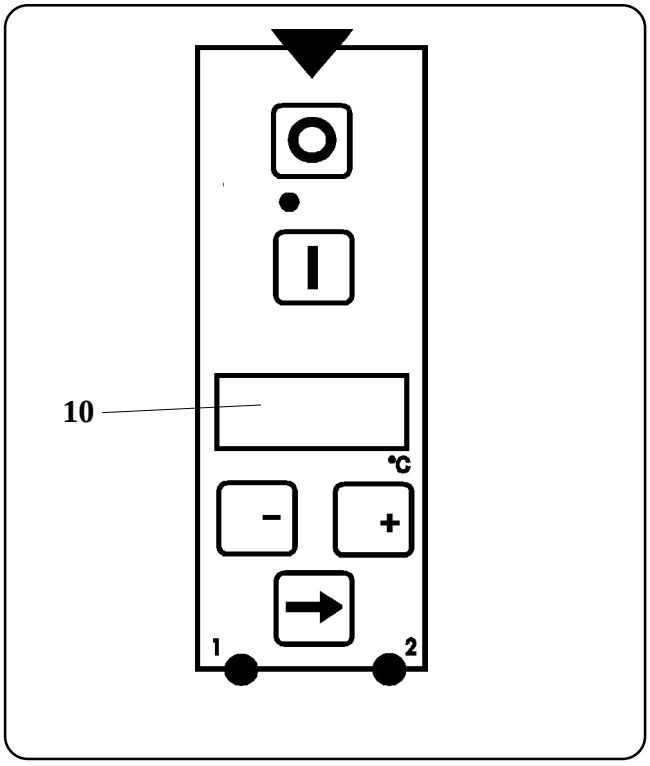
If the figure 100 is displayed, it is necessary to reprogram the programmer.

The temperature indicator (10) can display one of the two following values :

254 : indication of a short circuit of the PT100 probe of the adjustment shoe of the cylinder temperature.

255 : indication of a cutoff of the PT100 probe of the adjustment shoe of the cylinder temperature.

It is, in this case, necessary to change the probe of the adjustment shoe of the cylinder temperature.



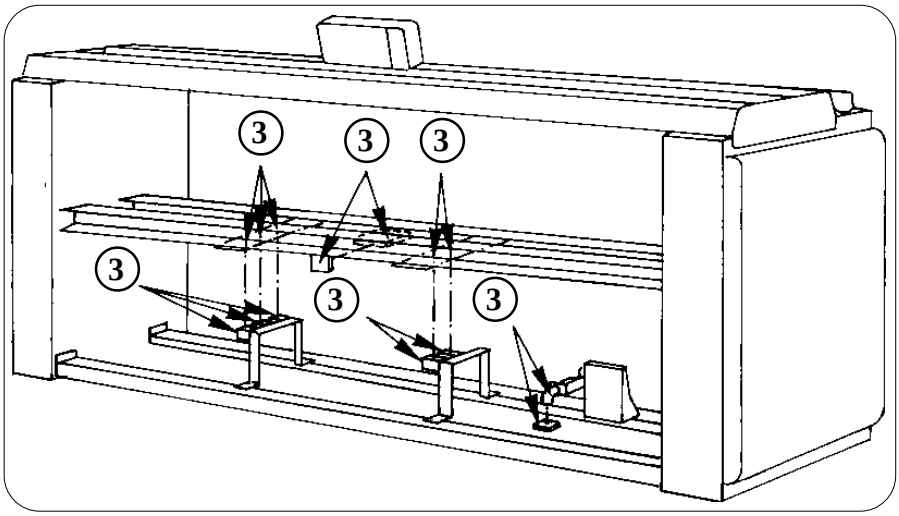
Check the water quality (TH / TAC).

Check the calcareous rate of the linen (ash rate).

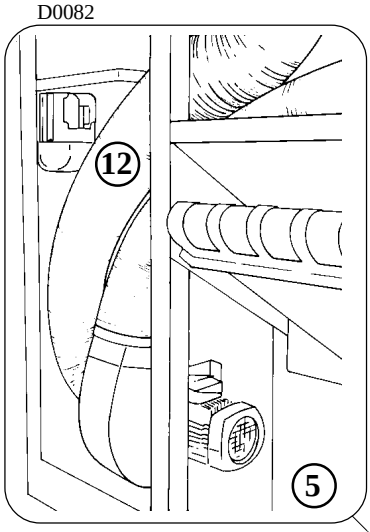
The productivity and the quality of ironing/folding are directly linked to the washing quality.

Check that all these conditions are fulfilled.

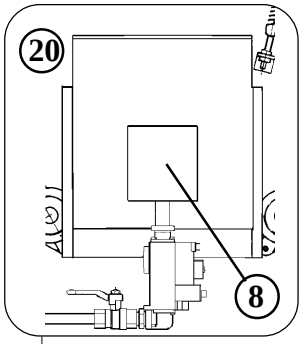
D0085



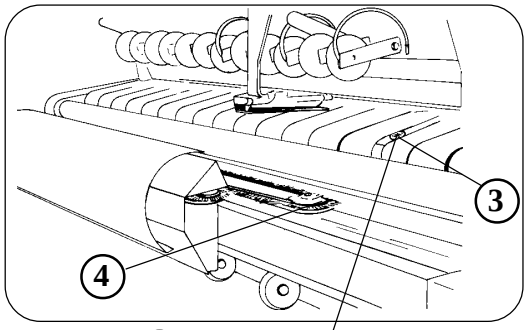
D0082



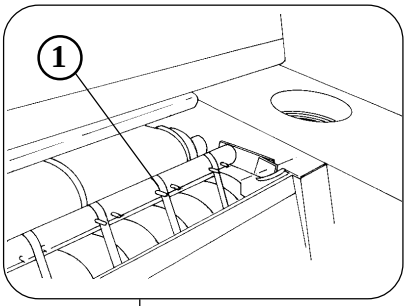
D0579

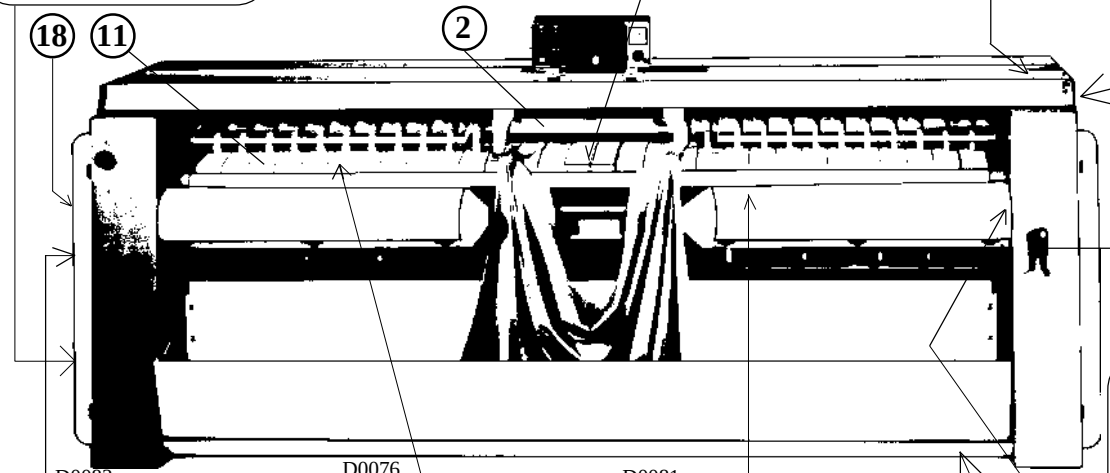


D0074

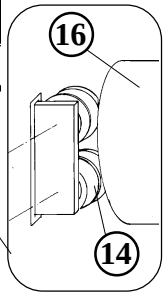


D0073

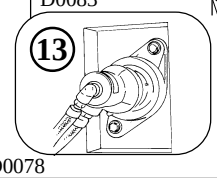




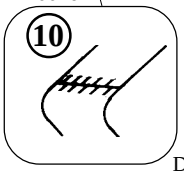
D0084



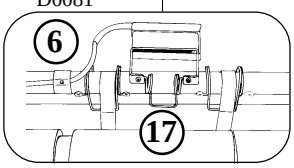
D0083



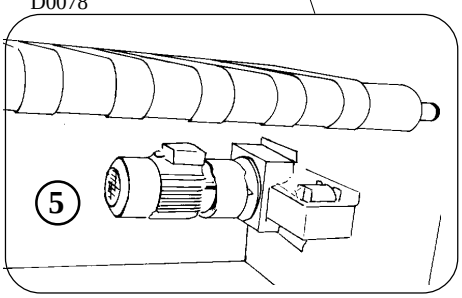
D0076



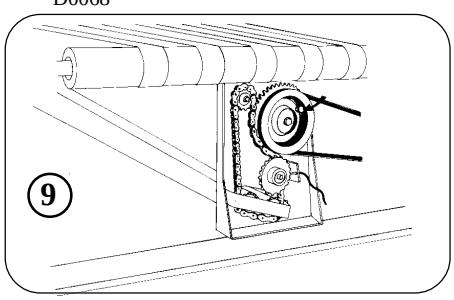
D0081



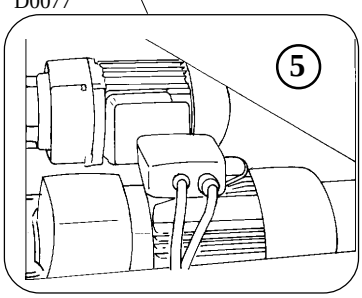
D0078



D0068



D0077



CAREFUL :

SHUT OFF THE POWER SUPPLY OF THE MACHINE BEFORE ANY MAINTENANCE OR REPAIR INTERVENTION IS CARRIED OUT AND MAKE SURE THAT THE CYLINDER IS COLD.

DAILY.

1. Check that the parting strips are intact and replace if necessary.

2. Check that the finger protection is working.

3. Clean the photocells and the reflectors.

4. Clean the smoothing brushes.

WEEKLY.

5. Clean the fan grates of motors.

6. Clean the stripper fingers and the thermostat attachment.

7. Clean the ironer, internal and external, from dust.

MONTHLY.

8. Clean the gas filters (only for gas heated machines).

9. Grease the chains and bearings (see lubrication table on the following pages).

10. Check the condition of the ironing strips and of the clips. Change if necessary.

11. Check the feeding bands and their drive.

12. Clean the whole suction device.

13. Grease the support rollers of the steam cylinder with a high temperature grease (see lubrication table).

EVERY SIX MONTHS.

14. Clean and check the rollers guides of the cylinder.

15. Check that the crank is working.

ONCE A YEAR.

16. Check the cleanliness of the cylinder.

17. Check that the thermostat is working.

18. Check the heating elements, wires and connections (only for electric heated machines).

19. Check and clean the outer pipes.

20. Check the gas inlet.
Clean pressure reducer filters.
Check electronic ignition.
Check the position of the ignition electrodes and flame control.
Check operation of the gas solenoid valve.

CAUTION

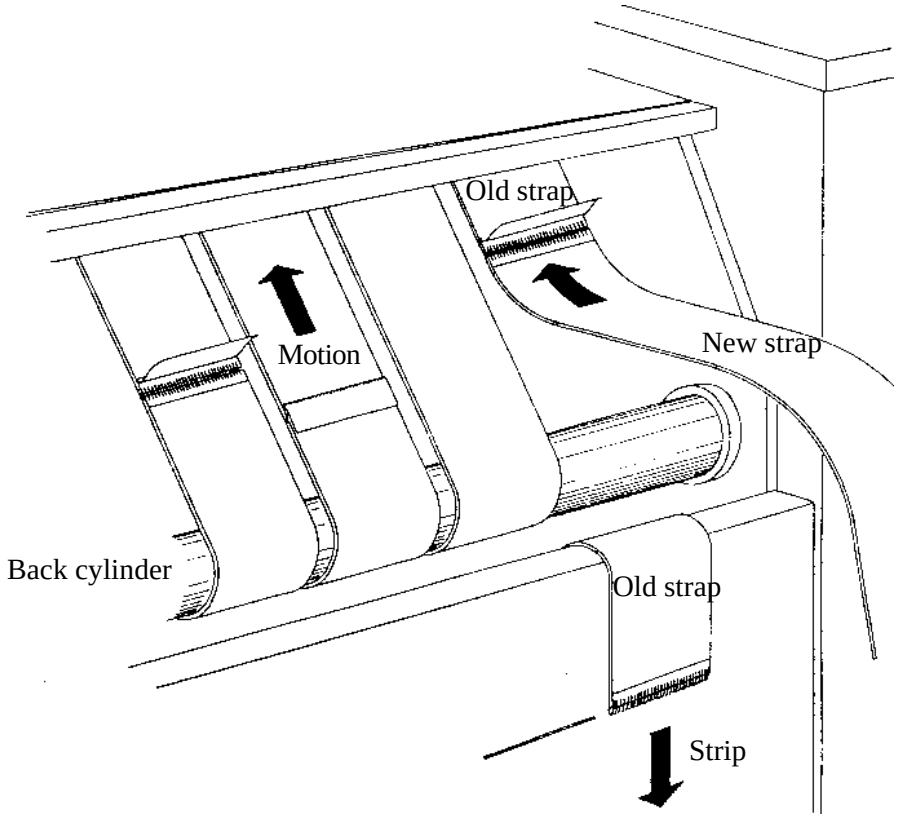
TO ENSURE THAT YOUR MACHINE GIVES THE VERY BEST SERVICE, PLEASE TAKE CARE THAT MAINTENANCE IS CARRIED OUT IN STRICT ACCORDANCE WITH THE INSTRUCTIONS ABOVE MENTIONED.

CAUTION.

THE STRIPS TENSION HAS BEEN ADJUSTED AT THE FACTORY WHEN THE MA CHINE WAS HOT.
NEVER TIGHTEN THEM AGAIN. THEIR TENSION SHOULD BE AS LOW AS POSSI BLE (JUST ENOUGH TO ALLOW THEM TO BE DRIVEN CORRECTLY).
IF THE STRIPS ARE TIGHTENED TOO MUCH, THEY WILL SOON DETERIORATE.
IF YOU HAVE TO MAKE AN ADJUSTMENT, PLEASE TAKE THESE INSTRUCTIONS INTO ACCOUNT.

D0089

REPLACEMENT OF STRAPS



Motors :

The fan motor is permanently lubricated.

The movement back-geared motor is permanently lubricated.

Bearings :

They are permanently lubricated, except the two steam cylinder bearings, that should be greased with high temperature grease.

Heat control :

Make sure that the shoes of the thermostatic control and of the safety control devices are always clean and in cylinder contact.

Gas heating :

Check that the gas burner is working properly every year.
Periodically check and clean the fluff filter.

Drum :

The drum must be kept very clean to make ironing easier and must be of a very high quality.

Deposits of washing powder or lime must be removed as soon as they start to affect the quality of the ironing.

The use of VERY FINE saddle grinder ONLY is recommended (grain 180 or Scotch Brite 3M BFB-AM).

THIS SHOULD BE RUBBED IN THE SAME DIRECTION AS THE LINEN IS PASSED THROUGH THE MACHINE.

Should the machine be stopped for a long period, in order to avoid any oxidation of the drum, a sheet impregnated with paraffin wax should be fed through the machine.

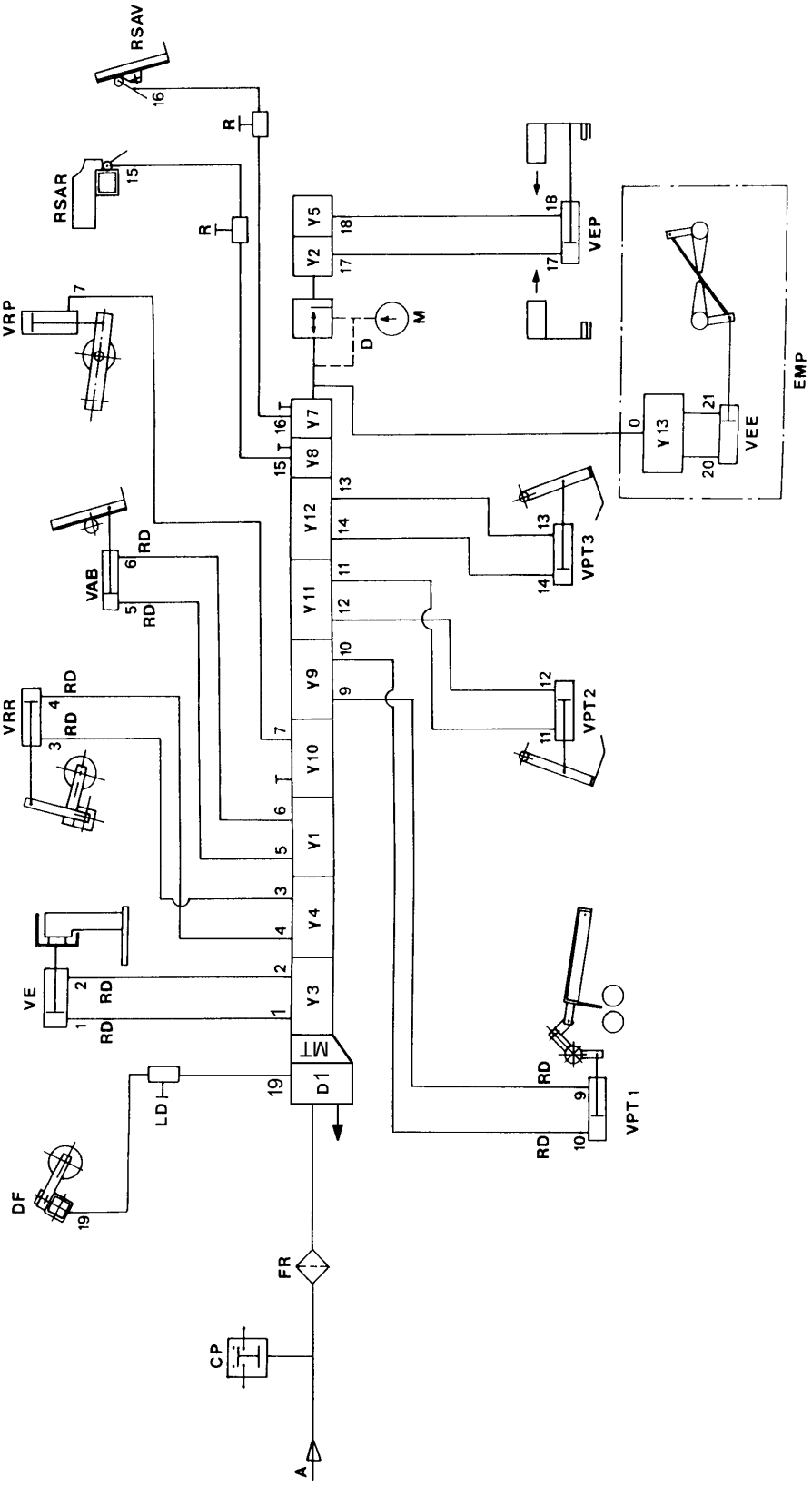
Using an old sheet, grate a little paraffin wax onto half of the unfolded sheet, fold in half and then run it through the flatwork-ironer while it is still hot enough.

If the machine is to be left unused for a longer period, it is advisable to oil the drum slightly (anti-rust oil ref. 96010012)

t0130gb

LUBRICATION TABLE

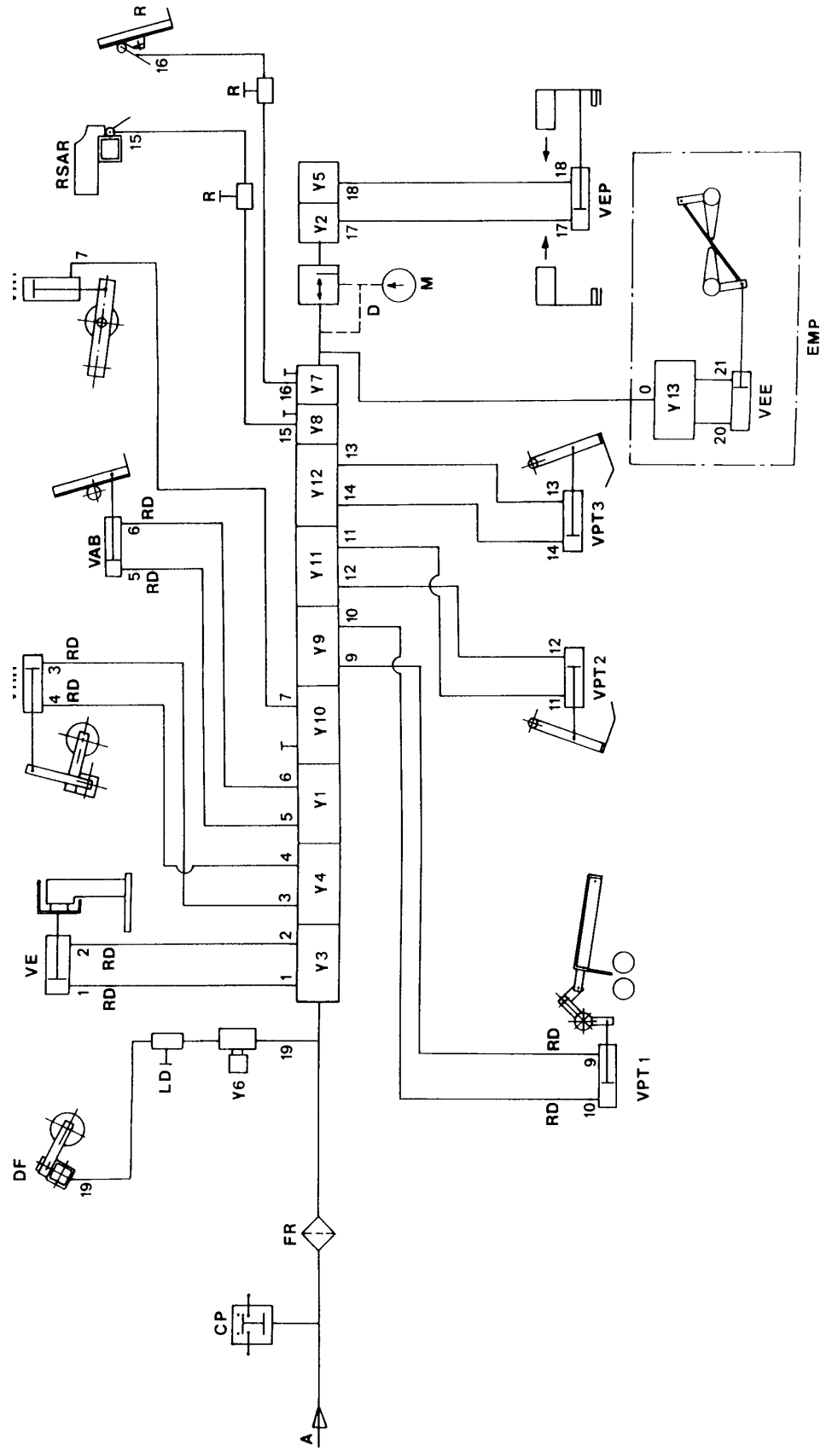
USES	Rolling bearings Bearings	Rolling bearings Bearings high temperature	Assembly paste (fretting corrosion)	Bare gears Chains shafts Thread Slides	Flange joints Union pipes Steam circuits	Reducers with wheels and screws	Reducers with gears	Circuits and pneumatic devices
TYPES OF LUBRICANTS AND STANDARDIZATION	Lithium soap grease	Lithium soap grease + silicone oil	Lithium soap paste + mineral oil + mineral solid greases	Lithium soap grease with MO SE additive	Graphite grease mini 60% graphite special leakproof	Extreme high pressure oil	Extreme high pressure oil	Inhibited oil SAE5
	Grade ISO NLGI 2	Grade ISO NLGI 3	Grade ISO NLGI 1	Grade ISO NLGI 2	Grade ISO NLGI 2	Grade ISO VG 150	Grade ISO VG 220	Grade ISO VG 22
TEMPERATURE LIMIT RANGE	- 20°C + 140°C	- 40°C + 200°C	- 20°C + 150°C	- 20°C + 135°C	- 30°C + 700°C	- 0°C + 100°C	- 0°C + 120°C	- 10°C + 65°C
RECOMMENDED	ALVANIA R2	NTN SH 44 M	ALTEMP Q.NB.50	MI-SETRAL 43N	GRACO AF 309	REDUCTELF SP 150	REDUCTELF SP 220	LUBRA K ATL SAE 5 W
CODE PRODUCT	96011008	--	--	96011000	96011004	96010001	96010004	96010030
CORRESPONDENCE **ANTAR**	ROLEXA 2			EPOXA MO 2		EPONA Z 150	EPONA Z 220	MISOLA AH
BP	LS EP2					ENERGOL CRXP 150	ENERGOL CRXP 220	SHF 22
CASTROL	SPEEROL EP 2					ALPHA SP 150	ALPHA SP 220	
ELF	EP2			STATERMA MO 10		REDUCTELF SP 150	REDUCTELF SP 220	SPINEF 22
ESSO	BEACON EP2			MULTI PURPOSE GREASE MOLY		SPARTAN EP 150	SPARTAN EP 220	SPINESSO 22
FINA	MARSON EP2					GIRAN SR 150	GIRAN SP 220	
GBSA					BELLEVILLE N			
GRAFOIL					GRACO AF 309			
KLUBER	CENTOPLEX 2	UNISILKON L50Z	ALTEMP Q.NB.50	UNIMOLY GL 82	WOLFRACOAT C	LAMORA 150	LAMORA 220	CRUCOLAN 22
MOBIL	MOBILUX					MOBILGEAR 629	MOBILGEAR 630	DTE 24
KERNITE	LUBRA K LC			LUBRA K MP		TOP BLENB ISO 80W90	TOP BLEND ISO 220	LUBRA K ATL SAE 5W
SETRAL				MI-SETRAL 43N				
SHELL	ALVANIA R2			RETINA AM		OMALA 150	OMALA 220	TELLUS 22
TOTAL	MULTISS EP2					CARTER EP 150	CARTER EP 220	EQUIVIS 22
MOLYKOTE		MOLYCOTE 44	PATE DX					
OPAL	GEVAIR SP			SUPER MOS 2		GEAROPAL GM 65 ISO 150	GEAROPAL GM75 ISO 220	HYDROPAL HO 110 HM ++22
ITECMA	GRL-ULTRA	VULCAIN		GMO	LHT-C	DURAGEAR 80 W 140		AEROSYN


RSAV
16
R
RSAR
15
R
VRP
7
M
D
Y5
Y2
18
17
VEP
18
17
EMP
Y13
0
21
20
VEE
Y7
Y8
Y12
Y11
Y9
Y10
Y1
Y4
Y3
MT
D1
16
15
13
14
11
12
10
9
7
6
5
3
4
2
1
19
VAB
6
5
RD
RD
VPT3
13
14
VPT2
12
11
VRR
4
RD
3
RD
VE
2
RD
1
RD
LD
19
DF
19
RD
9
10
RD
VPT1
FR
CP
A

32005552

PNEUMATIC DIAGRAM
32005552

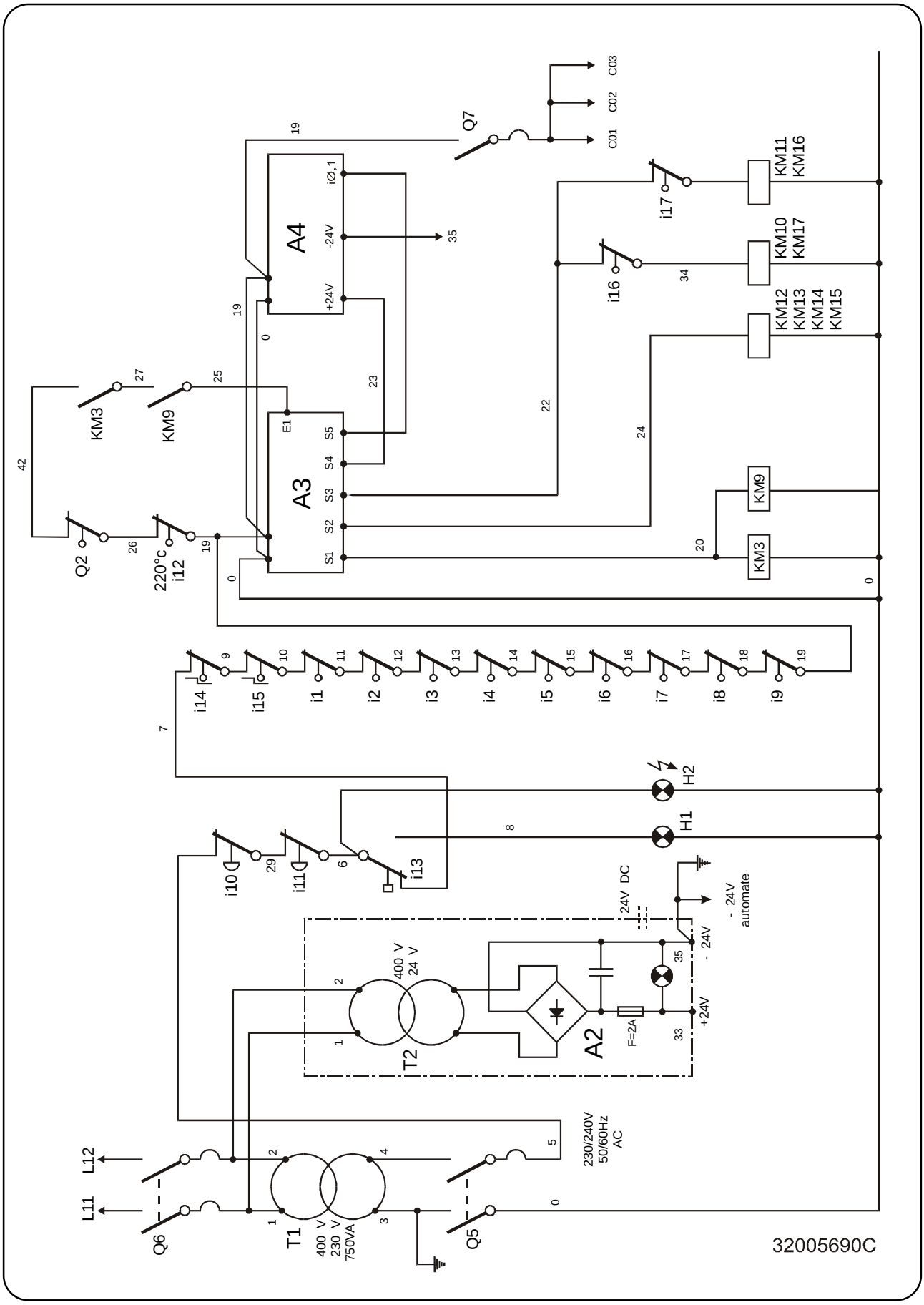
A	Compressed air supply 8 bar maxi
CP	Air shortage pressostat
FR	Regulating filter 5 microns (adjustment 5 bar)
DF	Smoothing supply
VE	Feeding jack
VRR	Small wheels lift jack
VAB	Vat joint jack
VRP	Roller lift jack
RSAR	Rear blowing burner supply
RSAV	Front blowing burner supply
LD	Flow limiter
RD	Flow reducer
R	Adjusting valve
D1	Distributor
MT	Transfer module
Y2 to Y11	Distributor
D	Pressure reducing valve 2/3 bar
M	Manometer
EL1-EL2	NF electrovalve
VPT1	First fold cross-folding jack
VPT2	Second fold cross-folding jack
VPT3	Third fold cross-folding jack
VEP	Feeding clamps spreading jack
EMP	Stacker
VEE	Sheet stacking jack


R
16
R
RSAR
15
R
7
Y5
18
Y2
17
18
VEP
17
M
D
EMP
16
Y7
15
Y8
13
Y12
14
0
Y13
21
VEE
20
13
VPT3
14
RD
VAB
6
5
RD
11
Y11
12
10
Y9
9
12
VPT2
11
RD
3
4
RD
7
Y10
6
Y1
5
4
Y4
3
2
Y3
1
VE
2
RD
1
RD
RD
9
VPT1
10
RD
19
LD
Y6
19
DF
19
FR
CP
A

32005552B

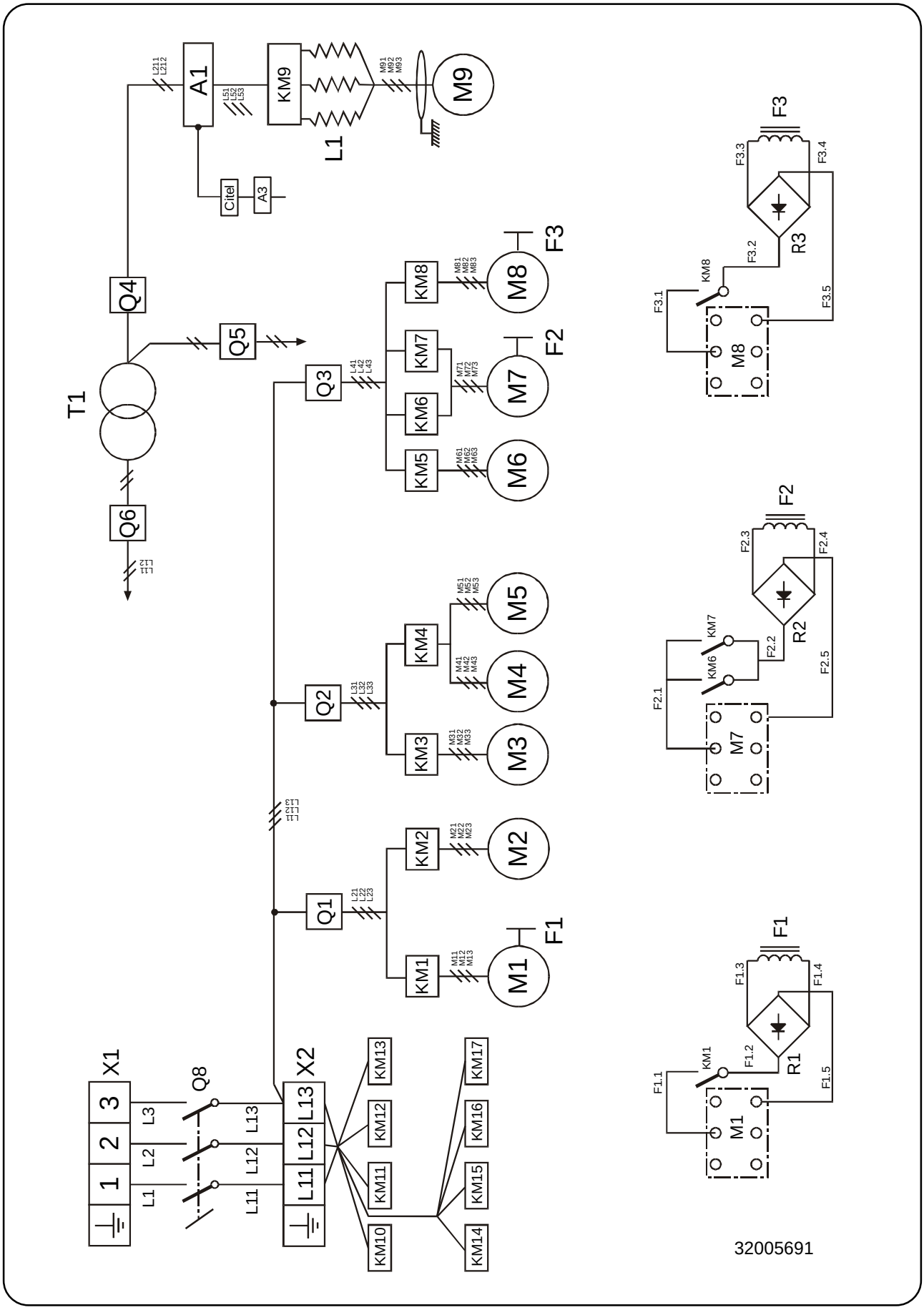
PNEUMATIC DIAGRAM
32005552B

A	Compressed air supply 8 bar maxi
CP	Air shortage pressostat
FR	Regulating filter 5 microns (adjustment 5 bar)
DF	Smoothing supply
VE	Feeding jack
VRR	Small wheels lift jack
VAB	Vat joint jack
VRP	Roller lift jack
RSAR	Rear blowing burner supply
RSAV	Front blowing burner supply
LD	Flow limiter
RD	Flow reducer
R	Adjusting valve
Y2 to Y11	Distributor
D	Pressure reducing valve 2/3 bar
M	Manometer
EL1-EL2-EL3	NF electrovalve
VPT1	First fold cross-folding jack
VPT2	Second fold cross-folding jack
VPT3	Third fold cross-folding jack
VEP	Feeding clamps spreading jack
EMP	Stacker
VEE	Sheet stacking jack


L11
L12
Q6
Q5
T1
400 V
230 V
750VA
230/240V
50/60Hz
AC
T2
400 V
24 V
A2
F=2A
24V DC
- 24V
automate
+24V
A3
A4
S1
S2
S3
S4
S5
E1
-24V
+24V
Q7
C01
C02
C03
KM3
KM9
KM11
KM16
KM10
KM17
KM12
KM13
KM14
KM15
i1
i2
i3
i4
i5
i6
i7
i8
i9
i10
i11
i12
i13
i14
i15
i16
i17
220°c
H1
H2
32005690C

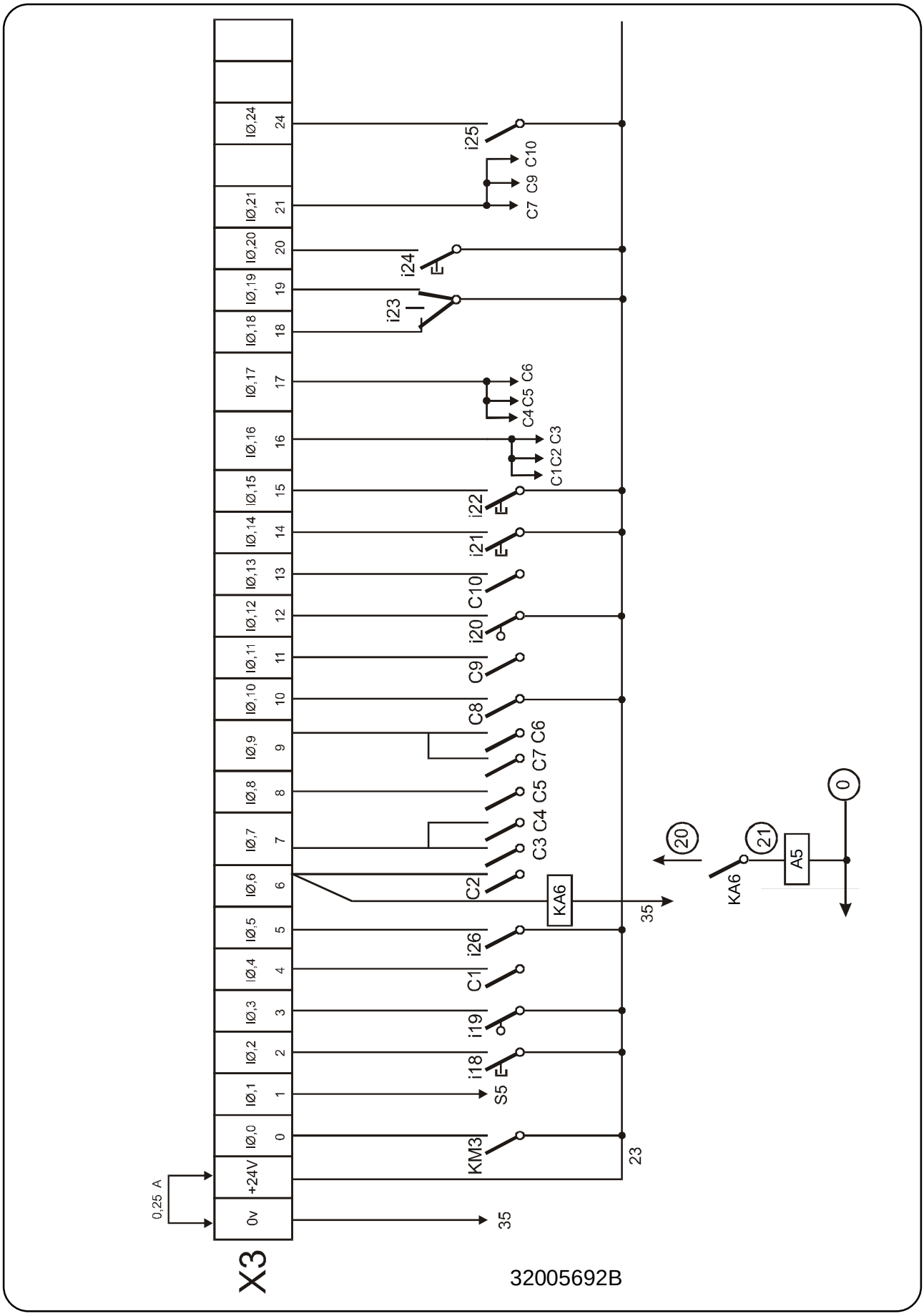
CONTROL CIRCUIT
Steam/electric heating
32005690C

T1	Isolating transformer 750 VA	
T2	Distribution circuit transformer 24 V	same part
A2	Distribution circuit rectifier 24 V DC	
A3	Programmer / block diagram	
A4	Programmable automate	
H1	Air shortage indicator	
H2	Stacker indicator	
Q2	Fan breaker contact	
Q5	Two-pole breaker ph + N 2A secondary	
Q6	Two-pole breaker 2 A primary	
Q7	Two-pole breaker 2 A (common outputs)	
I1	Thermal contact stacker table motor	
I2	Thermal contact pile evacuation motor	
I3	Thermal contact fan motor	
I4	Thermal contact smoothing motor	
I5	Thermal contact smoothing motor	
I6	Thermal contact cross-folding motor	
I7	Thermal contact longitudinal folding motor	
I8	Thermal contact rear evacuation motor	
I9	Thermal contact motion motor	
I10	Ironer emergency stop	
I11	Stacker emergency stop	
I12	Safety thermostat 220°C	
I13	Air shortage pressostat	
I14	Finger protection right flap position switch	
I15	Finger protection left flap position switch	
I16	Regulating left thermostat	
I17	Regulating right thermostat	
KM3	Fan contactor	
KM9	Motion contactor	


A1
KM9
M9
L1
Citel
A3
Q4
Q5
T1
Q6
Q3
KM8
KM7
KM6
KM5
M8
M7
M6
F3
F2
Q2
KM4
KM3
M5
M4
M3
Q1
KM2
KM1
M2
M1
F1
X1
Q8
X2
KM13
KM12
KM11
KM10
KM17
KM16
KM15
KM14
F3.1
F3.2
F3.3
F3.4
F3.5
R3
F2.1
F2.2
F2.3
F2.4
F2.5
R2
F1.1
F1.2
F1.3
F1.4
F1.5
R1
32005691

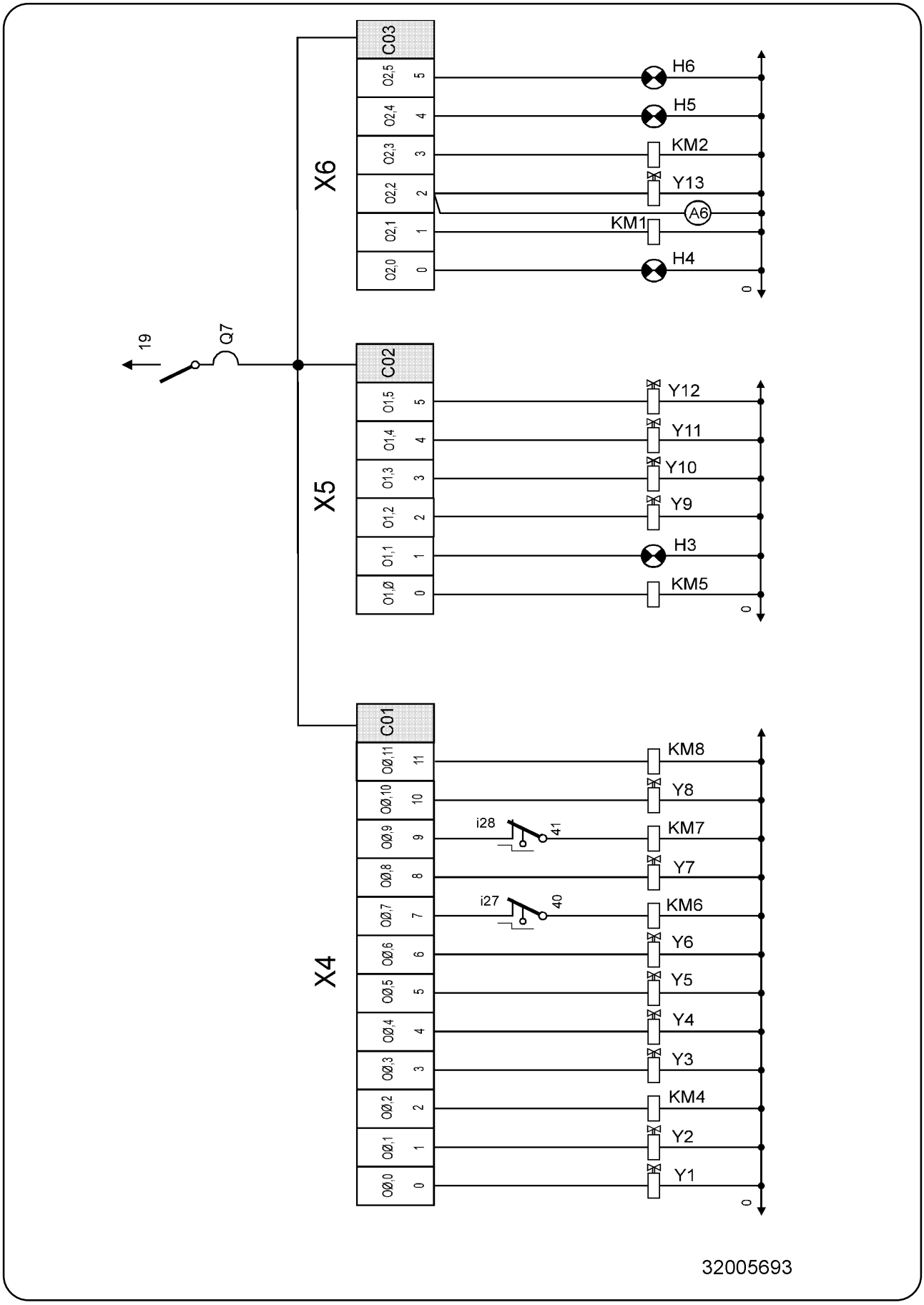
POWER CIRCUIT
32005691

X1	General supply terminal
X2	Resistors supply terminal
Q1	Three-pole motor breaker
Q2	Three-pole motor breaker
Q3	Three-pole motor breaker
Q4	Two-pole breaker 4 A
Q5	Two-pole breaker ph + N 2A
Q6	Two-pole breaker 2A
Q8	General switch
T1	Insulating transformer 750 VA
L1	Feeder reactor
A1	Frequency converter
A3	Programmer
Citel	Accomodating connection
F1	Stacker table brake
F2	Longitudinal folding brake
F3	Rear evacuation brake
M1	Stacker table motor
M2	Pile evacuation motor
M3	Fan motor
M4	Smoothing right motor
M5	Smoothing left motor
M6	Cross-folding motor
M7	Longitudinal folding motor
M8	Rear evacuation motor
M9	Motion motor
KM1	Stacker table motor contactor
KM2	Pile evacuation motor contactor
KM3	Fan motor contactor
KM4	Smoothing motor contactor
KM5	Cross-folding motor contactor
KM6	Front longitudinal folding motor contactor
KM7	Rear longitudinal folding motor contactor
KM8	Rear evacuation motor contactor
KM9	Motion motor contactor
KM10 to KM17	Heating contactors
R1	Rectifier for brake F1
R2	Rectifier for brake F2
R3	Rectifier for brake F3


X3
0v
+24V
0,25 A
IØ,0
IØ,1
IØ,2
IØ,3
IØ,4
IØ,5
IØ,6
IØ,7
IØ,8
IØ,9
IØ,10
IØ,11
IØ,12
IØ,13
IØ,14
IØ,15
IØ,16
IØ,17
IØ,18
IØ,19
IØ,20
IØ,21
IØ,24
0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
24
KM3
S5
i18
i19
C1
i26
KA6
C2
C3 C4 C5 C6 C7
C8
C9
i20
C10
i21
i22
C1 C2 C3
C4 C5 C6
i23
i24
C7 C9 C10
i25
23
35
35
20
21
KA6
A5
0
32005692B

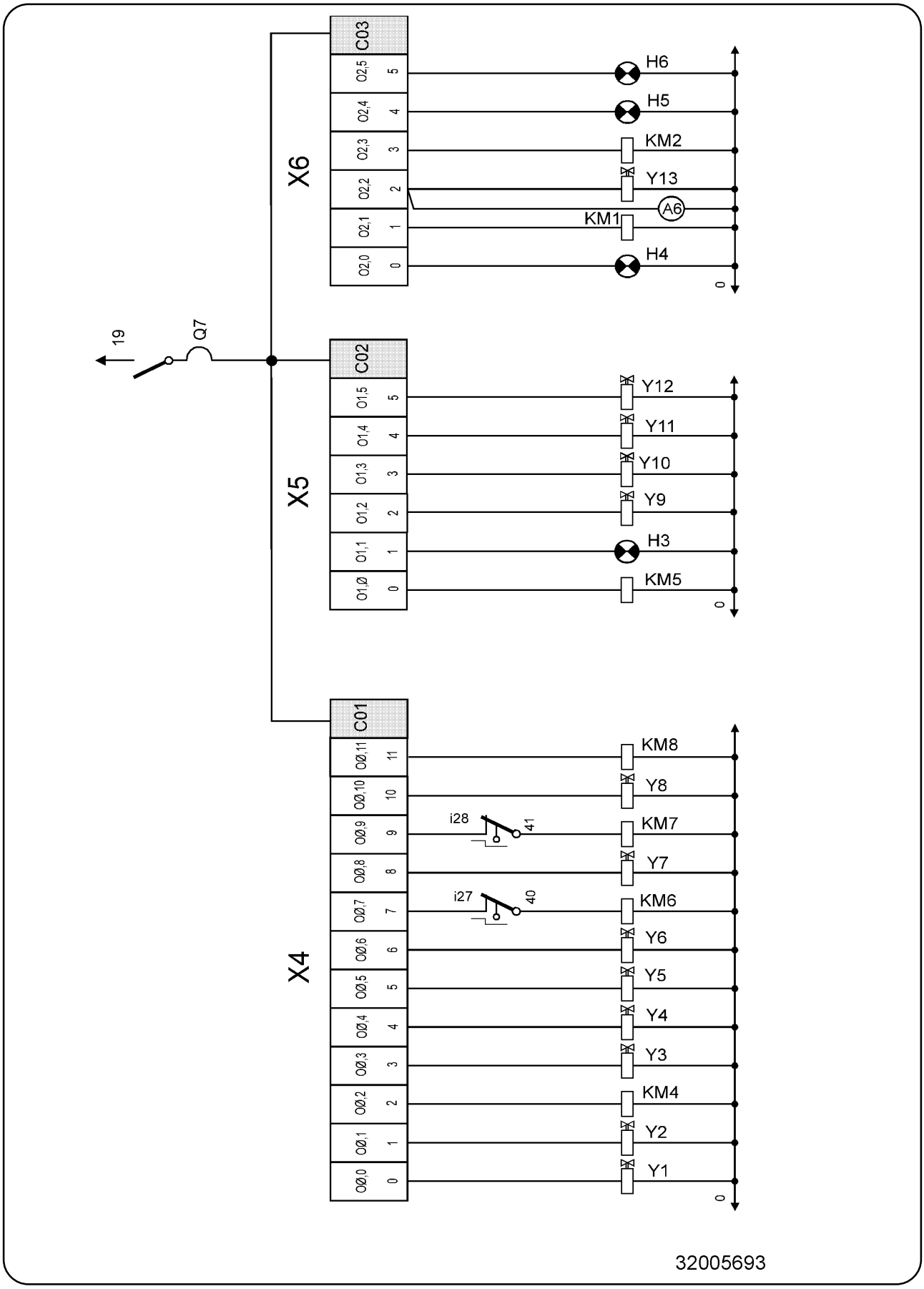
AUTOMATE INPUTS
32005692B

A5	Control box for antistatic bar
IØ,O	Run / stop
IØ,1	With/without folding
IØ,2	Feeding push button
IØ,3	Jack sensor
IØ,4	Sheet feeding detection (C1)
IØ,5	Longitudinal sheet measurement
IØ,6	Longitudinal folding (C2) led 6,2
IØ,7	Longitudinal folding safety device (C3-C4)
IØ,8	Cross-folding (C5)
IØ,9	Detector for transversal measurement (C6-C7)
IØ,10	Sheet detection at ironer delivery (C8)
IØ,11	Sheet on stacker (C9)
IØ,12	Stacker jack sensor
IØ,13	Pile completed on stacker (C10)
IØ,14	Pile evacuation push-button
IØ,15	Reclosing/initialization push-button
IØ,16	Dirty cell detection (C1-C2-C3)
IØ,17	Dirty cell detection (C4-C5-C6)
IØ,18	Feeding switch without folding
IØ,19	Third fold suppression switch
IØ,20	Rear ejection push-button
IØ,21	Dirty cell detection (C7-C8-C9-C10)
IØ,24	Cross-folding measurement / stacker centering
X3	Inputs connection terminal on automate A4
C1	Feeding sheet photocell
C2	Longitudinal folding photocell
C3	Longitudinal folding safety device photocell
C4	Longitudinal folding safety device photocell
C5	Cross-folding photocell
C6	Detection for transversal measurement photocell
SC7	Detection for transversal measurement photocell
C8	Ironer delivery detection photocell
C9	Sheet detection on stacker photocell
C10	Pile completed on stacker photocell
KA6	Control box relay for antistatic bar
KM3	Fan contactor
i18	Feeding push-button
i19	Feeding position switch
i20	Stacker jack position switch
i21	Pile evacuation push-button
i22	Reclosing initialization push-button
i23	Switch without folding / without third fold] 3 positions
i24	Rear ejection push-button
i25	Cross-folding measurement inductive detector
i26	Longitudinal folding measurement inductive detector


X6
C03
O2,5 5
O2,4 4
O2,3 3
O2,2 2
O2,1 1
O2,0 0
H6
H5
KM2
Y13
A6
KM1
H4
0
19
Q7
X5
C02
O1,5 5
O1,4 4
O1,3 3
O1,2 2
O1,1 1
O1,Ø 0
Y12
Y11
Y10
Y9
H3
KM5
0
X4
C01
OØ,11 11
OØ,10 10
OØ,9 9
OØ,8 8
OØ,7 7
OØ,6 6
OØ,5 5
OØ,4 4
OØ,3 3
OØ,2 2
OØ,1 1
OØ,0 0
KM8
Y8
i28
41
KM7
Y7
i27
40
KM6
Y6
Y5
Y4
Y3
KM4
Y2
Y1
0
32005693

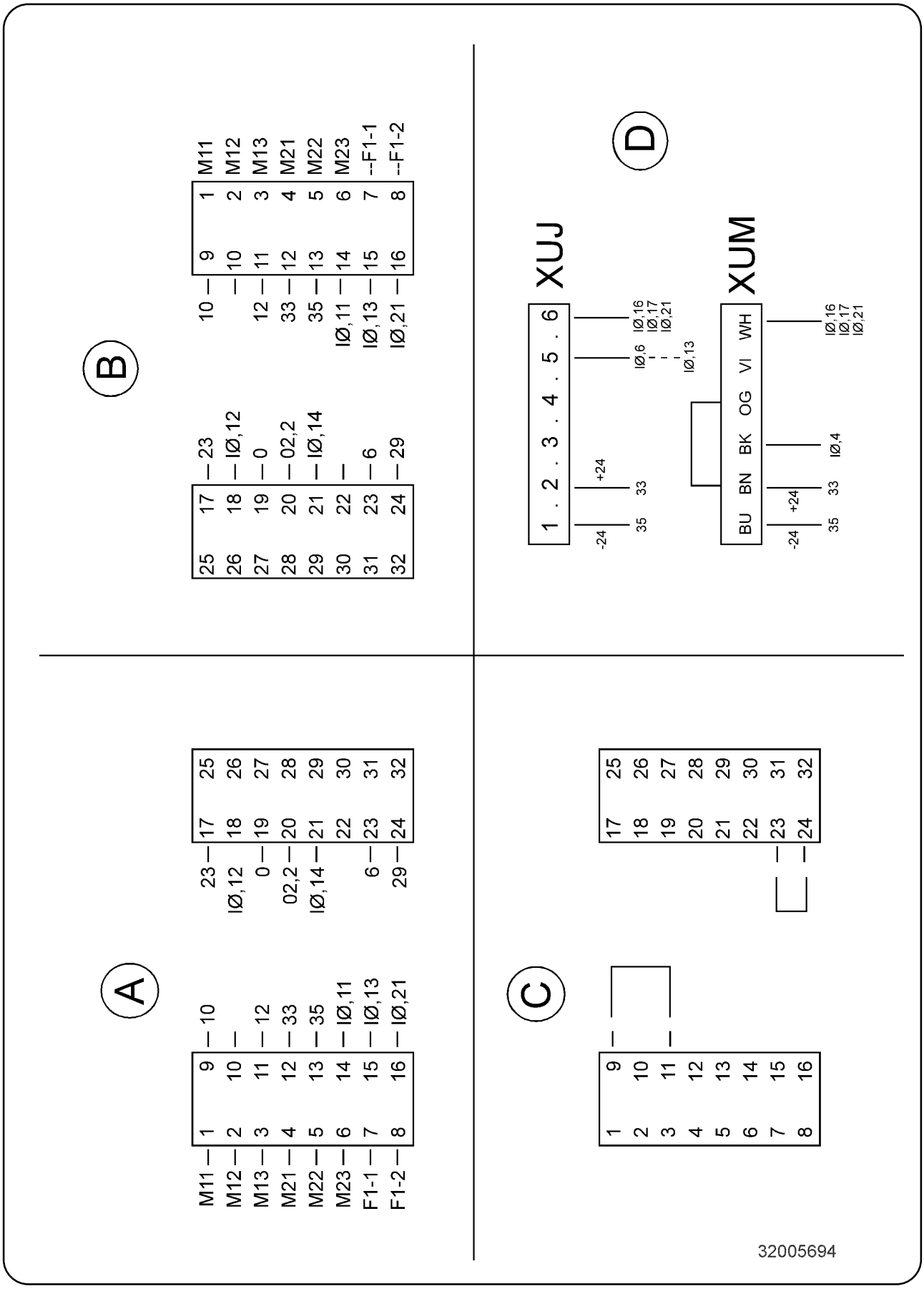
AUTOMATE OUTPUTS
32005693

OØ,O	Vat without folding
Y1	Vat without folding pneumatic distributor
OØ,1	Clamps spreading
Y2	Clamps spreading penumatic distributor
OØ,2	Smoothing
KM4	Smoothing motor contactor
OØ,3	Clamps movement
Y3	Clamps movement pneumatic distributor
OØ,4	Clamps unblocking (small wheels)
Y4	Clamps unblocking pneumatic distributor
OØ,5	Clamps drawing nearer
Y5	Clamps drawing nearer pneumatic distributor
OØ,6	Feeding blow
Y6	Feeding blow pneumatic distributor
OØ,7	Front longitudinal folding (led 6-3)
i27	Front folding position switch
KM6	Front longitudinal folding motor contactor
OØ,8	Front blow
Y7	Front blow pneumatic distributor
OØ,9	Rear folding (led 6-4)
i28	Rear folding position switch
KM7	Rear longitudinal folding motor contactor
OØ,10	Rear blow
Y8	Rear blow pneumatic distributor
OØ,11	Sheet evacuation
KM8	Rear evacuation motor contactor
O1,0	Drive of transversal bands
KM5	Cross-folding motor contactor
O1,1	Rear evacuation indicator (led 6-5)
H3	Sheet evacuation indicator


X6
C03
O2,5 5
O2,4 4
O2,3 3
O2,2 2
O2,1 1
O2,0 0
H6
H5
KM2
Y13
A6
KM1
H4
0
19
Q7
X5
C02
O1,5 5
O1,4 4
O1,3 3
O1,2 2
O1,1 1
O1,Ø 0
Y12
Y11
Y10
Y9
H3
KM5
0
X4
C01
OØ,11 11
OØ,10 10
OØ,9 9
OØ,8 8
OØ,7 7
OØ,6 6
OØ,5 5
OØ,4 4
OØ,3 3
OØ,2 2
OØ,1 1
OØ,0 0
KM8
Y8
i28
41
KM7
Y7
i27
40
KM6
Y6
Y5
Y4
Y3
KM4
Y2
Y1
0
32005693

AUTOMATE OUTPUTS (continued)
32005693

O1,2	First cross-folding blade lowering (led 6-6)
Y9	First fold blade lowering pneumatic distributor
O1,3	Evacuation roller lifting
Y10	Roller lifting pneumatic distributor
O1,4	Second cross-folding blade folding (led 6-7)
Y11	Second fold blade folding pneumatic distributor
O1,5	Third cross-folding blade folding (led 6-8)
Y12	Third fold blade folding pneumatic distributor
O2,0	Safety positive device indicator
H4	Safety positive device indicator
O2,1	Stacker table bands «ON»
KM1	Table motor contactor
O2,2	Stacker table opening (led 6-11)
A6	Stacker meter
Y13	Stacker table opening pneumatic distributor
O2,3	Pile evacuation
KM2	Pile evacuation motor contactor
O2,4	Completed pile indicator
H5	Completed pile indicator
O2,5	Dirty cell
H6	Dirty cell indicator
X4	Outputs on automate A4 connection terminal
X5	Connection terminal on outputs extension
X6	Connection terminal on outputs extension


A
M11 — 1 — 9 — 10
M12 — 2 — 10 —
M13 — 3 — 11 — 12
M21 — 4 — 12 — 33
M22 — 5 — 13 — 35
M23 — 6 — 14 — IØ,11
F1-1 — 7 — 15 — IØ,13
F1-2 — 8 — 16 — IØ,21
23 — 17 — 25
IØ,12 — 18 — 26
0 — 19 — 27
02,2 — 20 — 28
IØ,14 — 21 — 29
6 — 23 — 31
29 — 24 — 32
B
10 — 9 — 1 M11
— 10 — 2 M12
12 — 11 — 3 M13
33 — 12 — 4 M21
35 — 13 — 5 M22
IØ,11 — 14 — 6 M23
IØ,13 — 15 — 7 --F1-1
IØ,21 — 16 — 8 --F1-2
23 — 17 — 25
IØ,12 — 18 — 26
0 — 19 — 27
02,2 — 20 — 28
IØ,14 — 21 — 29
— 22 — 30
6 — 23 — 31
29 — 24 — 32
C
1 — 9
2 — 10
3 — 11
4 — 12
5 — 13
6 — 14
7 — 15
8 — 16
17 — 25
18 — 26
19 — 27
20 — 28
21 — 29
22 — 30
23 — 31
24 — 32
D
XUJ
1 . 2 . 3 . 4 . 5 . 6
-24
+24
35
33
IØ,6
IØ,16
IØ,17
IØ,21
IØ,13
XUM
BU BN BK OG VI WH
-24
+24
35
33
IØ,4
IØ,16
IØ,17
IØ,21
32005694

32005694

(A) Plug on stacker (front view) connection side

1 to 16 and 17 to 32	tags on plug
M11 to IØ,17 and 23 to 29	tags of threads

(B) Socket on ironer (front view) connection side

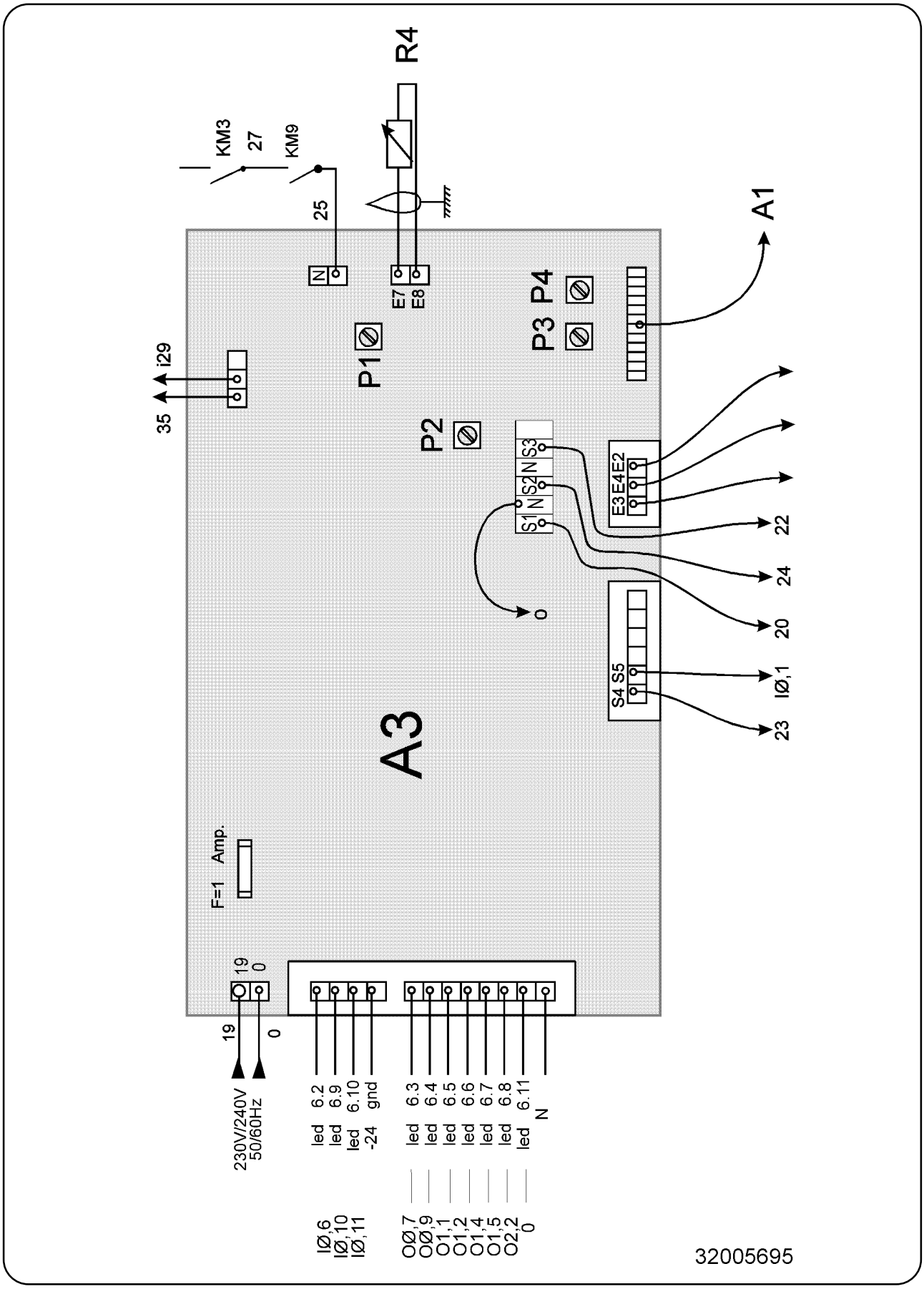
1 to 16 and 17 to 32	tags on socket
M11 to IØ,17 and 23 to 29	tags of threads

(C) Plug shunt (front view) connection side

Shunt between 9 and 11 and shunt between 23 and 24

(D) Cells connection example

XUJ and XUM types.

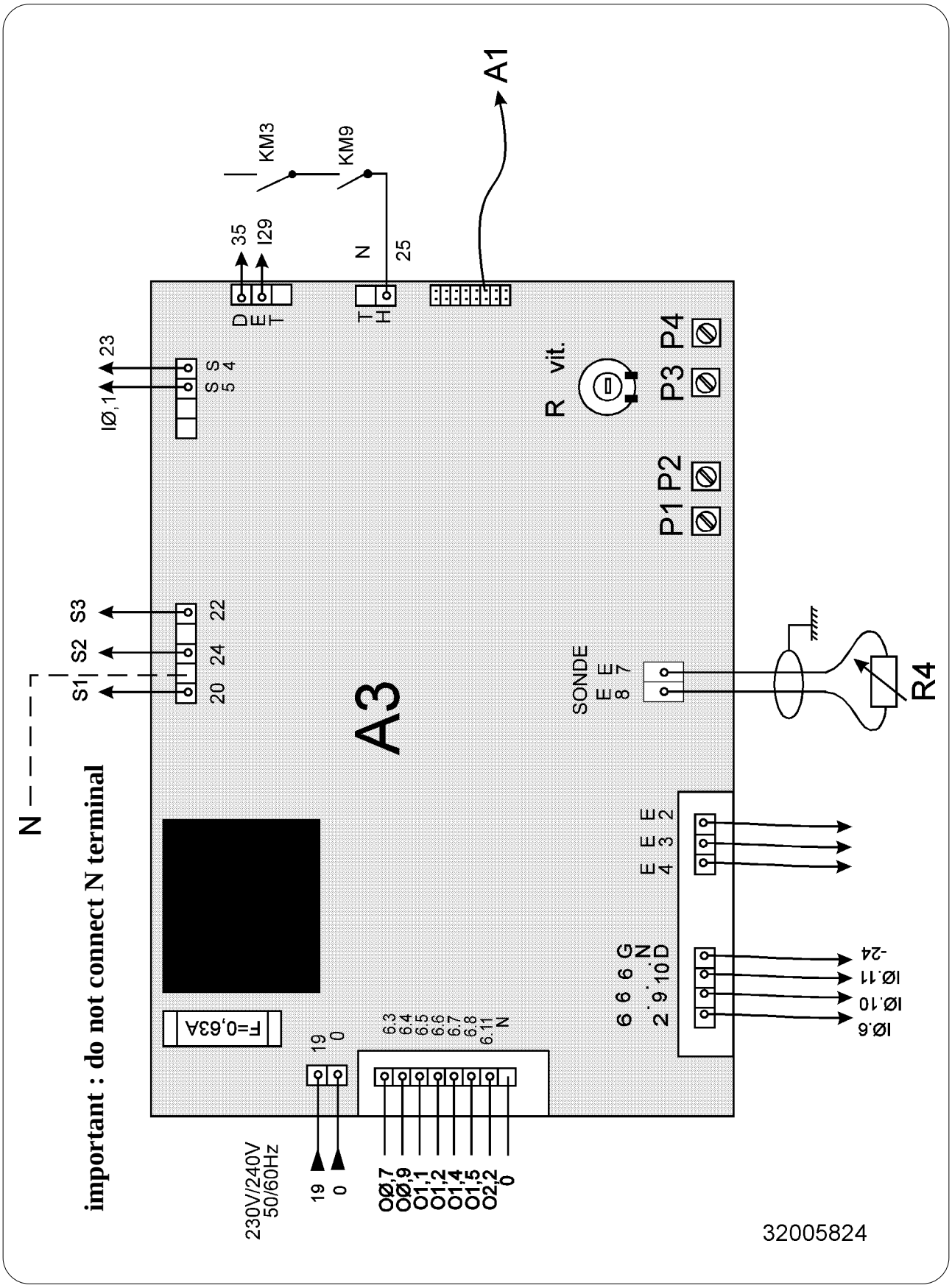

R4
KM3
27
KM9
25
A1
i29
35
P1
P2
P3
P4
E7
E8
N
S1
N
S2
N
S3
E3
E4
E2
S4
S5
A3
F=1 Amp.
19
0
230V/240V
50/60Hz
led 6.2
led 6.9
led 6.10
-24 gnd
led 6.3
led 6.4
led 6.5
led 6.6
led 6.7
led 6.8
led 6.11
N
IØ,6
IØ,10
IØ,11
OØ,7
OØ,9
O1,1
O1,2
O1,4
O1,5
O2,2
0
22
24
20
IØ,1
23
32005695

INPUTS / OUTPUTS CARD
32005695
Version number 1

A1	Frequency converter
A3	Programmer / synoptic
P1	Temperature adjustment potentiometer (do not touch)
P2	Temperature adjustment potentiometer (do not touch)
P3	Maximum speed adjustment potentiometer
P4	Minimum speed adjustment potentiometer
R4	Temperature adjustment PT100 probe
i29	Speed display detector
KM3	Fan motor contactor
KM9	Motion motor contactor
S1	Fan control output
S2	Adjusted heating control output
S3	Direct heating control output
S4 and S5	Outputs for automate control with or without folding
E2	Ignitor indicator input
E3	Ignitor indicator input
E4	Ignitor indicator input
E7	Temperature probe input
E8	Temperature probe input

Synoptic led assignment

led 6.2	Ironing output
led 6.3	Front folding
led 6.4	Rear folding
led 6.5	Rear evacuation
led 6.6	First fold
led 6.7	Second fold
led 6.8	Third fold
led 6.9	Folding output
led 6.10	Stacker
led 6.11	Completed pile


A1
KM3
KM9
35
I29
N
25
D E T
T H
23
IØ,1
S S
5 4
R vit.
P4
P3
P2
P1
S3
S2
S1
22
24
20
A3
SONDE
E E
8 7
R4
N — — — — —
important : do not connect N terminal
E E E
4 3 2
6 6 6 G
2 9 10 D
IØ.6
IØ.10
IØ.11
-24
F=0,63A
19
0
6.3
6.4
6.5
6.6
6.7
6.8
6.11
N
230V/240V
50/60Hz
19
0
OØ,7
OØ,9
O1,1
O1,2
O1,4
O1,5
O2,2
0
32005824

INPUTS / OUTPUTS CARD

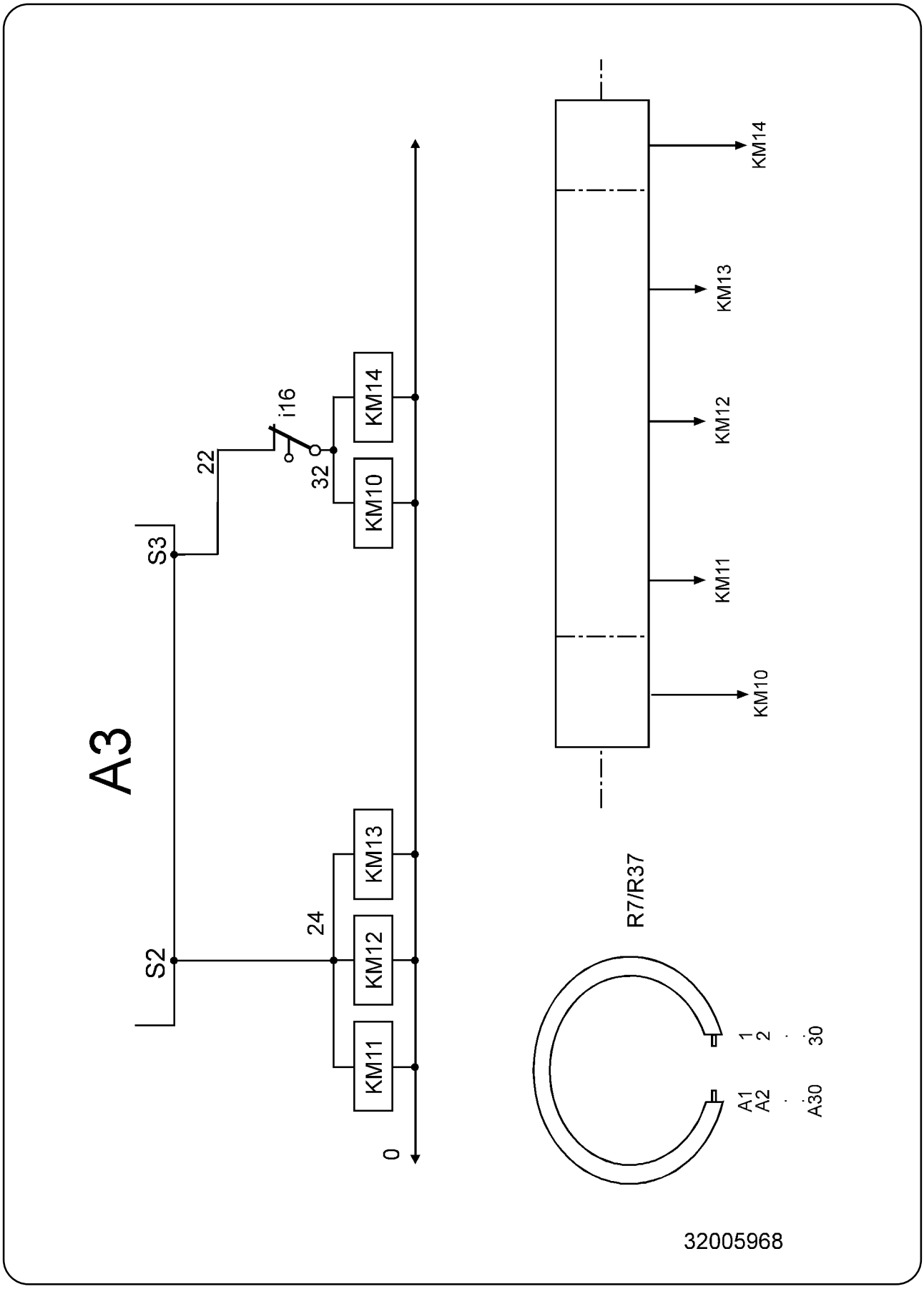
32005824

Version number 2

A1	Frequency converter
A3	Programmer / synoptic
P1	Temperature adjustment potentiometer (do not touch)
P2	Temperature adjustment potentiometer (do not touch)
P3	Maximum speed adjustment potentiometer
P4	Minimum speed adjustment potentiometer
R4	Temperature adjustment PT100 probe
i29	Speed display detector
KM3	Fan motor contactor
KM9	Motion motor contactor
S1	Fan control output
S2	Adjusted heating control output
S3	Direct heating control output
S4 and S5	Outputs for automate control with or without folding
E2	Ignitor indicator input
E3	Ignitor indicator input
E4	Ignitor indicator input
E7	Temperature probe input
E8	Temperature probe input
R vit.	Speed adjustment potentiometer

Synoptic led assignment

led 6.2	Ironing output
led 6.3	Front folding
led 6.4	Rear folding
led 6.5	Rear evacuation
led 6.6	First fold
led 6.7	Second fold
led 6.8	Third fold
led 6.9	Folding output
led 6.10	Stacker
led 6.11	Completed pile


A3
S3
S2
22
i16
32
24
KM14
KM10
KM13
KM12
KM11
0
KM14
KM13
KM12
KM11
KM10
R7/R37
1
2
30
A1
A2
A30
32005968

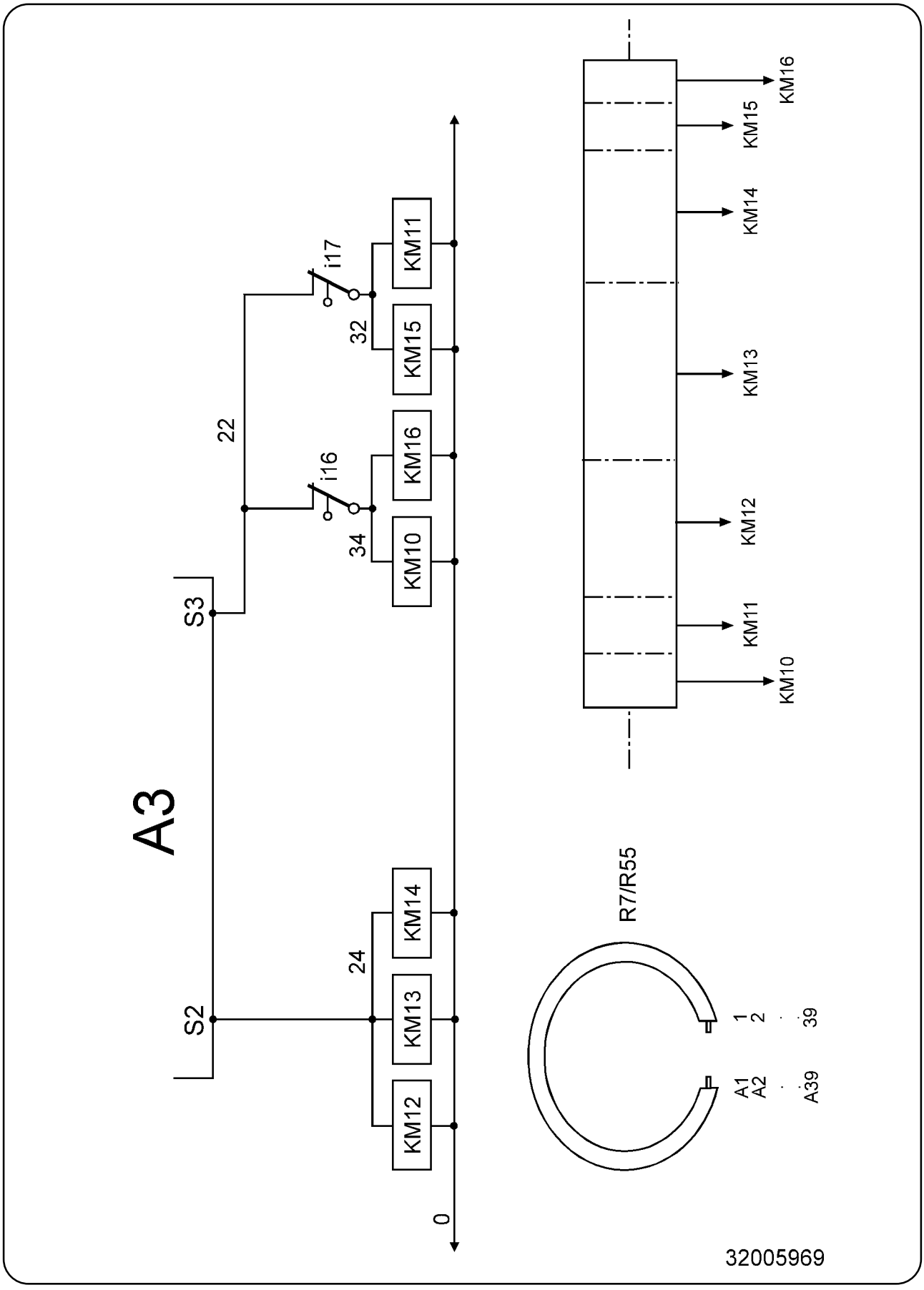
ELECTRIC HEATING
IRONER 190
32005968

A3	Programmer / synoptic
S2	Output of heating regulated by PT100
S3	Direct heating output (not regulated)
i16	Regulation left thermostat
KM11	Central zone heating contactor
KM12	Central zone heating contactor
KM13	Central zone heating contactor
KM10	Lateral zone heating contactor
KM14	Lateral zone heating contactor
R7/R37	1300 W resistors

t0051gb

MARKING OF ELECTRIC RESISTANCES

Contactor	Star				Triangle		
	Contactor wiring			Star commut.on terminal	Contactor wiring		
	terminal 1	terminal 2	terminal 3	terminal 4	terminal 1	terminal 2	terminal 3
KM10	A1 A2	A3 A4	A5 A6	1.3.5 2.4.6	A1 A2 5 6	A3 A4 1 2	A5 A6 3 4
KM11	A7 A8	A9 A10	A11 A12	7.9.11 8.10.12	A7 A8 11 12	A9 A10 7 8	A11 A12 9 10
KM12	A13 A14	A15 A16	A17 A18	13.15.17 14.16.18	A13 A14 17 18	A15 A16 13 14	A17 A18 15 16
KM13	A19 A20	A21 A22	A23 A24	19.21.23 20.22.24	A19 A20 23 24	A21 A22 19 20	A23 A24 21 22
KM14	A25 A26	A27 A28	A29 A30	25.27.29 26.28.30	A25 A26 29 30	A27 A28 25 26	A29 A30 27 28


A3
S3
S2
22
24
32
34
i17
i16
KM11
KM15
KM16
KM10
KM14
KM13
KM12
0
KM16
KM15
KM14
KM13
KM12
KM11
KM10
R7/R55
1
2
39
A1
A2
A39
32005969

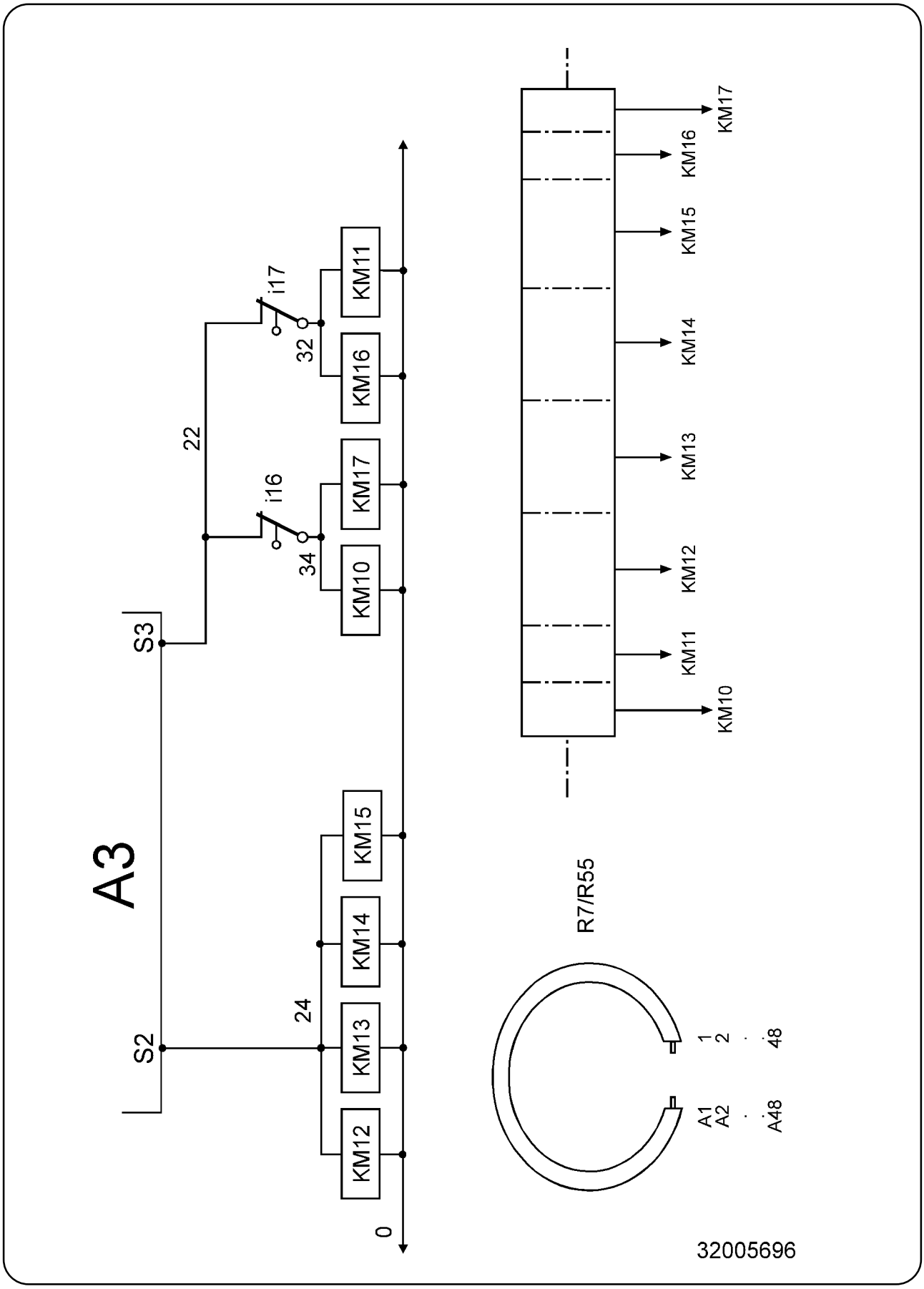
ELECTRIC HEATING IRONER 250
32005969

A3 Programmer / synoptic
S2 Output of heating regulated by PT100
S3 Direct heating output (not regulated)
i16 Regulation left thermostat
i17 Regulation right thermostat
KM12 Central zone heating contactor
KM13 Central zone heating contactor
KM14 Central zone heating contactor
KM10 Lateral zone heating contactor
KM16 Lateral zone heating contactor
KM15 Lateral zone heating contactor
KM11 Lateral zone heating contactor
R7/R46 1300 W resistors

t0050gb

MARKING OF ELECTRIC RESISTANCES

	Star				Triangle		
Contactor	**Contactor wiring**			**Star commut.on terminal**	**Contactor wiring**		
	terminal 1	terminal 2	terminal 3	terminal 4	terminal 1	terminal 2	terminal 3
KM10	A1 A2	A3 A4	A5 A6	1.3.5 2.4.6	A1 A2 5 6	A3 A4 1 2	A5 A6 3 4
KM11	A7 A8	A9 A10	A11 A12	7.9.11 8.10.12	A7 A8 11 12	A9 A10 7 8	A11 A12 9 10
KM12	A13 A14	A15 A16	A17 A18	13.15.17 14.16.18	A13 A14 17 18	A15 A16 13 14	A17 A18 15 16
KM13	A19 A20	A21 A22	A23 A24	19.21.23 20.22.24	A19 A20 23 24	A21 A22 19 20	A23 A24 21 22
KM14	A25	A26	A27	25.26.27	A25 27	A26 25	A27 26
KM15	A28 A29	A30 A31	A32 A33	28.30.32 29.31.33	A28 A29 32 33	A30 A31 28 29	A32 A33 30 31
KM16	A34 A35	A36 A37	A38 A39	34.36.38 35.37.39	A34 A35 38 39	A36 A37 34 35	A38 A39 36 37


A3
S3
S2
22
24
0
i17
i16
32
34
KM11
KM16
KM17
KM10
KM15
KM14
KM13
KM12
KM17
KM16
KM15
KM14
KM13
KM12
KM11
KM10
R7/R55
A1
A2
A48
1
2
48
32005696

ELECTRIC HEATING
IRONER 310
32005696

A3	Programmer / synoptic
S2	Regulated heating output
S3	Direct heating output
i16	Regulation left thermostat
i17	Regulation right thermostat
KM12	Central zone heating contactor
KM13	Central zone heating contactor
KM14	Central zone heating contactor
KM15	Central zone heating contactor
KM11	Lateral zone heating contactor
KM16	Lateral zone heating contactor
KM10	Lateral zone heating contactor
KM17	Lateral zone heating contactor
R7/R55	1300 W resistors

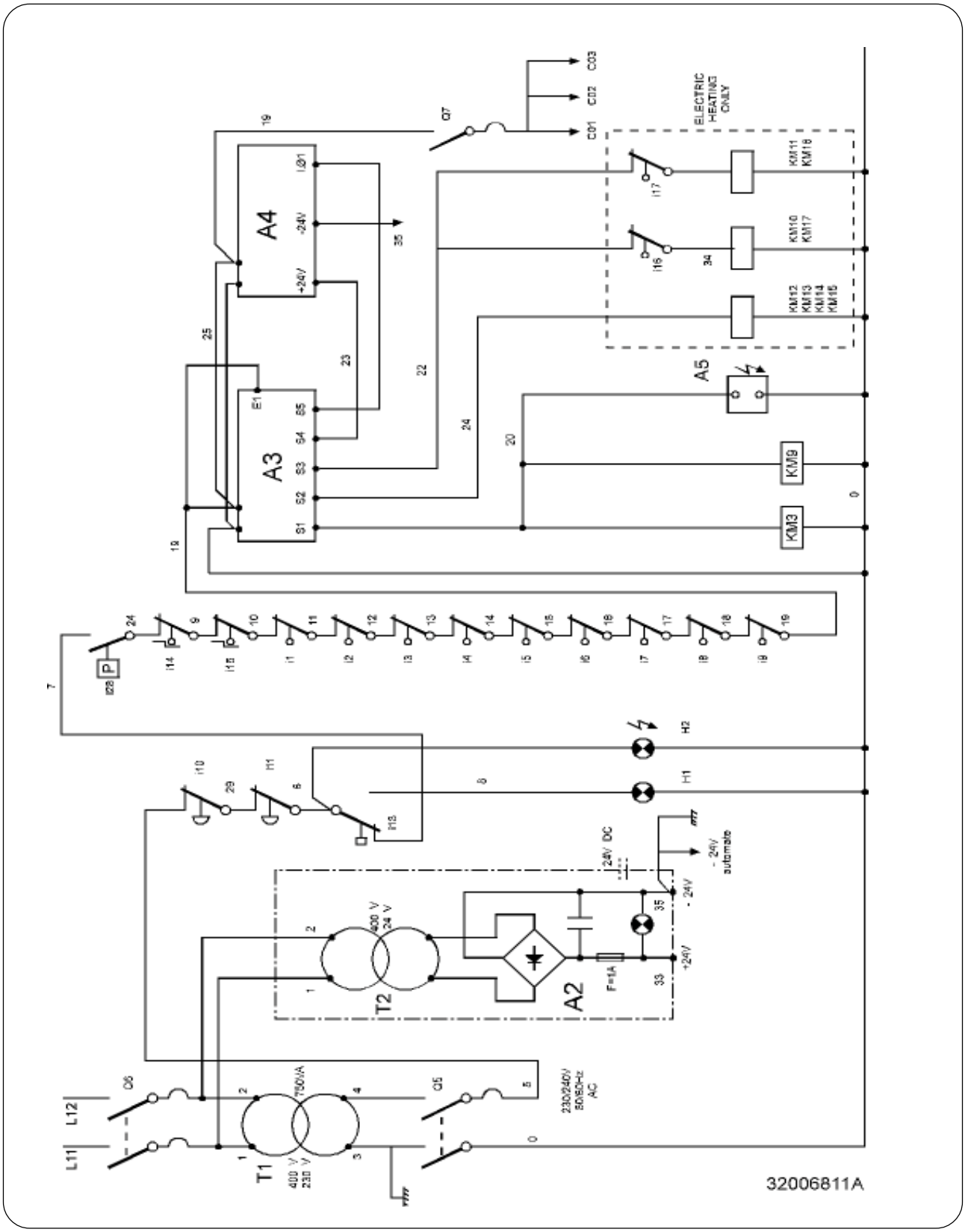
t0049gb

MARKING OF ELECTRIC RESISTANCES

	Star				Triangle		
Contactor	**Contactor wiring**			**Star commut. on terminal**	**Contactor wiring**		
	terminal 1	terminal 2	terminal 3	terminal 4	terminal 1	terminal 2	terminal 3
KM10	A1 A2	A3 A4	A5 A6	1.3.5 2.4.6	A1 A2 5 6	A3 A4 1 2	A5 A6 3 4
KM11	A7 A8	A9 A10	A11 A12	7.9.11 8.10.12	A7 A8 11 12	A9 A10 7 8	A11 A12 9 10
KM12	A13 A14	A15 A16	A17 A18	13.15.17 14.16.18	A13 A14 17 18	A15 A16 13 14	A17 A18 15 16
KM13	A19 A20	A21 A22	A23 A24	19.21.23 20.22.24	A19 A20 23 24	A21 A22 19 20	A23 A24 21 22
KM14	A25 A26	A27 A28	A29 A30	25.27.29 26.28.30	A25 A26 29 30	A27 A28 25 26	A29 A30 27 28
KM15	A31 A32	A33 A34	A35 A36	31.33.35 32.34.36	A31 A32 35 36	A33 A34 31 32	A35 A36 33 34
KM16	A37 A38	A39 A40	A41 A42	37.39.41 38.40.42	A37 A38 41 42	A39 A40 37 38	A41 A42 39 40
KM17	A43 A44	A45 A46	A47 A48	43.45.47 44.46.48	A43 A44 47 48	A45 A46 43 44	A47 A48 45 46

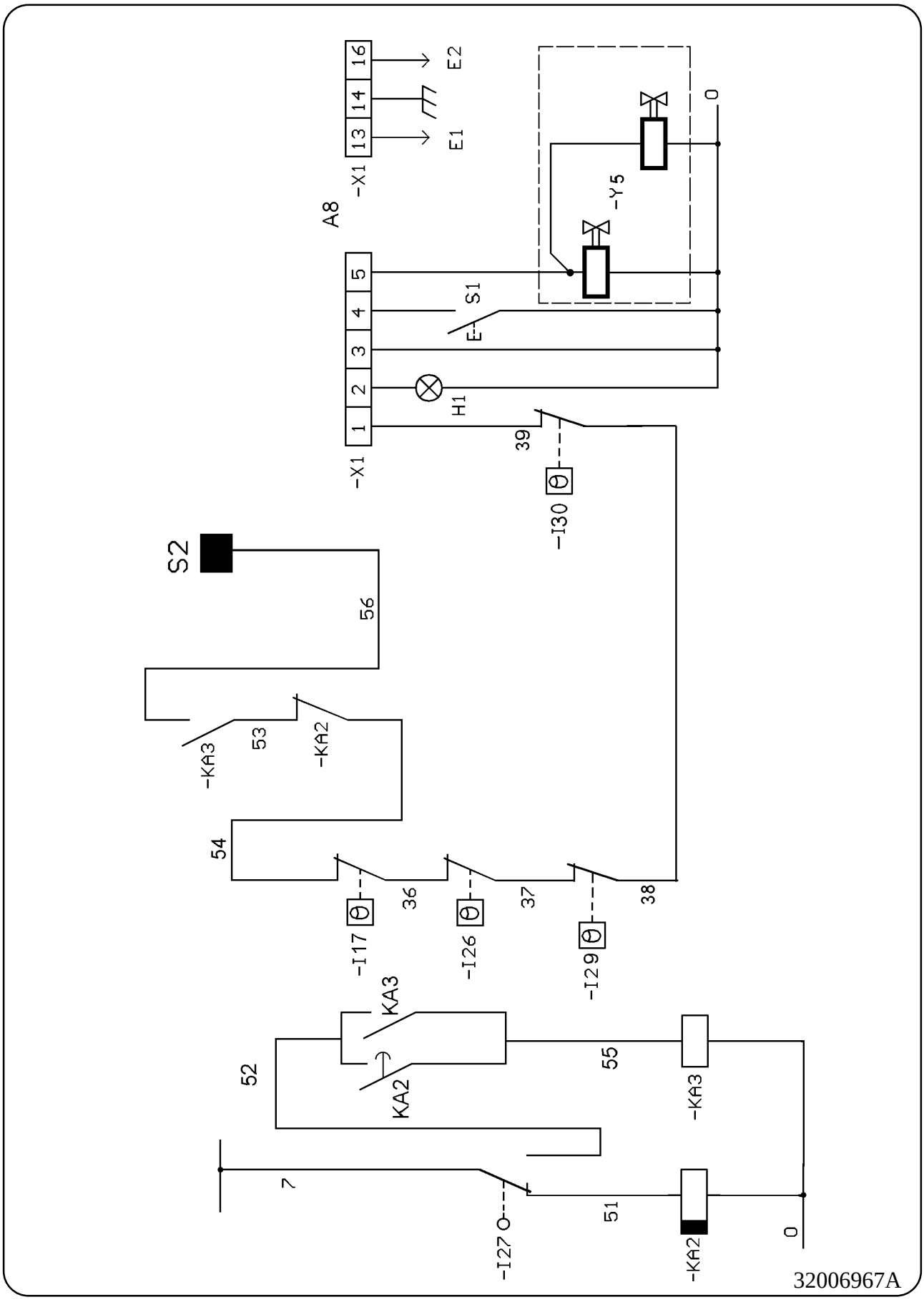
CONTROL CIRCUIT

n° 32006811A



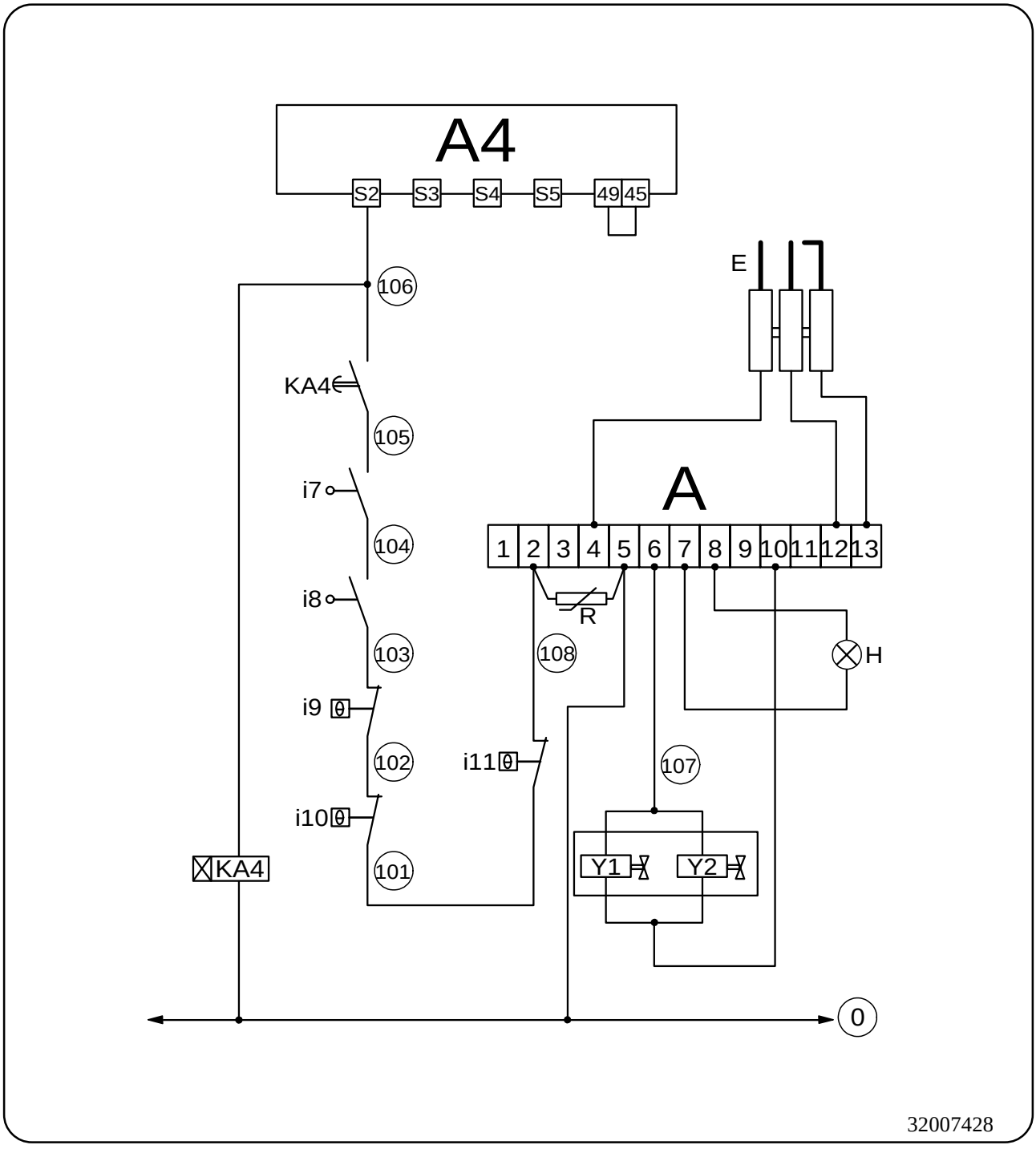
CONTROL CIRCUIT
Gas heating - ceramic burner
Standard / Australia
key to drawing n° 32006811A

T1	Isolating transformer 750 VA	
T2	Distribution circuit transformer 24 V	same part
A2	Distribution circuit rectifier 24 V DC	
A3	Programmer / block diagram	
A4	Programmable automate	
A5	Control box for antistatic bar	
H1	Air shortage indicator	
H2	Stacker indicator	
Q5	Two-pole breaker ph + N 2A secondary	
Q6	Two-pole breaker 2 A primary	
Q7	Two-pole breaker 2 A (common outputs)	
I1	Thermal contact stacker table motor	
I2	Thermal contact pile evacuation motor	
I3	Thermal contact fan motor	
I4	Thermal contact smoothing motor	
I5	Thermal contact smoothing motor	
I6	Thermal contact cross-folding motor	
I7	Thermal contact longitudinal folding motor	
I8	Thermal contact rear evacuation motor	
I9	Thermal contact motion motor	
I10	Ironer emergency stop	
I11	Stacker emergency stop	
I12	Safety thermostat 220 °C	
I13	Air shortage pressostat	
I14	Finger protection right flap position switch	
I15	Finger protection left flap position switch	
I16	Regulating left thermostat	
I17	Regulating right thermostat	
I28	Gas pressure switch	
KM3	Fan contactor	
KM9	Motion contactor acceuillir	


A8
-X1
16
14
13
E2
E1
-Y5
S1
H1
39
-I30
S2
56
-KA3
53
-KA2
54
36
37
38
-I17
-I26
-I29
KA3
KA2
52
55
-KA3
7
51
-I27
-KA2
0
32006967A

CONTROL CIRCUIT
Gas heating - ceramic burner
Australia ironers
32006967A

i17	Left side control thermostat
i26	Right side control thermostat
i27	Air pressure switch
i29	Over heating thermostat
i30	Over heating thermostat 220 °C
A8	Ignition meter case
KA2	Time-relay for air pressure switch gas
KA3	Air pressure switch relay
H1	Indicator for faulty pipe burner
S1	Push-button reset burner
S2	Programmer output
Y5	Gas electrovalve
E1	Control electrode
E2	Ignition electrode


A4
S2
S3
S4
S5
49
45
106
KA4
105
i7
104
i8
103
i9
102
i10
101
KA4
E
A
1
2
3
4
5
6
7
8
9
10
11
12
13
R
108
H
i11
107
Y1
Y2
0
32007428

CONTROL CIRCUIT
Gas heating - ceramic burner
Standard ironers
32007428

A	RV500 Ignition meter case
A4	electronic programmer
E	Ionization / ignition electrode
H	Indicator for faulty pipe burner
i7	Gas inlet pressostat (option)
i8	Air pressure switch
i9	Safety thermostat
i10	Left side thermostat
i11	Right side thermostat
KA4	Time relay
R	Varistor
Y1-Y2	Gas electrovalve

MOTORS INTENSITY

M1 **Stacker** table motor : 0,37 kW
M2 **Stacker** piles evacuation motor : 0,37 kW

Nominal intensity : triangle 4,5A
star 2,6A

M3 Fan motor **ironer** : 0,30 kW
M4 Smoothing right motor **ironer** : 0,18 kW
M5 Smoothing left motor **ironer** : 0,18 kW

Nominal intensity : triangle 4,4A
star 2,5A

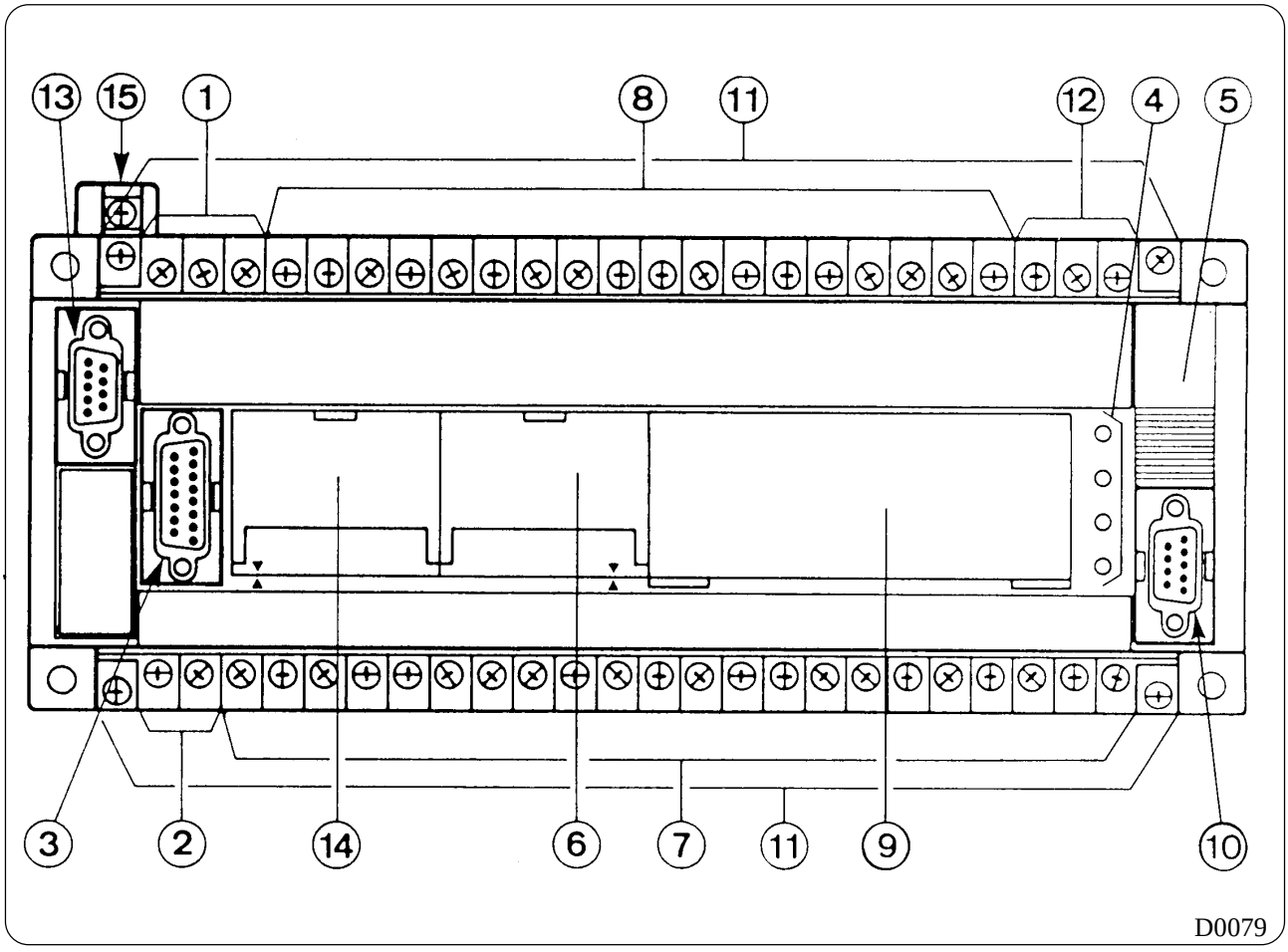
M6 Cross-folding motor **ironer** : 0,37 kW
M7 Longitudinal folding motor **ironer** : 0,37 kW
M8 Rear evacuation motor **ironer** : 0,25 kW

Nominal intensity : triangle 6,6A
star 3,9A

M9 Ironer motion motor : 0,37 kW

Nominal intensity : 3A (with 132 V)

This page is left blank on purpose.


13
15
1
8
11
12
4
5
3
2
14
6
7
11
9
10
D0079

MICRO AUTOMATE TSX 17

Description of micro automate TSX 17

TSX 172 3428 type.

This micro automate includes :

- A power supply (1) of 10 to 240 VCA delivering a supply (2) of 24 VCC, 250 mA, meant to the sensors 24 VCC connected to TSX 17.

- A central unit with terminal plug (3) and display of its condition (4).

- A place (5) for a cell in order to save the programmes stored. TSX 17 is not equipped with a cell because the memory used on your machine cannot be deleted but with UV rays.

- A place (6) for the EPROM type cartridge.

- 22 inputs (7) deliver a supply in 24 isolate VCC.

- 12 inputs (8) to feed the relays of the machine.

- An indicator (9) displays the inputs/outputs with leds.

- A 9 points connector (10) for the inputs/outputs bus extensions.

- 2 disconnectable terminals (11) with protected screws.

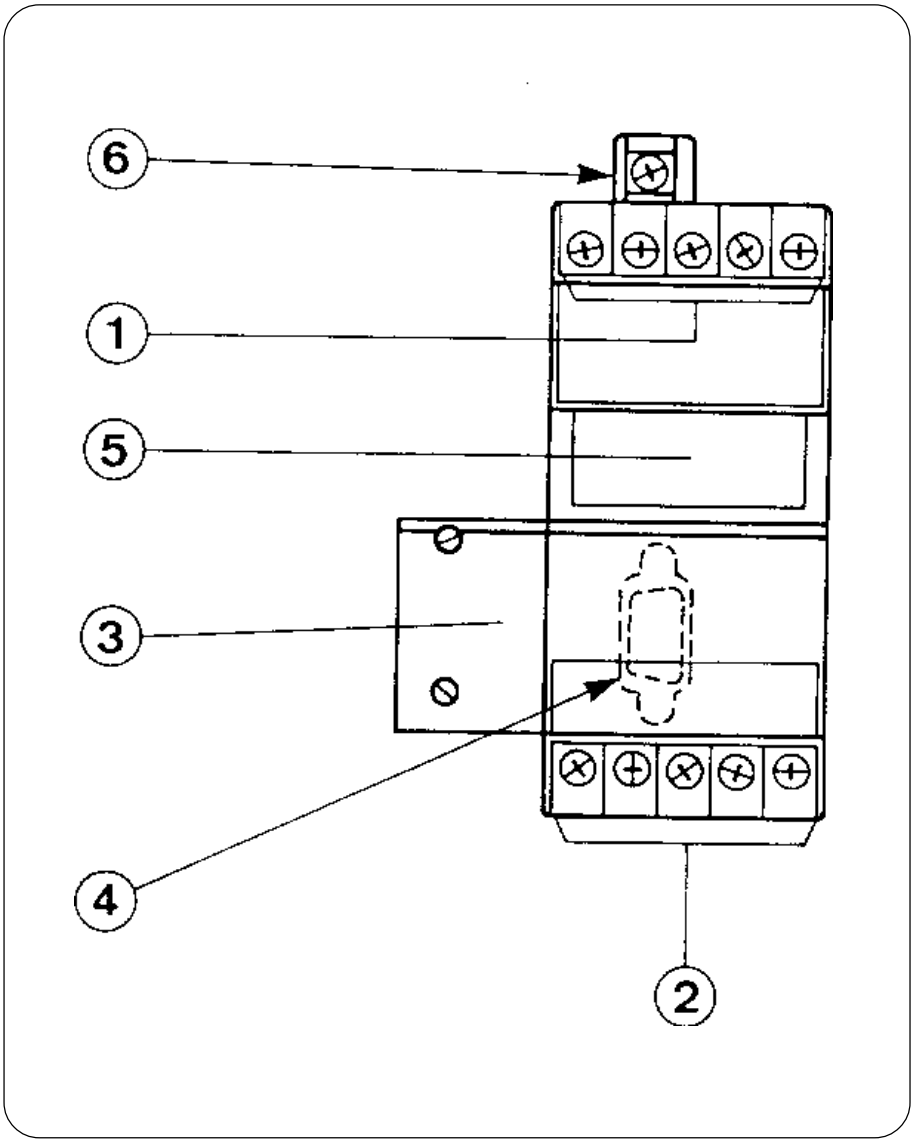
- 2 fast inputs (12) (24 VCC).

- A connector (13) for the connection of the inputs of counting and resetting operations of the counter/quick sucker.

- A place (14) for the PL7-2 micro software cartridge. This cartridge is compulsory to access to the language of the PL7-2 software when a technician connects a console table to TSX 17.

- An earth terminal (15) for the earthing of the micro automate.

D0080



TSX DSF 635 OUTPUTS MODULE

Two modules are added to the TSX 17 micro automate.

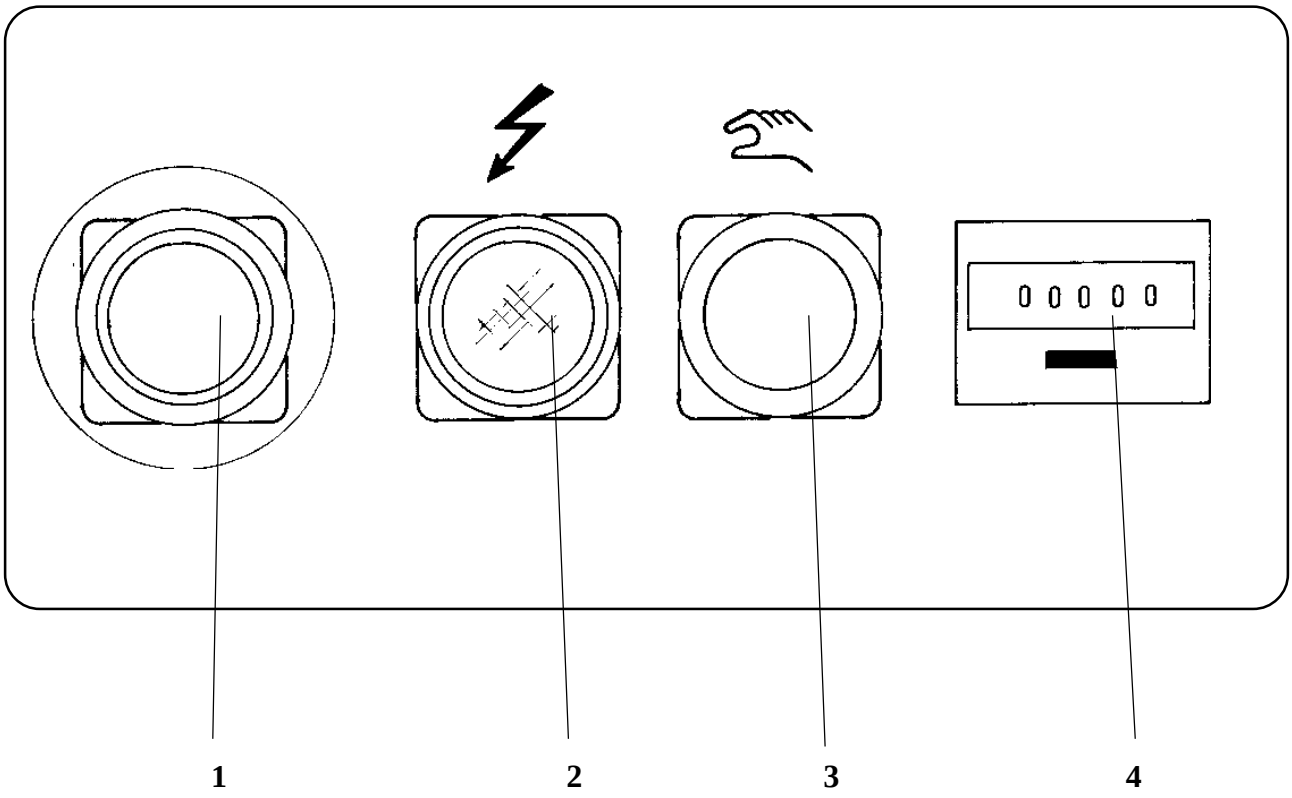
Description of the TSX DSF 635 outputs module.

This module includes :

- 6 outputs (1) and (2) displayed with leds on front side (5).
- A 9 points connector (3) and its wire for the connection to the micro automate or to the previous module.
- A 9 points connector (4) for the connection to the following module.
- An earth terminal (6) for the earthing of the extension module.

STACKER CONTROL PANEL

D0067



1 Emergency stop push-button

2 Voltage indicator

3 Pile evacuation push-button

4 Sheet counter with resetting device

UTILIZATION

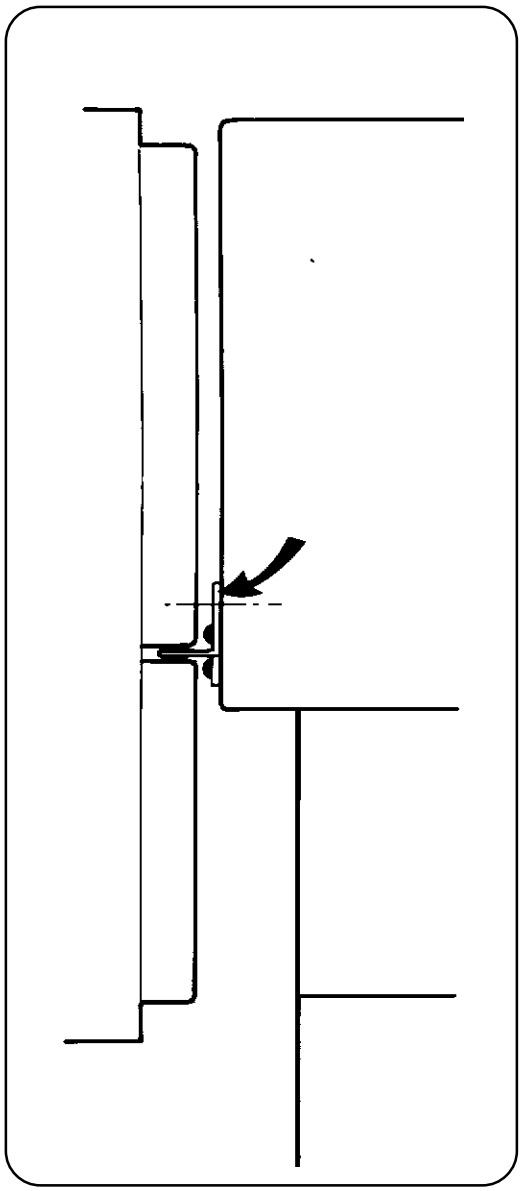
Present the stacker on the right side of the ironer and centre it with the centering finger on the opening of the machine (diagram D0071).

Set the stacker in position with the blocking bolsters.

Connect the compressed air supply pipe.

Connect the supply and control plug of the stacker.

D0071

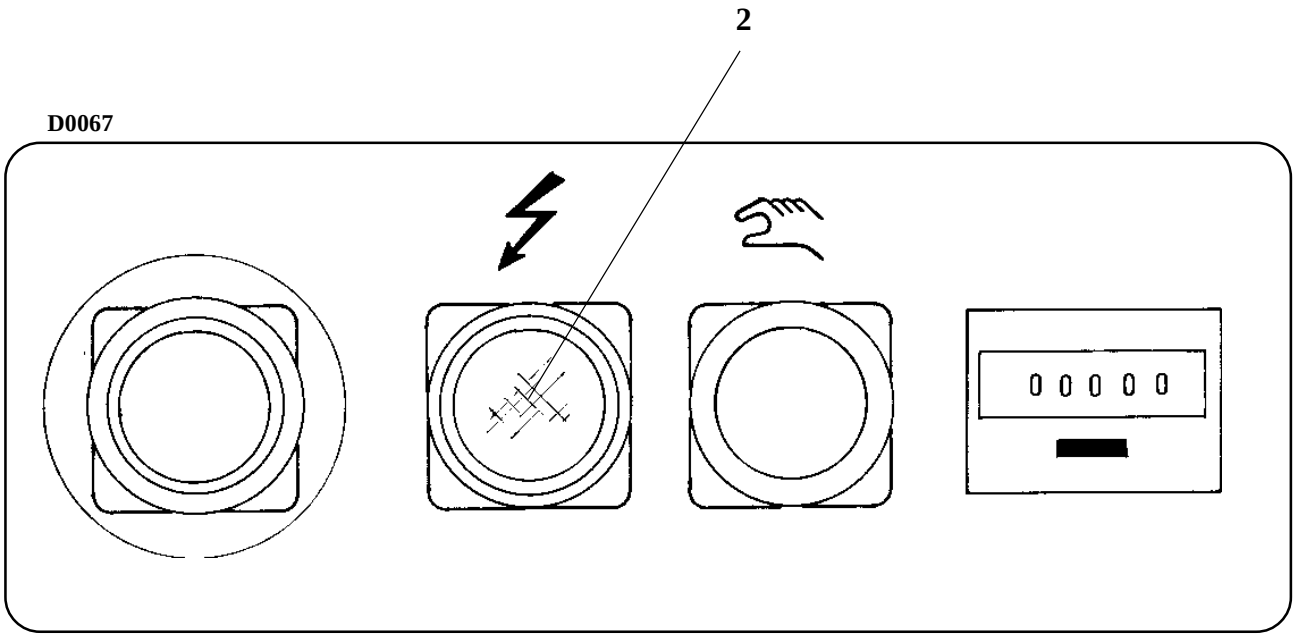


NB : the ironer will not work if the supply plug of the stacker is not connected.

If the ironer is used without the stacker, it is absolutely necessary to connect the special plug (without threads) provided with the machine.

When the ironer is being charged, the indicator (2) "UNDER VOLTAGE" of the stacker is lit.

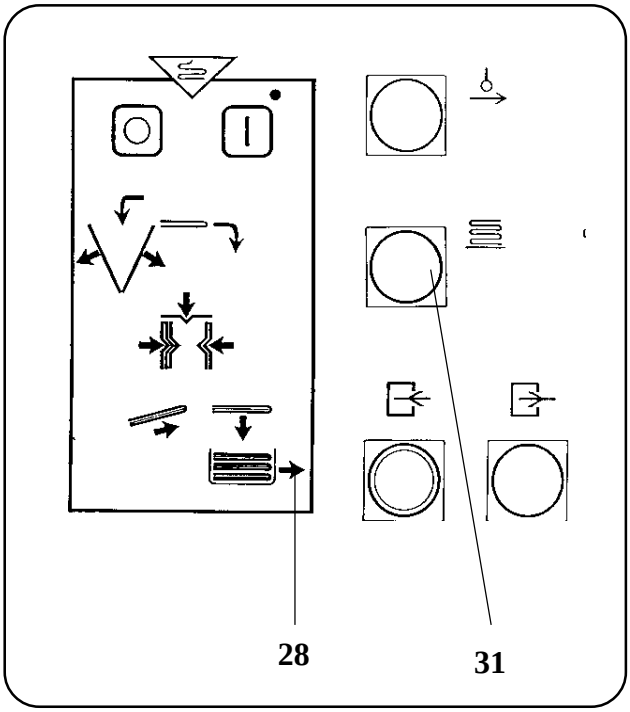
D0067



When a pile of linen is completed (height 210 mm approximately) on the stacker plate, it is then evacuated on the evacuation table.

The indicators (28-31) on the control panel of the ironer signal during 30 seconds to warn that a pile is completed.

D0070

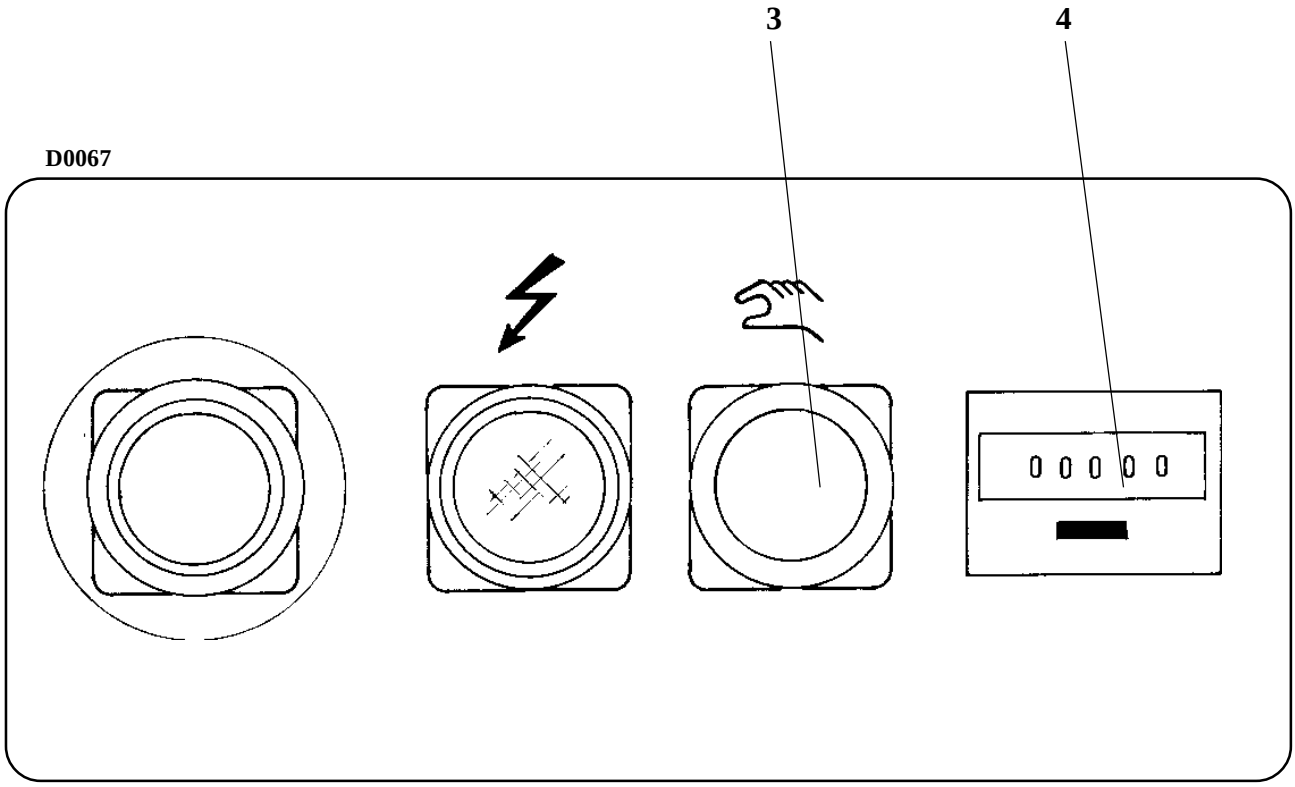


NB : the evacuation table of the stacker can contain 2 completed piles and another one being completed on the plate of the stacker.

It is necessary to evacuate the piles as soon as they arrive on the evacuation ramp.

A push-button (3) makes it possible to evacuate the pile(s) of linen manually.

A sheet counter (4) with resetting device makes it possible to count the ironed items during a given time.

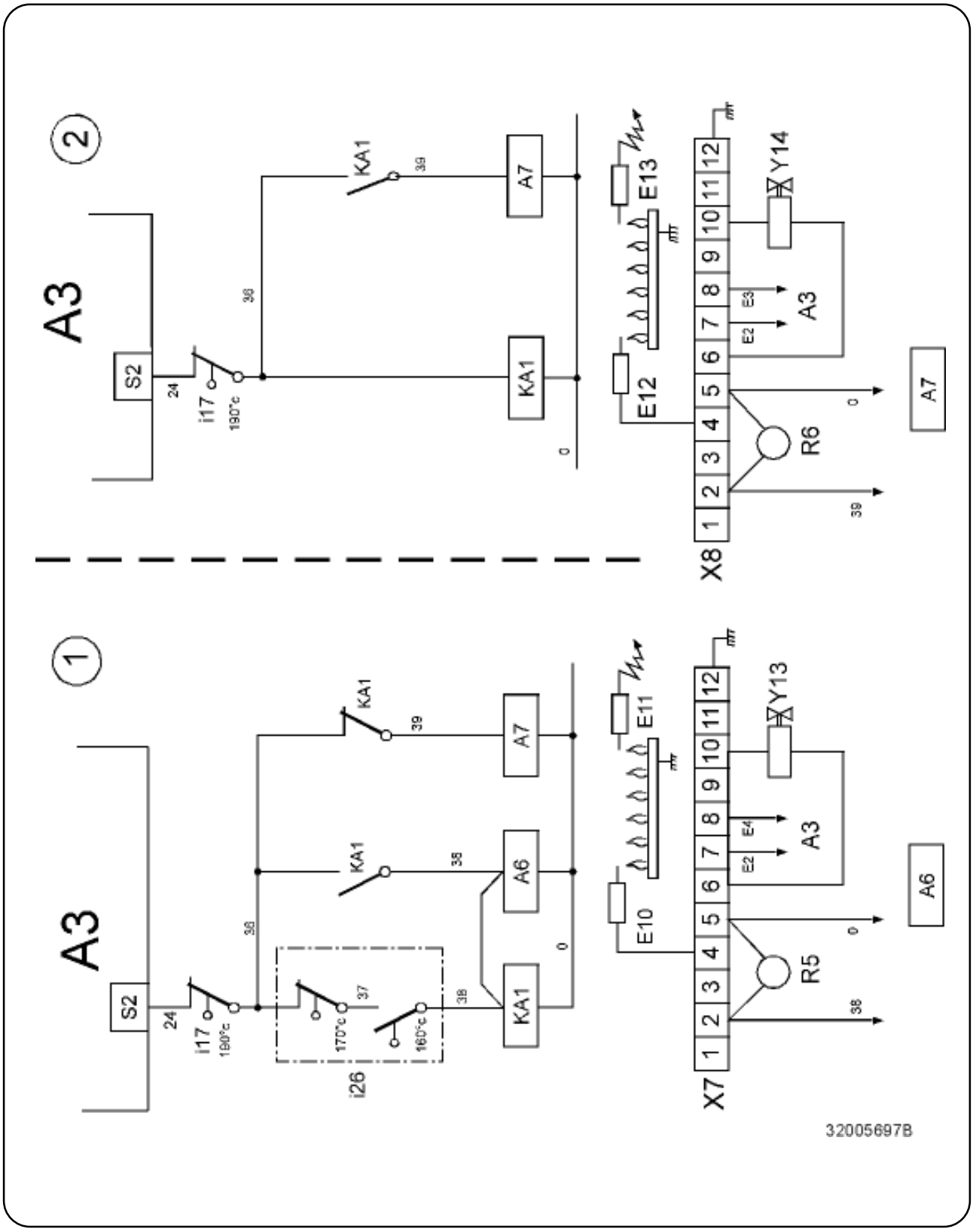


MAINTENANCE

Clean the detection cells daily.

SAFETY

The sheets the folded length of which is above 55 cm are evacuated on the right side of the stacker to avoid obstruction.


2
A3
S2
24
i17
190°c
38
KA1
39
A7
KA1
0
E13
E12
Y14
X8
1 2 3 4 5 6 7 8 9 10 11 12
E3
E2
A3
R6
0
39
A7
1
A3
S2
24
i17
190°c
38
KA1
39
A7
KA1
38
A6
KA1
0
37
170°c
38
160°c
i26
E11
E10
Y13
X7
1 2 3 4 5 6 7 8 9 10 11 12
E4
E2
A3
R5
0
38
A6
32005697B

GAS HEATING
With blue flame burner
no 32005697B

(1) Wirning of machine with 2 burner

(2) Wirning of machine with 1 burner

A3 Programmer / synoptic
A6 Ignition meter case/adjusting control
A7 Ignition meter case/keeping control
S2 Regulated heating output
KA1 Burner relay
i17 Left side regulation thermostat
i26 Right side regulation thermostat
E10 Ignition electrode
E11 Control electrode
E12 Control electrode
E13 Ignition electrode
R5 Protection varistor
R6 Protection varistor
Y13 Gas electrovalve
Y14 Gas electrovalve

DUBIX-ELECTROLUX SYSTEMES DE BLANCHISSERIE
Rue Pasteur, B.P. 6, 10430 Rosières-près-Troyes, France.
Téléphone +33 (0)3 25 82 91 33. Fax 33 (0)3 25 82 50 44.

ELECTROLUX LAUNDRY SYSTEMS
SE- 341 80 Ljungby, Sweden. Telephone +46 (0)372 661 00. Telefax +46 (0)372 133 90.

ELECTROLUX NYBORG A/S
Østerbro 4. DK- 5690 Tommerup, Denmark. Telephone 64 76 12 34.