

SERVICE MANUAL

STG - ROTISSERIE OVEN MODELS STW - WARMER MODELS

MODELS

Programmable controls **STG5 P**
 STG7 P

Warmers **STW5**
 STW7



Model STG7 P

- NOTICE -

This manual is prepared for the use of trained Service Technicians and should not be used by those not properly qualified. If you have attended training for this product, you may be qualified to perform all the procedures in this manual.

This manual is not intended to be all encompassing. If you have not attended a training for this product, you should read, in its entirety, the repair procedure you wish to perform to determine if you have the necessary tools, instruments and skills required to perform the procedure. Procedures for which you do not have the necessary tools, instruments and skills should be performed by a trained technician.

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Versions		
Version	Issue date dd/mm/yy	Remarks
10/2012	01/10/2012	General update.
03/2014	01/03/2014	Textual changes. Troubleshooting adapted. Exploded views modified.

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GENERAL TECHNICAL DATA

This manual covers the STG series rotisserie ovens and the STW series warmers. Ovens and warming cabinets come in two sizes. Ovens and cabinets will also be delivered in stacked versions.

- STG 5 – Oven with five spits (15 to 20 chickens)
- STG 7 – Oven with seven spits (28 to 35 chickens)
- STW 5 Warming cabinet.
- STW 7 Warming cabinet.

All of the information, illustrations and specifications contained in this manual are based on the latest product information available at the time of printing.

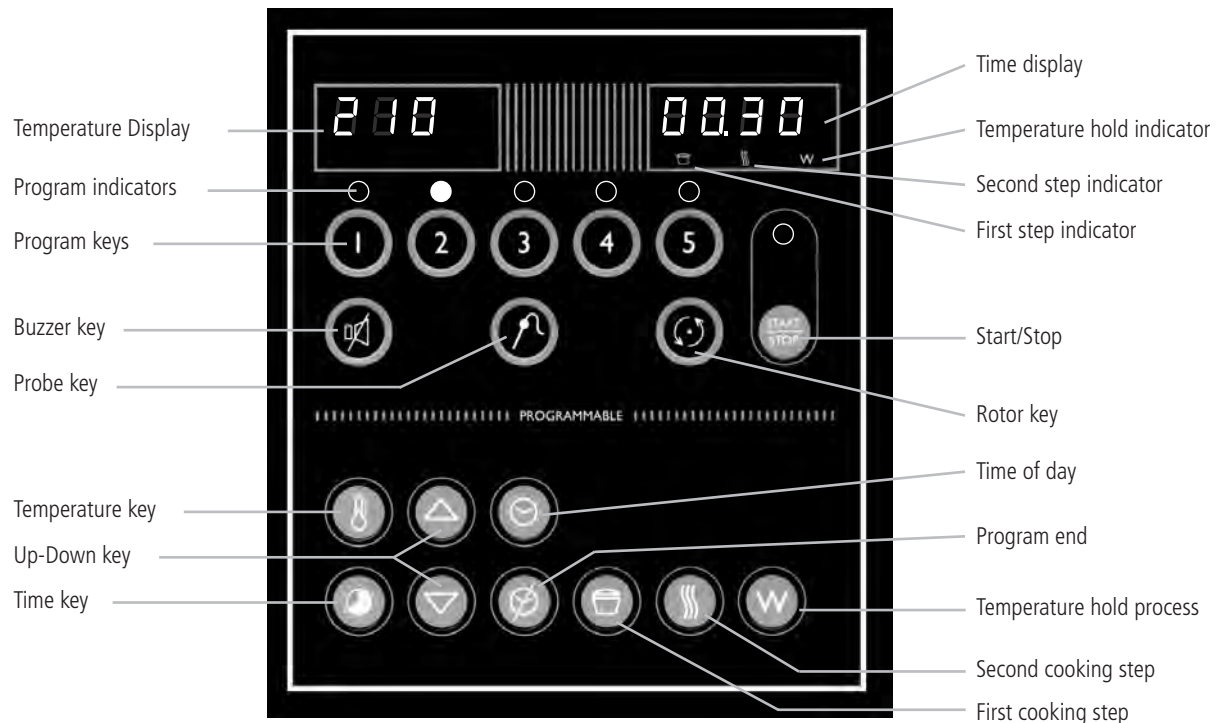
TECHNICAL DATA

Type	STG 5	STGW 5	STG 7	STGW 7	STW 5	STW 7
Power (W)	6500	9300	10200	13700	2800	3500
Fuses needed with power connection 400 V, 3N ~50...60 Hz (3 phases with zero)	3x 16 A	3x 16 A	3x 16 A	3x 32 A	-	-
Fuses needed with power connection 200 or 230 V, 3 ~50...60 Hz (3 phases without zero)	3x 16 A	3x 32 A	3x 32 A	3x 35 A	-	-
Fuses needed with power connection 230 V, 1N ~50...60 Hz (1 phase with zero)	-	-	-	-	1x 16 A	1x 16 A
Standard plug from factory 5-pole Acc IEC309 and CEE-form	16 A 3P+N+E	16 A 3P+N+E	16 A 3P+N+E	32 A 3P+N+E	-	-
Standard plug from factory single pole	–	–	–	–	2-pole earthed plug 16 A	2-pole earthed plug 16 A
Net weight (kg)	122	222	181	331	100	150
Gross weight (kg)	159	260	217	382	122	165
Height (mm)	870	1750	1025	2060	870	1025
Width (mm)	825	825	985	985	825	985
Depth (mm)	650	650	850	850	650	850

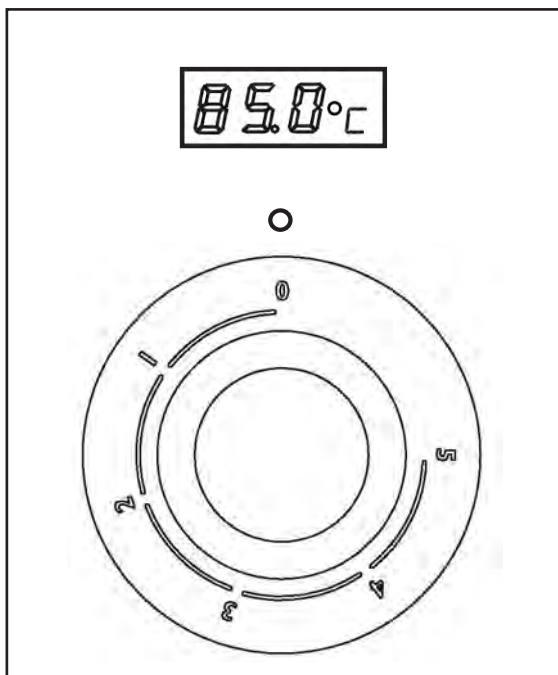
- Standard set of tools.
- Metric wrenches, sockets and hex socket key wrenches.
- Multi-meter and AC current clamp meter.
- Temperature tester.
- Insulation value tester (Megger).
- Field Service Grounding Kit.

PROGRAMMING INSTRUCTIONS FOR THE STG 5 / STG 7 AND STW 5 / STW 7

DISPLAY AND KEYS



SETTING THE STW



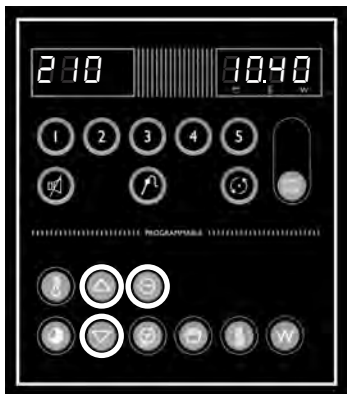
Turn thermostat dial to desired temperature.

SETTING THE STG



When the main switch is tuned to "1" the display lights up and the rotisserie is ON.

SETTING ACTUAL TIME

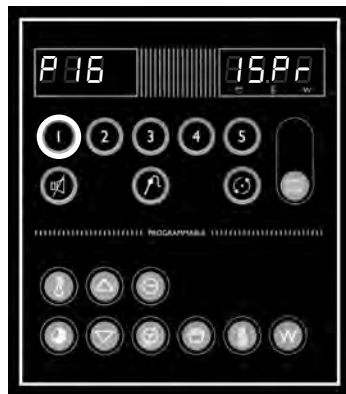


Press and hold *Time of day* key

Press *Up* or *Down* key

Release *Time of day* key

15 PROGRAMS



After the unit is switched-on the time display indicates: 15PR

Key 1:

1x = program 01

2x = program 06

3x = program 11

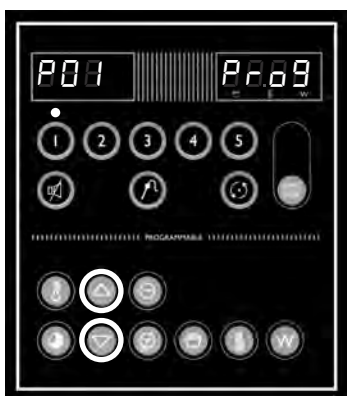
Key 2:

1x = program 02

2x = program 07

3x = program 12

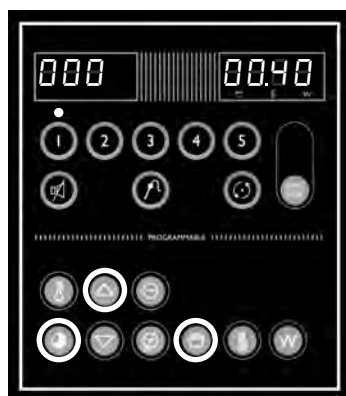
ENTERING A PROGRAM



Select Program number

Press both *Up* and *Down* keys during 2 seconds

FIRST COOKING STEP (TIME)



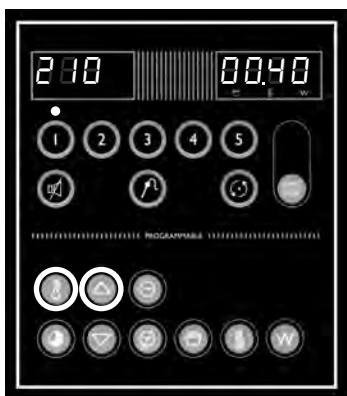
Press *Cooking process* key

Cooking symbol lights up

Press and hold the *Time* key

Press *Up* or *Down* key

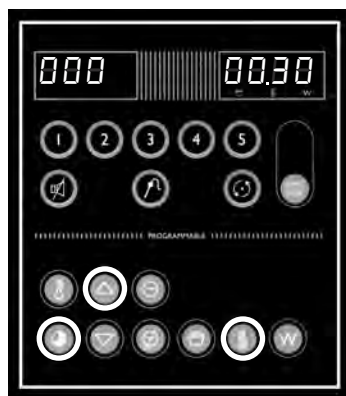
FIRST COOKING STEP (TEMP.)



Press and hold the *Temperature* key

Press *Up* or *Down* key

SECOND COOKING STEP (TIME)



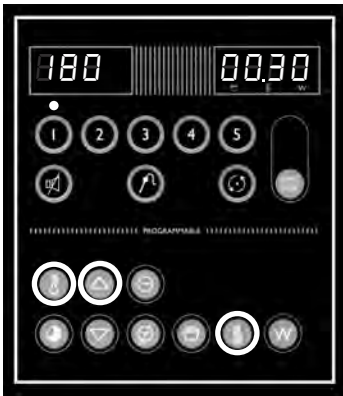
Press *Grilling process* key

Grilling symbol lights up

Press and hold the *Time* key

Press *Up* or *Down* key

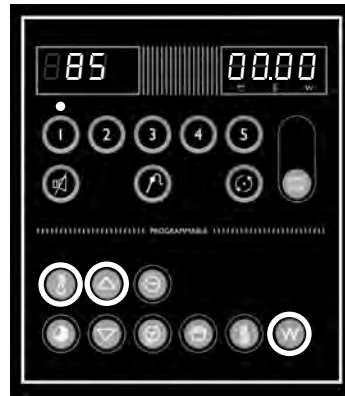
SECOND COOKING STEP (TEMP.)



Press and hold *Temperature* key

Press *Up* or *Down* key

TEMPERATURE HOLD



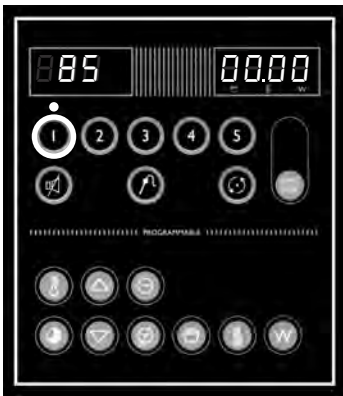
Press *Temperature Hold* process key

Temperature Hold symbol lights up

Press and hold the *Temperature* key

Press *Up* or *Down* key

LOADING PROGRAM



Press program number to load pre-set values

PROGRAM START & LOADING



Press *Start / Stop* key

On indicator lights up

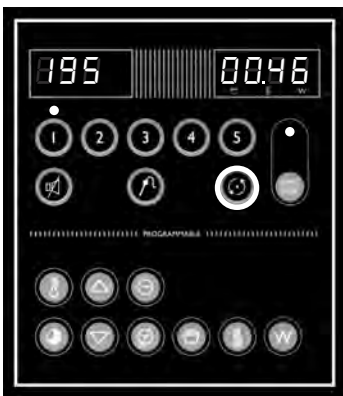
Press *Rotor* key to start turning the rotor

Press *Rotor* key again to stop

Load the rotisserie with products

OPTIONAL SETTINGS FOR THE STG 5 AND STG 7

INTERRUPTING ACTIVE PROGRAM



Press *Rotor* key

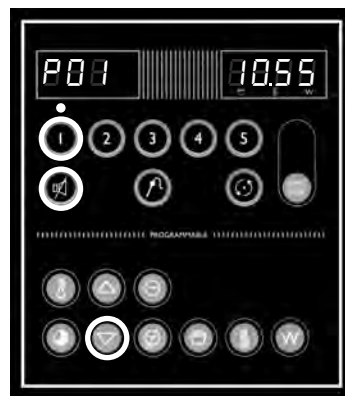
Heaters and front lamp switch off

Rotor stops

On indicator is blinking

Process time in hold

SET ADDITIONAL BUZZER SIGNAL

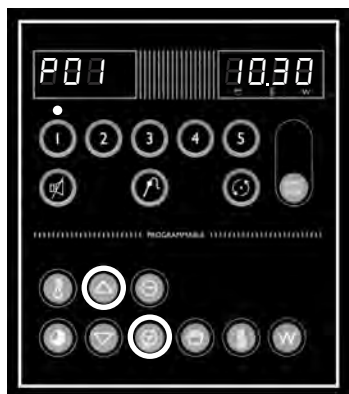


Select a pre-defined program

Press and hold *Buzzer* key

Press *Down* key

SET PROGRAM END TIME

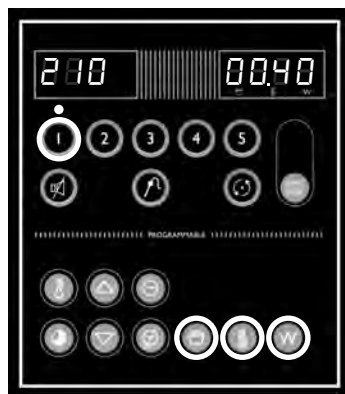


Select a pre-defined program

Press and hold the *Program end* key

Press *Up* key

DISPLAY SET TIME & TEMPERATURE



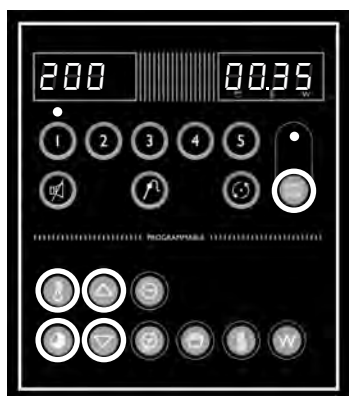
Select a pre-defined program

Press *Cooking, Grilling or Temperature hold* key

No time indication for *Temperature hold*

Visible during process or program selection

ADJUSTING ACTIVE PROGRAM



Press and hold *Temperature or Time* key

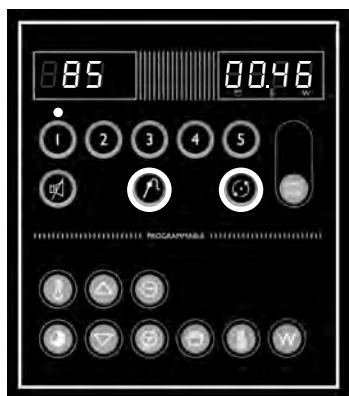
Adjust temperature or time with *Up* or *Down* key

PREHEAT INDICATION



Under 40°C (104°F) the display shows *PRH*

TEMPERATURE PROBE (OPTIONAL)



Press the *Rotor* key

Insert the probe in the meat up to the core

Press *Temperature sensor* key; after 20 seconds the temperature reading switches off

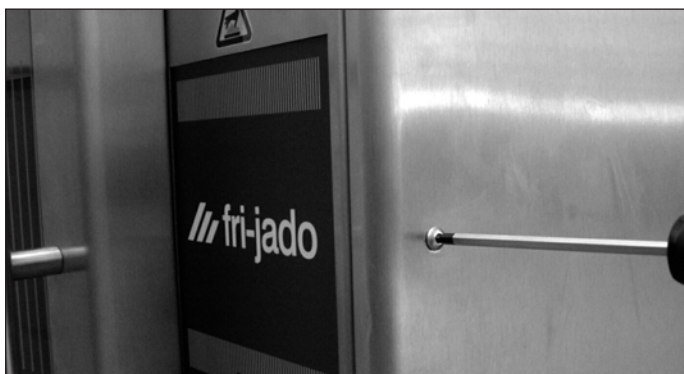
INDICATIONS DURING PROCESS

- Process indicators shows actual process. After completion indicator switches off
- Time display shows remaining program time which is the sum of the remaining cooking and grilling time
- Temperature display indicates actual temperature in the grill. Under 40°C (104°F) the display shows *PRH* (preheat)
- When remaining time reaches 0, the process indicators and the *On*-indicator switches off

REMOVAL AND REPLACEMENT OF PARTS FOR THE STG 5 AND STG 7

WARNING: Disconnect the electrical power to the machine at the main circuit box. Place a tag on the circuit box indicating the circuit is being serviced.

RIGHT OR LEFT SIDE PANEL



1. Remove the screws that secure the panel to the frame.
2. Remove the panel.
3. Reverse the procedure to install.

TOP COVER



1. Remove the left side panel according prior procedure.
2. Remove the screws securing both large and small top covers.
3. Remove the top cover. (Lift at left side and remove to the left).
4. Reverse the procedure to install.

Note: STG 5 has an optional special top cover for access to the circulation blower. Standard no cover for the blower.

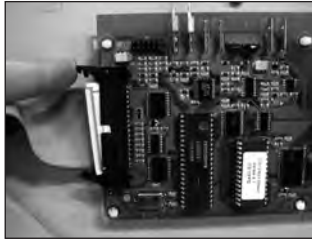
KNOB



1. Remove cover plate on the knob with a small screw driver.
2. Loosen the screw inside the knob.
3. Remove the knob with ring.
4. Reverse the procedure to install.

Note: check that the ring behind the knob is in the right position and runs free from the panel.

OPERATING PANEL

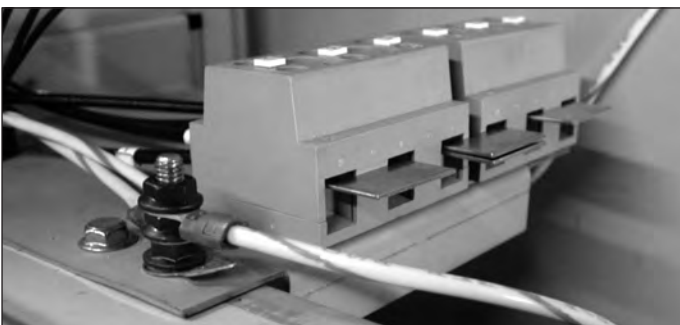


1. Remove the right side panel according prior procedure.
2. Remove the knob according prior procedure.
3. Remove the screw that secures the panel.
4. Remove the 2 bolts on the backside of the instrument panel (top and bottom side, only for the STG 7).
5. Remove the screws that secure the meat probe holder and remove the holder (if supplied).
6. Remove the flatcable on the power section.
7. Remove the clip on the back, top left side that secures panel and frame.
8. Remove the instrument panel.
9. Reverse the procedure to install.

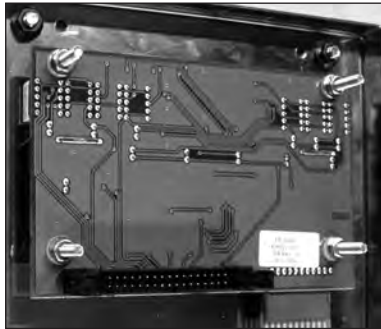
ELECTRIC PANEL



1. Remove the operating panel according prior procedure.
2. Remove on the front side the screws that secure the panel.
3. Remove on the inside bottom of the electric panel the bolt and nuts.
4. Disconnect the wiring.
5. Slide the electrical panel backwards.
6. Reverse the procedure to install.



DISPLAY



1. Remove the right side panel according prior procedure.
2. Disconnect the flatcable on the display.
3. Remove the clip on the back, top left side that secures panel and frame.
4. Remove the nuts and washers on the backside of the display and remove the metal cover.
5. Remove the nuts and plastic rings that secure the board and remove the board. Do not forget to disconnect the blue connector on the board.
6. Reverse the procedure to install.

PANEL AND KEYPAD ASSEMBLY



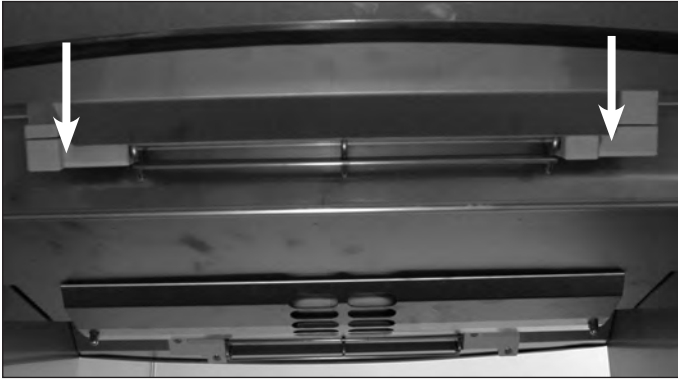
1. Remove the operating panel according prior procedure.
2. Remove the display according prior procedure.
3. Remove the nuts that secure the keypad and remove the keypad.
4. Reverse the procedure to install.

NAMEPANEL



1. Remove the operating panel according prior procedure.
2. Remove the 4 nuts that secure the panel and remove panel.
3. Reverse the procedure to install.

QUARTZ LAMP



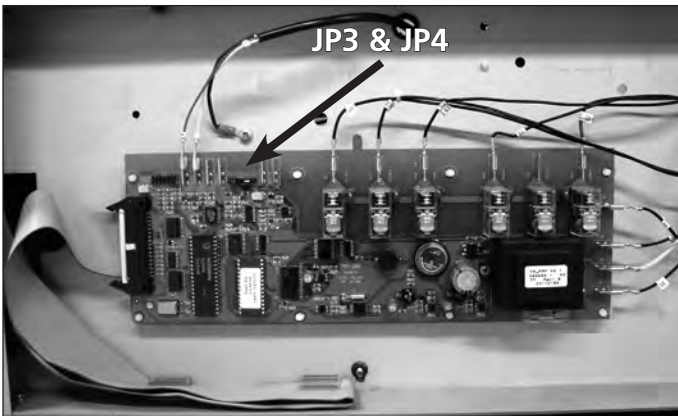
Caution: Do not touch the glass with your hands. The moisture from your hands could affect the live span of the lamp. This moisture can be removed with alcohol while the lamp is cold.

Note: Use a clean rag or paper towel to replace the lamp.



1. Remove the insulators of the lamp.
2. Remove the bolt from each end of the lamp and remove the lamp.
3. Install the lamp with the painted side towards the top of the oven. Hold the metal with your hand when tightening the bolts to prevent the metal from twisting and damaging the lamp.
4. Tighten the insulators evenly to prevent damage.

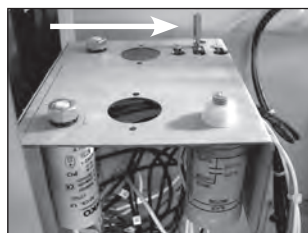
POWER AND I/O BOARD



1. Remove the right side panel according prior procedure.
2. Disconnect wiring and flatcable on the board.
3. Remove the board from the clips by pressing the clips together.
4. Reverse the procedure to install.

Note: When installing new board, ensure that JP3 and JP4 on new board are set the same as on the old board.

HIGH LIMIT THERMOSTAT



1. Remove the right side panel according prior procedure.
2. Remove the suction and fan plate on the inside of the oven.
3. (STG 5 only) Remove the nut on the clamp and slide clamp towards yourself. Loosen the screw in the clamp that secures the probe and remove the probe.
4. (STG 7 only) Remove the thermostat-probe from the clip in the oven and guide it outside through the opening in the side wall.
5. Remove the screws on the electric panel that secure the thermostat.
6. Remove the thermostat and disconnect the wiring.
7. Reverse the procedure to install.

Note: Set the new high limit thermostat to its maximum position.

MAIN SWITCH



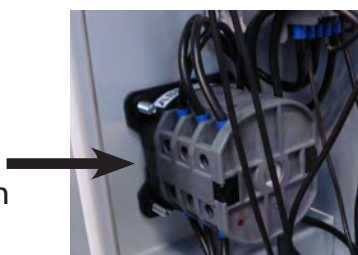
Main switch till serial number 100050804



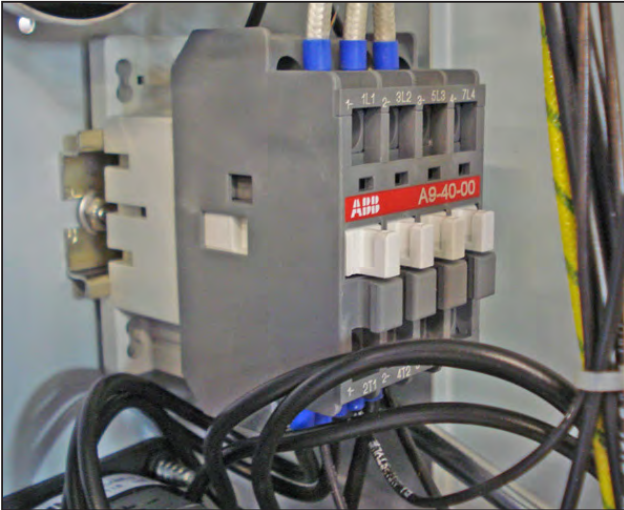
1. Remove the instrument panel according prior procedure.
2. Loosen the screws on the electric panel that secure the switch.
3. Remove the switch and disconnect the wiring.
4. Reverse the procedure to install.

Note: The main switch until serial number 100050804 is different than the new main switch.

New main switch



CONTACTOR



1. Remove the right side panel according prior procedure.
2. Disconnect the lead wires to the switch.
3. Push the locking tab down with a screw driver and lift the contactor out to remove it from the mounting bracket.
4. Reverse the procedure to install.

BLOWER MOTOR



1. Remove the right side panel and the top cover according to prior procedures.
2. Remove the rotor discs, suction and fan plate on the ceiling inside the oven.
3. Remove the wing nut on the fan blade and remove fan blade. (Left handed threads)
4. Disconnect wiring of the motor.
5. Remove the screws that secure the motor and remove the motor.
6. Reverse the procedure to install.

Note: The blowers are equipped with a capacitor of 1,5 uF. Check the direction of rotation of the motor (clockwise, see arrow) and change the wiring if necessary.

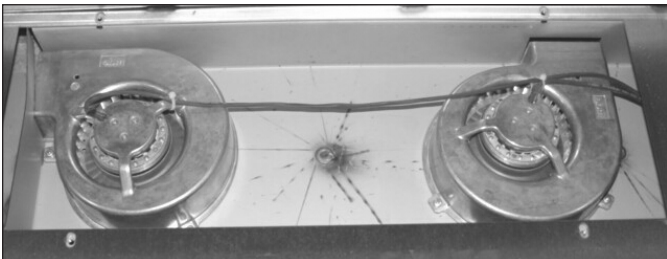
PT500 SENSOR



1. Remove the right side panel according to prior procedure.
2. Disconnect the wiring of the sensor.
3. Remove the screw that secures the sensor and remove the sensor.
4. Reverse the procedure to install.

Note: The wiring cable is an insulated cable with an earthing screen.

BLOWER MOTOR BOTTOM ROTISSERIE (STACKED STG)



1. Remove the right side panel according prior procedures.
2. Remove the rotor discs, suction and fan plate on the ceiling inside the bottom oven.
3. Remove the wing nut on the fan blade and remove the fan blade. (Left handed threads).
4. Remove fat drawer from upper oven.
5. Remove the bolts that secure the intermediate plate and remove this plate.
6. Remove the drip trays from the upper oven.
7. Remove the bolts that secure the top plate (STG 5 must have a special top cover!) and remove the top plate.
8. Disconnect wiring of the motor.
9. Remove the screws that secure the motor and remove the motor.
10. Reverse the procedure to install.

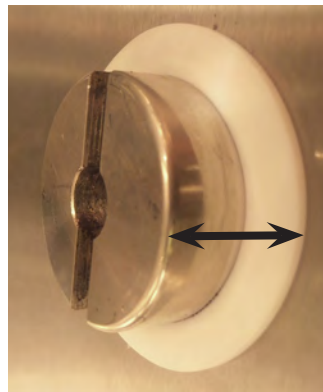
Note: The blowers are equipped with a capacitor of 1,5 uF. Check the direction of rotation of the motor (clockwise, see arrow) and change the wiring if necessary.

HEATING ELEMENT



1. Remove the rotor discs, right side panel, suction and fan plate according prior procedures.
2. Disconnect the wiring from the element.
3. Remove the mounting nut.
4. Remove the element from the mounting clip and pull it from the wall.
5. Reverse the procedure to install.

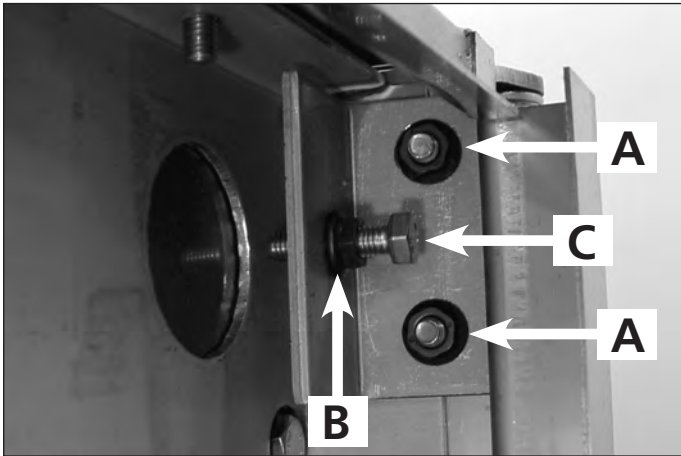
DRIVE MOTOR



1. Remove the right side panel and rotor discs according prior procedure.
2. Disconnect the wiring of the motor. Check where the wire, marked A is connected.
3. Remove the screws that secure the fan cover and remove the cover.
4. Note down how far the drive arm or drive block sticks out from the inner wall (see white or black arrow).
5. (TDR 5 only) Remove the nuts that secure the motor and remove the motor.
6. (TDR 7 only) Set the drive arm in a position vertical downwards. This can be done manually or by turning the fan blade by hand.
7. Mark the position of the motor support with a marker.
8. Remove the bolts that secure the motor and the nuts that secure the motor support and remove the motor.
9. Check the white Teflon ring. Replace this if necessary.
10. Check the position of the red gasket between motor support and the side wall. Replace this if necessary.
11. Install the fan blade on the new motor.
12. Reverse the procedure to install.

Note: Always make a test run of 15 minutes on maximum temperature to insure the motor is well mounted and adjusted and turns parallel to the side wall.

DOOR ADJUSTMENT (LEFT SIDE)



1. Remove the left side panel according prior procedure.
2. Loosen the nuts (A) of the upper hinge. The door must be closed.
3. Loosen the locknut (B) and adjust the bolt (C) in or out to adjust the door.
4. Tighten the nuts of the hinge and mount the left-hand panel.

DOOR GLASS INSIDE



1. Lift the door upward out of the hinges and place it on a table.
2. Remove the cap nuts and rings on the profiles of the door.
3. Remove the profiles from the glass.
4. Mount the profiles on the new glass. Do not forget the teflon rings of 2 mm inside the holes.
5. Mount the cap nuts and rings.
6. Place the door in the hinges.

Note: Tightening of nuts max. 6 Nm.

DOOR OUTSIDE



1. Lift the inner door out of the hinges and lay this aside.
2. Remove the left side panel according prior procedure.
3. Remove the 2 nuts behind the upper hinge and loosen the locknut according prior procedure. The door must be closed.
4. Hold the door on both sides and move this towards yourself, before lifting it out of the hinge on the bottom side. See to it that the washers stay on the hinge. Also remove the top hinge.
5. Place the top hinge on the new door.
6. Place the new door on the hinge on the bottom side and push the 2 studs on the top hinge through the openings on the top side and screw the nuts on it .
7. Adjust the door according prior procedure.

Note: Tightening of nuts max. 6 Nm. or 4.5 lbf.ft



REMOVAL AND REPLACEMENT OF PARTS FOR THE STW 5 AND STW 7

WARNING: Disconnect the electrical power to the machine at the main circuit box. Place a tag on the circuit box indicating the circuit is being serviced.

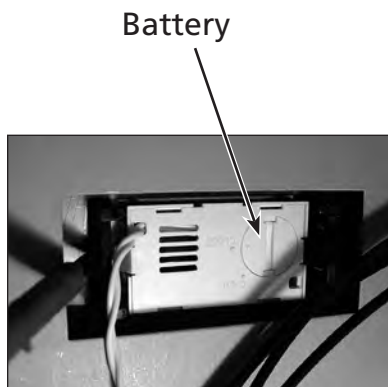
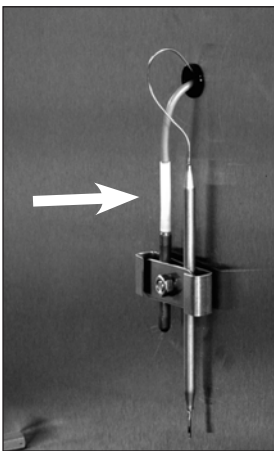
BLOWER MOTOR



1. Remove the right side panel according prior procedure.
2. Remove the racks and bottom plate.
3. Remove the cap nuts that secure the fan plate and remove fan plate.
4. Remove the wing nut on the fan blade and remove fan blade. Left handed threads.
5. Disconnect wiring of the motor.
6. Remove the screws that secure the motor and remove the motor.
7. Reverse the procedure to install.

Note: The blowers are equipped with a capacitor of 1.5 uF. Check the direction of rotation of the motor (clockwise, see arrow) and change the wiring if necessary.

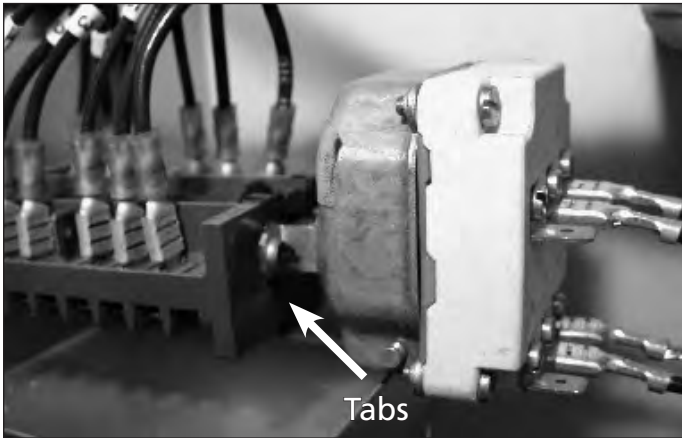
THERMOMETER



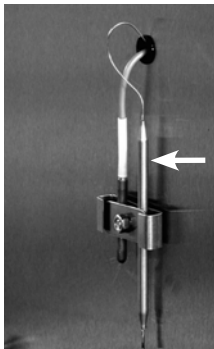
1. Remove the right side panel and the fan plate according prior procedures.
2. Remove the thermometer probe from the clamp inside the cavity (see arrow) and guide it outside through the opening.
3. Remove the thermometer by pushing in the clamps on both sides.
4. Reverse the procedure to install.

Note: When there is no indication on the display of the thermometer, the battery could be empty and has to be replaced.

THERMOSTAT



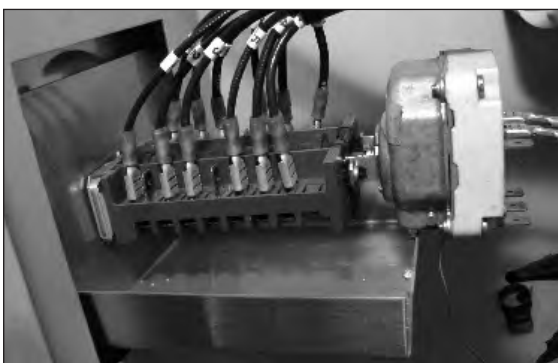
1. Remove the right side panel and the fan plate according prior procedures.
2. Remove the thermostat probe from the clamp inside the cavity (see arrow) and guide it outside through the opening.
3. Disconnect the wiring from the thermostat.
4. Remove the thermostat from the main switch by squeezing the tabs and pull the thermostat away.
5. Reverse the procedure to install.



MAIN SWITCH



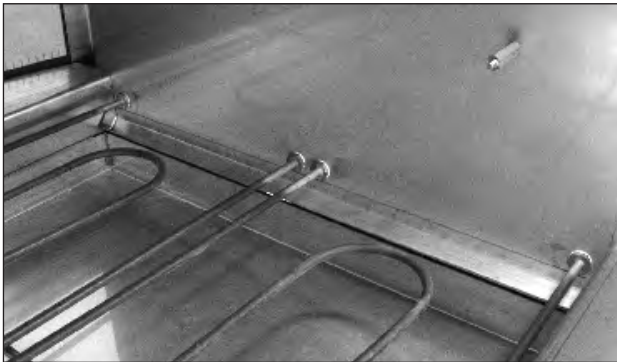
1. Remove the right side panel according prior procedure.
2. Remove the knob according prior procedure.
3. [STGW only] Remove the 2 bolts on the backside of the instrumentpanel
4. Remove the screw that secures the instrumentpanel and remove this panel.
5. Remove the screws that secure the main switch and remove the switch.
6. Disconnect the wiring from the switch.
7. Remove the thermostat from the main switch according prior procedure.
8. Reverse the procedure to install.



HEATING ELEMENT



1. Remove the right side panel, racks, bottom plate and the fan plate according prior procedures.
2. Disconnect the wiring from the element.
3. Remove the nuts and rings that secure the element and remove the element.
4. Reverse the procedure to install.



HALOTHERM LAMP



1. Remove the nuts of the cover profile.
2. Push the lamp to either side and pull it down to remove the lamp.
3. Insert one end of the new lamp in the socket and push it in. Align the other end of the lamp with the socket and allow the spring tension to push the lamp in place.
4. Replace the cover profile.



Note: Be sure that the "drop" on the lamp is pointing downwards.

ELECTRICAL TESTS AND SERVICE PROCEDURES

WARNING: Disconnect the electrical power to the machine at the main circuit box. Place a tag on the circuit box indicating the circuit is being serviced.

HEATING ELEMENT TEST

Note: When testing the resistance of the element remove the wiring.

Type	Wattage/Voltage	Resistance Ω -0% + 10%	Current A
STG 5	2000 / 208 2000 / 230	21.5 26.5	9.6 8.7
STG 7	2100 / 208 2100 / 230	20.5 25.0	10.0 9.1
STG 7	3100 / 208 3100 / 230	14.0 17.0	14.9 13.4
STW 5	2500 / 230	21.0	10.8
STW 7	1500 / 230	35.0	6.5

CONTACTOR, DRIVE MOTOR AND BLOWER TEST

Note: When testing the resistance remove the wiring.

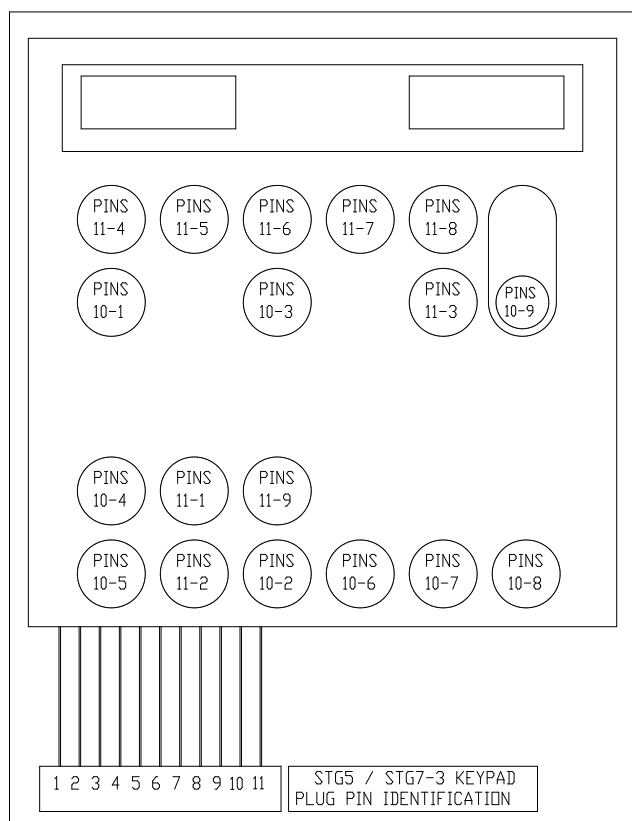
Type	Description	Voltage	Resistance Ω
STG 5 + 7	Contactor	208 / 230	Resistance of coil (A1 - A2) ~ 52
STG 5 + 7	Drive motor	208 / 230	Between white A and white wire ~ 234 Between white A and brown wire ~ 117 Between white and brown wire ~ 117
STG 5	Blower rotisserie	208 / 230	Between blue and brown wire ~ 310 Between blue and black wire ~ 190 Between brown and black wire ~ 500
STG 7	Blower rotisserie	208 / 230	Between blue and brown wire ~ 310 Between blue and black wire ~ 320 Between brown and black wire ~ 630
STW 5 + 7	Blower warmer	208 / 230	Between blue and brown wire ~ 310 Between blue and black wire ~ 320 Between brown and black wire ~ 630

PT500 SENSOR TEST

Temperature		Resistance
°F	°C	± 5 Ohms
60	16	531
70	21	541
80	27	553
90	32	562
100	38	574
125	52	601
150	65	626
200	94	681
250	121	732
350	177	837
450	233	940

1. Remove the right side panel according prior procedure.
2. Remove the wiring from the sensor.
3. Connect a temperature sensor to the probe for comparison.
4. Test the probe with an Ohmmeter.

KEYPAD TEST



1. Remove the instrument panel according prior procedure.
2. Remove the display according prior procedure.
3. Remove the nuts that secure the panel with foil and remove panel.
4. Use a multimeter to test. Connect the measuring pins to the cable plug pins for each key to be tested as indicated in the diagram. You can set the multimeter on a beep signal or set it on resistance measuring. Press the key to be tested and the meter should give a beep signal or indicates a resistance less than 200 Ohms.

CHANGING QUARTZ LIGHT FUNCTIONS

For the standard rotisseries (with doors on both sides) the Quartz light on customer side is always on during the process and the light on service side switches on and off with the heating elements. In some cases it is desirable that the lights work the other way around. To do this you have to change the wiring of the Quartz lights. Below is described how to do this with the different rotisseries. See also the circuit and wiring diagrams.

STG 5 P: Change the wire 43 on the contactor with the wire 23 on the power board.

Note: Wire 43 has to be extended.

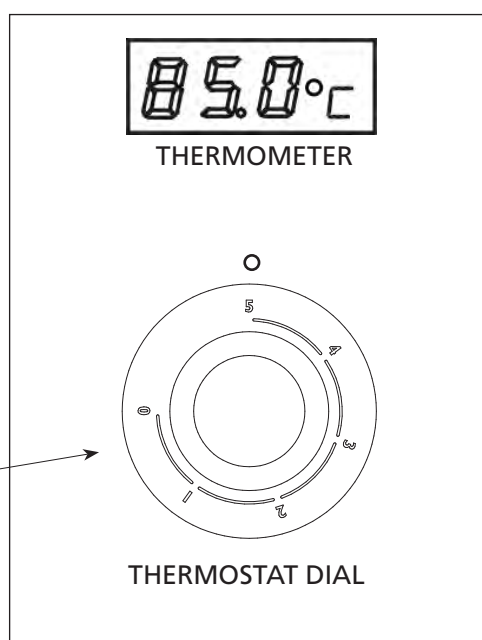
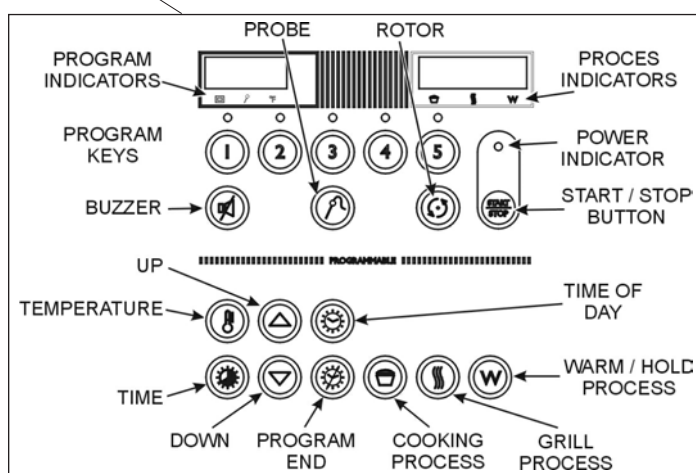
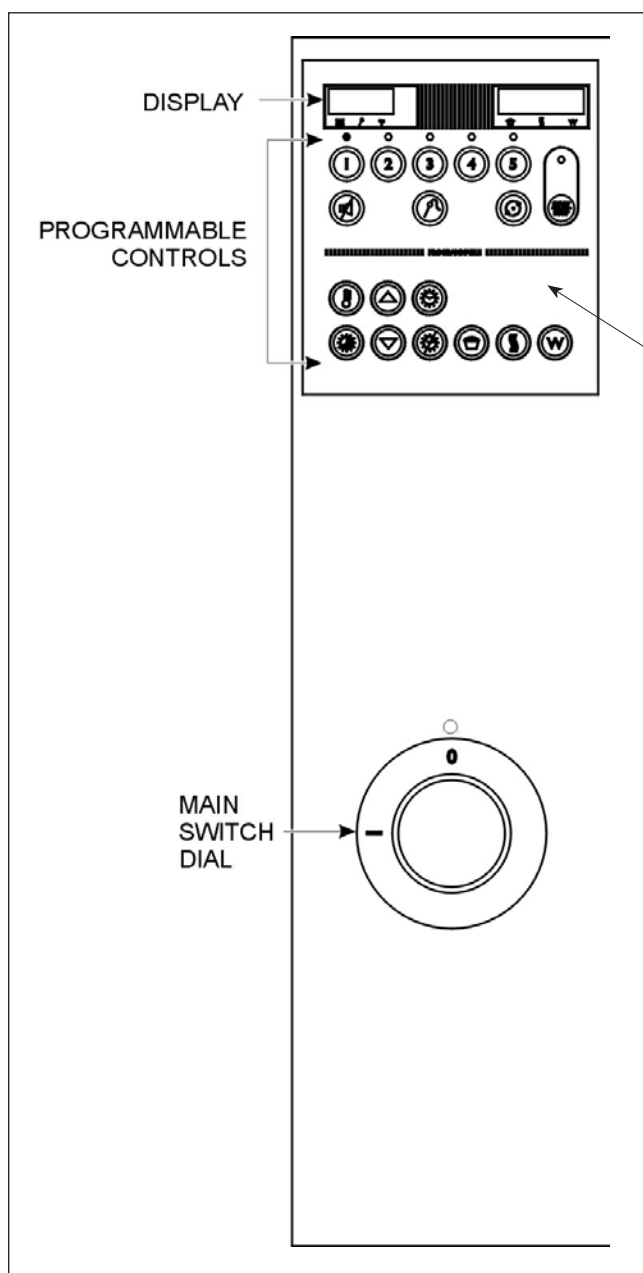
STG 7 P 3N~400V and 1N~230V: Change the wire 43 on the contactor with the wire 23 on the power board.

Note: Wire 43 has to be extended.

STG 7 P 3~200/230V: Change the wires 41 and 18 on the connection block. Change the wire 43 on the contactor with the wire 23 on the power board.

Note: Wire 43 has to be extended.

CONTROL LOCATION



- 1 ≈ 25°C
- 2 ≈ 40°C
- 3 ≈ 60°C
- 4 ≈ 80°C
- 5 ≈ 95°C

GENERAL TROUBLESHOOTING LIST

TROUBLESHOOTING FOR THE STG 5 / 7 ROTISERIES

Symptom	Possible causes
No power to oven controls.	1. Main breaker open. 2. Fuse F1 burned. 3. Main switch malfunction. 4. Wiring loose.
Main fuse or breaker blows.	1. Wiring incorrectly. 2. Heating element, drive motor, blower or contactor switch shorted. 3. Wiring shorted.
Drive motor does not run in program mode.	1. Capacitor malfunction. 2. Wiring loose. 3. Main switch malfunction. 4. Motor malfunction.
Drive motor stops and runs again after a certain period.	1. Thermal protection activated (105°C / 220°F). This shuts off after the temperature is below 105°C / 220°F.
Blower motor does not run.	1. Capacitor malfunction. 2. Motor inoperative. 3. Power board malfunction (relay). 4. Wiring loose.
Blower motor stops and runs again after a certain period.	1. Thermal protection activated (150°C / 302°F). This shuts off after the temperature is below 150°C / 302°F.
Overttemperature differs from temperature setting in program mode.	1. Incorrect line voltage. 2. Safety thermostat malfunction. 3. Safety thermostat probe not in right position. 4. Blower motor(s) inoperative (turning direction?) 5. Electronic control inoperative. 6. PT-500-sensor malfunction. 7. Dirty fanguard or fanblade(s).
All heating elements out, one quartzlamp and blowers operate while oven cavity is below set temperature.	1. Safety thermostat malfunction. 2. Contactor inoperative. 3. Power board malfunction. 4. Wiring loose.
Oven temperature does not reach desired temperature in program mode.	1. Safety thermostat malfunction. 2. Safety thermostat probe not in right position. 3. Contactor inoperative. 4. PT-500-sensor malfunction. 5. Electronic control inoperative. 6. Heater(s) inoperative. 7. Incorrect line voltage.
No display and/or keypad does not function.	1. Main braker on L2 (STG5) or L1 (STG7) open. 2. Loose flatcable from display to electronic control. 3. Fuse F4 (63mA) burned. 4. Fuse F1 (10A) burned. 5. Display and/or electronic control malfunction. 6. Keypad malfunction.
Count down clock does not count down during cooking process.	1. Christal of real time clock is broken. Change power board.

TROUBLESHOOTING FOR THE STW 5 / 7 WARMERS

Symptom	Possible causes
No power to warmer controls.	1. Main breaker open. 2. Switch malfunction. 3. Wiring loose.
Main fuse or breaker blows.	1. Wiring incorrectly. 2. Heating element or blower shorted. 3. Wiring shorted.
Blower motor does not run.	1. Capacitor malfunction. 2. Wiring loose. 3. Motor inoperative.
Blower motor stops and runs again after a certain period.	1. Thermal protection activated (150°C / 302°F). This shuts off after the temperature is below 150°C / 302°F.
Lamps do not operate.	1. Lamp malfunction. 2. Switch malfunction. 3. Wiring loose.
Oven temperature does not reach desired temperature.	1. Incorrect line voltage. 2. Heater(s) inoperative. 3. Thermometer malfunction. 4. Thermostat malfunction. 5. Thermostat probe not in right place. 6. Blower motor inoperative (turning direction?) 7. Dirty fanguard or fanblade.
Products dry out too fast.	1. No water in tray.
No indication on display.	1. Display malfunction. 2. Battery of display empty.

ANALYTIC TROUBLESHOOTING LIST

SERVICING AND REPAIRING THE STG 5 AND 7 ROTISSERIES

This is an analytic description for servicing and repairing all major parts of the rotisseries and warmers. It consists off 4 basic steps to recognize and solve the problems. These steps are:

1. Symptoms.
2. Possible causes.
3. Solving of the problem: checking/action.
4. Replacing of parts and testing.
 - a. Replacing is described in the service manual.
 - b. For testing see programming of rotisserie on page 5 in this manual.

Description of part	Symptoms	Possible causes	Solving: checking/action
Inside door	Broken glass	Slamming of door. Fastening bolts and nuts are loose. No sealing ring between steel and glass.	Give instruction to operator. Tighten all fastenings. Mount new glass with sealing rings between glass and steel.
Outside door	Broken glass	Slamming of door. Fastening bolts and nuts are loose. No sealing ring between steel and glass.	Give instruction to operator. Tighten all fastenings. Mount new glass with sealing rings between glass and steel.
	Door adjustment	Door not well adjusted and closes against bottom side.	Adjust door on hinge and tighten the hinge plate.
Heating element	Rotisserie doesn't reach adjusted temperature	Wiring. Element malfunction.	Check the wiring. Check the power on the element. Check the current with AC current tester. See table on page 24.
	Duration of grilling time is too long	Wiring. Element malfunction.	Check the wiring. Check the current with AC current tester. See table on page 24.

Description of part	Symptoms	Possible causes	Solving: checking/action
PT-sensor	Temperature indication on display runs up very fast and over the maximum of 250°C -482°F / 290°C - 550°F in 20 seconds) Temperature indication on display doesn't go up and stays on Prh Rotisserie doesn't reach adjusted temperature Temperature indication on display runs up too fast.	No connection between wires. Full contact between wires of sensor. Short circuit in sensor. Malfunction sensor. Sensor not in right position. Malfunction sensor.	Check the wiring. Check thin wire on sensor. Check the wiring. Measure resistance of sensor. This is zero. Measure resistance of sensor with a thermometer probe next to the sensor. See table on page 25. Check position of sensor. Measure resistance of sensor. See table on page 23.
Safety thermostat	Contactors doesn't come in after starting of program Contactors switches off before reaching the adjusted temperature in program	Wiring. Thermostat malfunction. Thermostat malfunction. Thermostat probe not in right position.	Check the wiring. Check if the thermostat is making contact. Check if the thermostat is turned fully clockwise (contact closed). Check the position of the thermostat probe.
Main switch	No power to all, or some oven controls Switch comes in, but one or more functions from the switch don't work.	Wiring. Malfunction of the cams on the switch. Contacts burned.	Check the wiring on the switch. Check the cams. Check the wiring. Check the power on all contacts. Check the contacts of the switch.
Contactors	Contactors doesn't come in	Wiring. Coil malfunction. Contact burned.	Check the wiring. Check resistance of the coil. This should be 525Ω. See table on page 24. Check the contacts of the contactors.
Keypad on display	No possibility to make a program	Permanent contact of one, or more, membrane keys. Some keys don't function.	Check key functions. Check functions of key path. See table on page 23. Check grey flat cable connection. Check green flat cable connection. Check functions after connecting a new grey flat cable.

Description of part	Symptoms	Possible causes	Solving: checking/action
Display and power board	No illumination on display	Wiring. Fuse burned. Flat cable. Display malfunction.	Check the wiring. Check the power on the board. Check the 63 mA fuse on the power board. Replacing of fuse for 100 mA is permitted. Check grey flat cable connection. Check functions after connecting a new grey flat cable. Check power to display on connector J1 of power board. 5V DC between pin 30 and 32 or between 31 and 33. Check functions after connecting a new display board.
	Some functions don't work or stay activated No possibility to make a program	Power board malfunction. Relay malfunction. Power board malfunction.	Check functions after connecting a new power board. Check relay on function with problem. Check functions after connecting a new power board.
Capacitor	Drive motor or blower don't work	Wiring. Capacitor malfunction.	Check the wiring. Check function after connecting a new capacitor. Checking of capacitor: Discharge capacitor with screwdriver. Set meter on MΩ and connect the pins of the meter on contacts, value runs up. Change the pins on contacts, value runs up again. This means the capacitor is OK.

Description of part	Symptoms	Possible causes	Solving: checking/action
Drive motor	Motor doesn't run	Wiring. Coil malfunction	Check the wiring. Check the power to the motor. Check resistance of the coils. See table on page 24. Between whiteA and white wire 234Ω Between whiteA and brown wire 117Ω Between white and brown wire 117Ω
	Motor runs after starting it up by hand Motor stops during process and comes in again after a period of time	Reduction gearbox. Relay on power board. Capacitor malfunction. Coil overheated, thermistor switches off (105°C – 221°F).	Check if reduction gearbox is blocked. Check power on relay X14. Check capacitor (see capacitor) or connect new capacitor. Check position of fan blade. Air is sucked up over the motor. Check cooling circuit of motor. Check if rotisserie is close to another heat source. Measure temperature motor during process.
	Fuse F1 or F2 burned	Short circuit in coil to earth	Check insulation value of coil with Megger on 500V. Minimum value is 0.5 MΩ.
Blower	Blower doesn't run	Wiring. Coil malfunction.	Check the wiring. Check the power on the blower. Check resistance of the coils. See table on page 24. Between blue and brown wire STG 7= 310Ω; STG 5= 310Ω Between blue and black wire STG 7= 320Ω; STG 5=190Ω Between brown and black wire STG 7= 630Ω; STG 5= 500Ω
	Blower runs after starting it up by hand Blower stops during process and comes in again after a period of time	Relay on power board. Capacitor malfunction. Coil overheated, thermistor switches off (150°C – 302°F).	Check power on relay X9 and X10 Check capacitor (see capacitor) or connect new capacitor. Check cooling circuit of blower. Check if rotisserie is close to another heat source. Measure temperature blower during process.
	Temperature indication on display runs up very fast (180°C - 355°F after 5 minutes) Fuse F1 burned	Blower doesn't turn and heat stays in top of cavity Short circuit in coil to earth	Check the wiring. Check the power on the blower. Check insulation value of coil with a Megger on 500V. Minimum value is 0.5 MΩ.

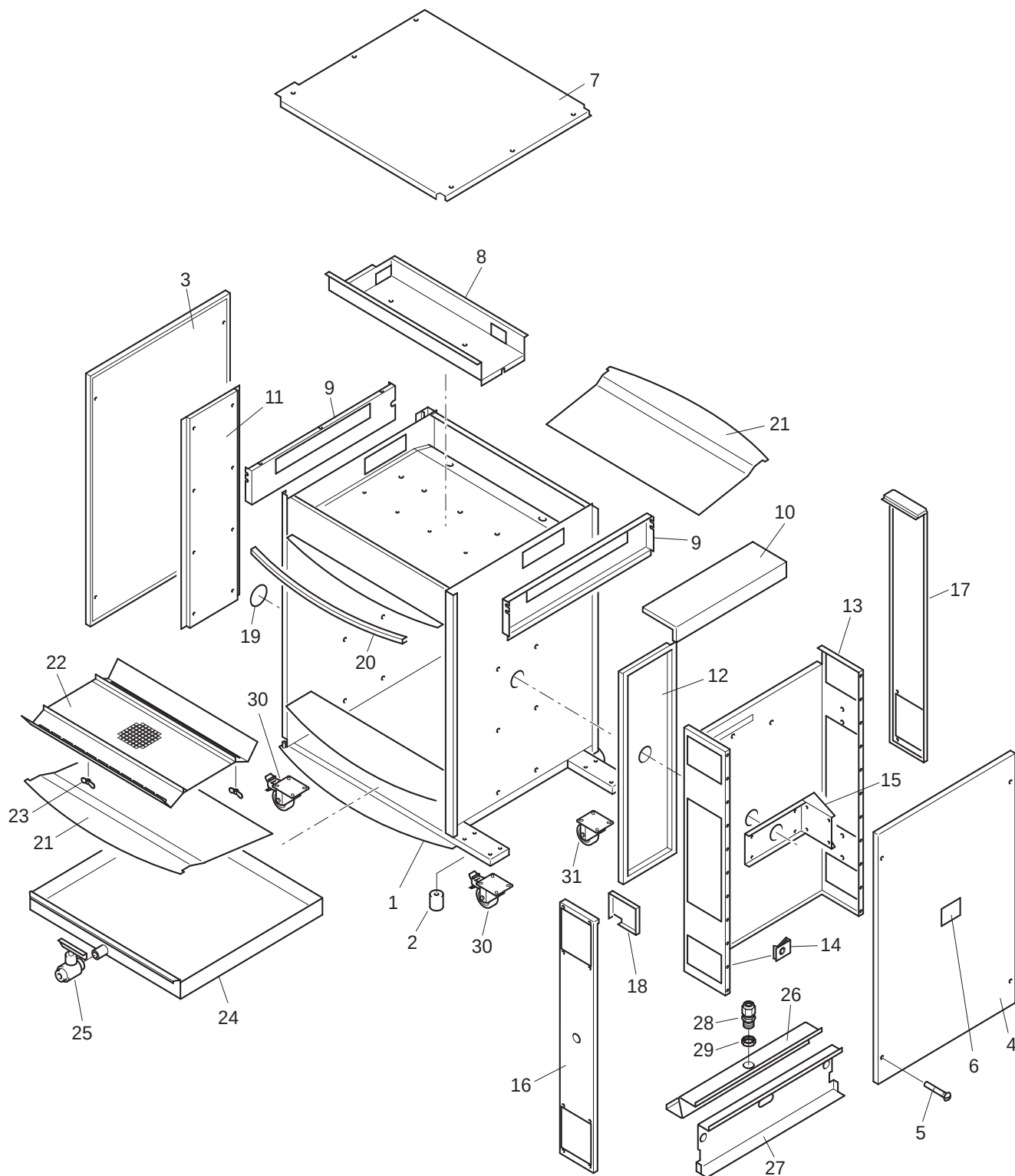
SERVICING AND REPAIRING OF THE WARMERS STW 5 AND 7

Description of part	Symptoms	Possible causes	Solving: checking/action
Outside door	Broken glass Door adjustment	Slamming of door. Fastening bolts and nuts are loose. No sealing ring between steel and glass. Door not well adjusted and closes against bottom side.	Give instruction to operator. Tighten all fastenings. Mount new glass with sealing rings between glass and steel. Adjust door on hinge and tighten the hinge plate.
Heating element	Warmer doesn't reach adjusted temperature	Wiring. Element malfunction.	Check the wiring. Check the power on the element. Check the current with AC current tester. See table on page 24.
Thermostat	Warmer doesn't reach adjusted temperature Warmer doesn't heat up	Wiring. Thermostat malfunction. Thermostat malfunction.	Check the wiring. Check if the thermostat is making contact. Check the position of the thermostat probe. Check if the drive shaft behind the main switch is connected on the thermostat. Check if the thermostat is making contact.
Thermometer	Temperature indication differs from setting with knob	Thermometer malfunction	Check the position of the thermometer probe. Check function after connecting a new thermometer.
Main switch	No power to all, or some oven controls	Wiring. Malfunction of the cams on the switch. Contacts burned.	Check the wiring on the switch. Check the cams. Check the contacts on the switch.
Capacitor	Drive motor or blower doesn't work	Wiring. Capacitor malfunction.	Check the wiring. Check function after connecting a new capacitor. Checking of capacitor: Discharge capacitor with screwdriver. Set meter on MΩ and connect the pins of the meter on contacts, value runs up. Change the pins on contacts, value runs up again. This means the capacitor is OK.

Description of part	Symptoms	Possible causes	Solving: checking/action
Blower	Blower doesn't run	Wiring.	Check the wiring.
		Coil malfunction.	Check the power on the blower. Check resistance of the coils. See table on page 24. Between blue and brown wire = 310Ω Between blue and black wire = 320Ω Between brown and black wire = 630Ω
	Blower runs after starting it up by hand Blower stops during process and comes in again after a period of time	Capacitor malfunction. Coil overheated, thermostat switches off (150°C – 302°F).	Check capacitor (see capacitor), or connect new capacitor. Check cooling circuit of blower. Check if warmer is close to another heat source. Measure temperature blower during process.
	Main fuse burned	Short circuit in coil to earth	Check insulation value of coil with a Megger on 500V. Minimum value is 0.5 MΩ.

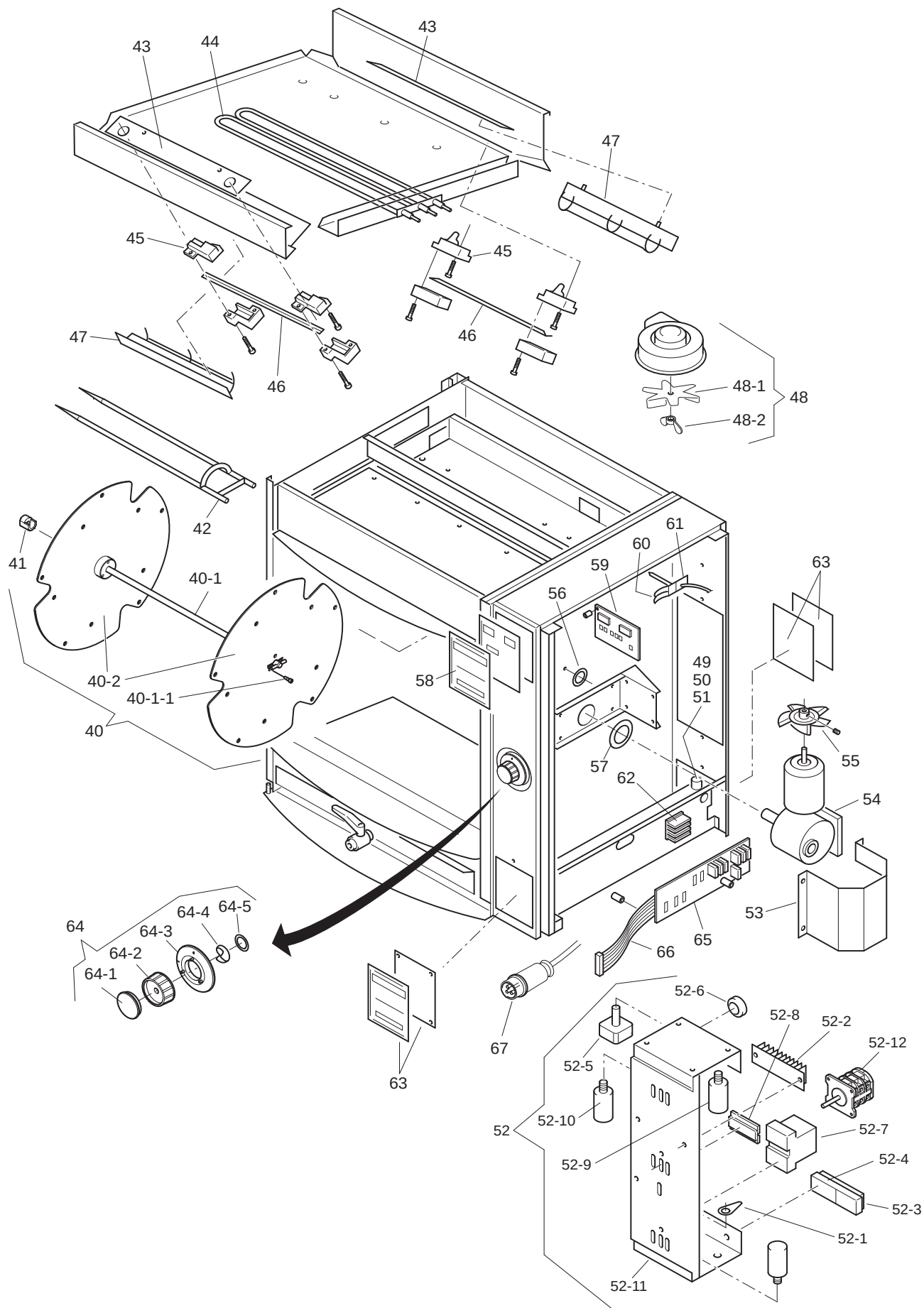
EXPLODED VIEWS & PARTLISTS

STG 5 P - SHEET METAL WORK



Item	Part number	Qty.	Description
1		1	Frame, ass.
2	9171125	4	Leg, rubber 50 mm
2A	9011260	4	Leg, rubber 40 mm (till 01-01-2008)
3	9170428	1	Side panel, left
4	9170532	1	Side panel, right
5	4288322	8	Screw M5 x 10, SS socket button head
6	9110810	1	Indication plate
7	9174060	1	Cap, top
8	9146544	1	Mounting plate, blower
9	9170432	2	Side panel, top
10	9174061	1	Cover, removable
11	9174071	1	Reinforcement, side plate, left
12	9170445	1	Reinforcement, side plate, right
13	9174072	1	Cover plate, machine components
14	9172053	8	Nut
15	9170444	1	Support, gear motor
16	9170608	1	Operation panel
17	9174075	1	Panel, customer side
18	9174146	1	Protection plate, electric components
19	9112430	4	Washer, insulation support
20	9172117	2	Sealing profile, Silicon L= 55 cm
21	9174069	2	Bottom plate, stainless steel
21	9172220	2	Bottom plate, coated
22	9141845	1	Plate, air guide
23	9073149	2	Wingnut M6, SS
24	9170458	1	Drawer
25	9171008	1	Drain-tap with handle
26	9174141	1	Spark catcher
27	9174073	1	Mounting plate
28	9261022	1	Strain relief M25
29	9261023	1	Connector M25
30	9172066	2	Swivel castor with brake (only for stacked units)
31	9172125	2	Rigid castor (only for stacked units)

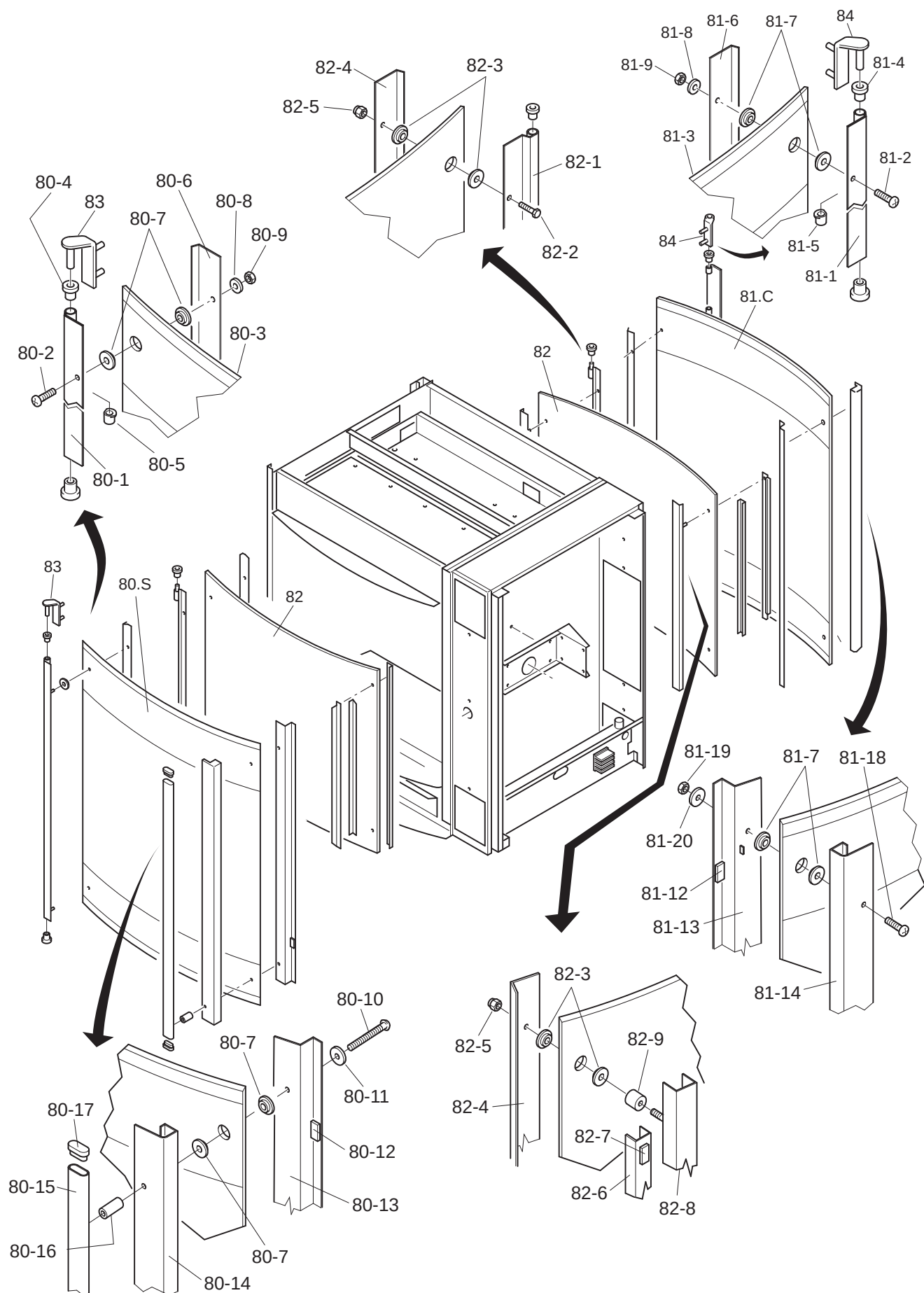
STG 5 P - COMPONENTS



Item	Part number	Qt.	Description
40	9146951	1	Rotorset ass., stainless steel
40-1	9170571	1	Rotor shaft, incl. disc studs and socket head screw M6x20, stainless steel
40-1-1	0142975	6	Socket-head screw M6x20 SS
40-2	9174369	2	Rotor disc 3 mm (5-holes), stainless steel
41	9172062	1	Steel bearing, 12 mm
42	9010549	5	Meatfork, stainless steel
42	9172222	5	Meatfork, coated
43	9112210	2	Mounting plate, lamp holder
44	9140019	2	Heating element 230 V, 2000 W
45	9110023	4	Lamp holder, cap + housing
46	9056082	2	Quartz light, 1000 W
47	9116662	2	Protection, lamp
48	9140027	1	Blower
48-1	9141934	1	Fan blade
48-2	9073150	1	Wingnut, left hand threaded
49	9110025	1	Fuse housing
50	9110026	1	Fuse holder
51	9110250	1	Fuse 5x20, ceramic, T10A
52	9173051	1	Electric panel, ass.
52-1	0166555	1	Earth symbol
52-2	8033659	1	Connecting block, 9-pol.
52-3	9044564	1	Connecting block, 1,2,3
52-4	9044572	1	Connecting block, 4,5,6
52-5	9070531	1	Safety thermostat 50-250 °C
52-6	9070840	2	Grommet
52-7	3500069	1	Contactator
52-8	9077088	1	Rail
52-9	9077101	1	Capacitor 2.5 mF
52-9A	9077102	1	Capacitor 3 uF (till serial nr. 100061450)
52-10	9110030	2	Capacitor 1,5 mF
52-11	9174106	1	Electric panel
52-12	9171140	1	Main switch
52-12A	9172328	1	Main switch (till serial number 100052500)
53	9174161	1	Protection support
54	9173005S	1	Gearmotor, complete with drive head and capacitor 2.5 uF
55	9172078	1	Fanblade Ø 150 mm, gearmotor
56	9171018	2	Plug

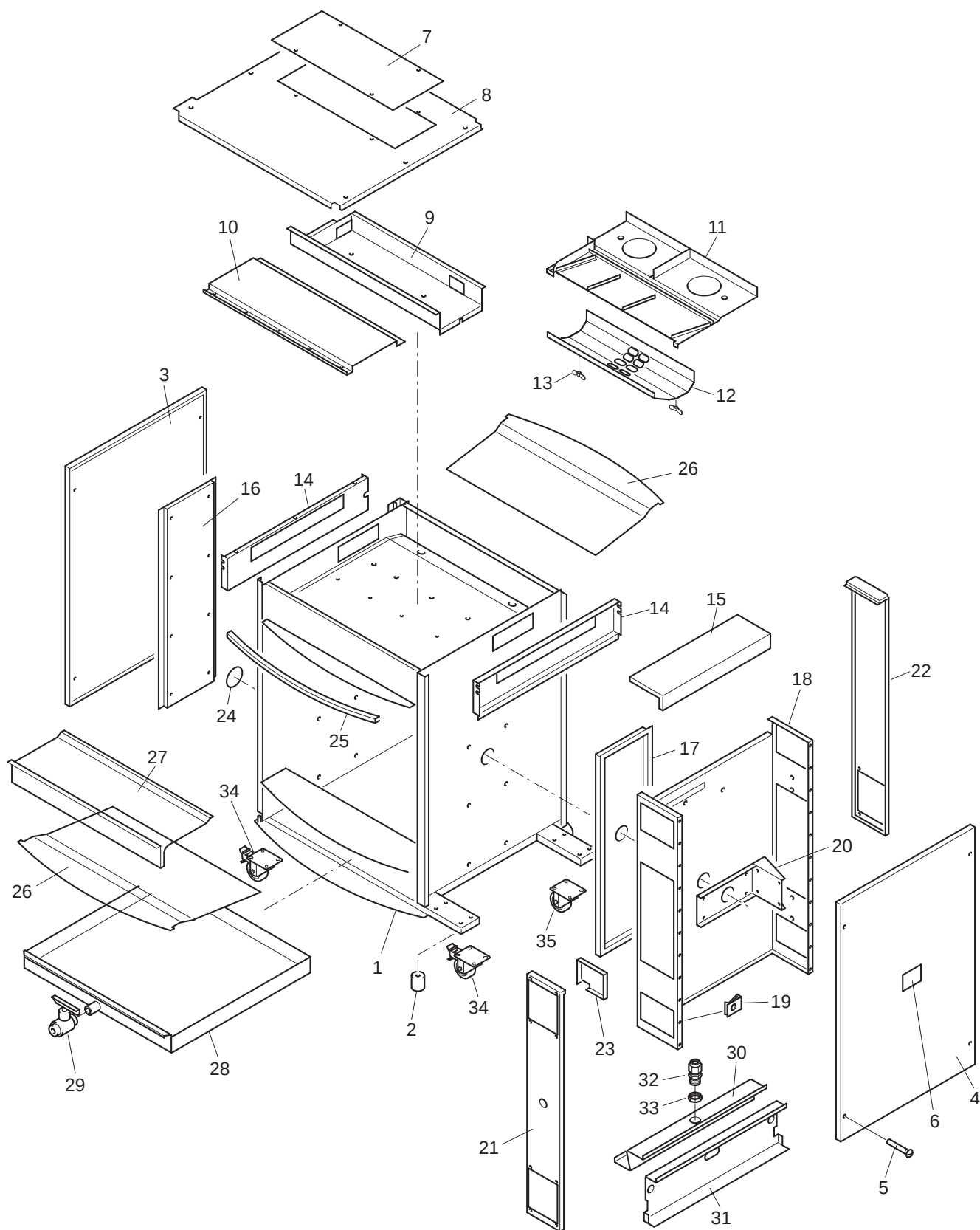
Item	Part number	Qt.	Description
57	9073131	1	Sealing ring, Teflon
58	9172045	1	Keypad + backplate
59	9110242	1	Display
60	9044140	1	Sensor cable
61	9070094	1	Temperature sensor PT 500
62	9151010	1	Connecting block
63	9172040	1	Name plate Fri-Jado, foil + backplate
64	9173017	1	Main power knob assembly
64-1	9172049	1	Back plate, main switch 0-1
64-2	9172021	1	Contron knob, grey
64-3	9172037	1	Back plate, main switch 0-1
64-4	9172052	1	Locking ring
64-5	9110802	1	Seal ring
65	9110276	1	Power and I/O board
66	9172113	1	Flatcable, 34-pol. (P)
67	9070028	1	Connecting cable with plug 16A

STG 5 P - DOORS



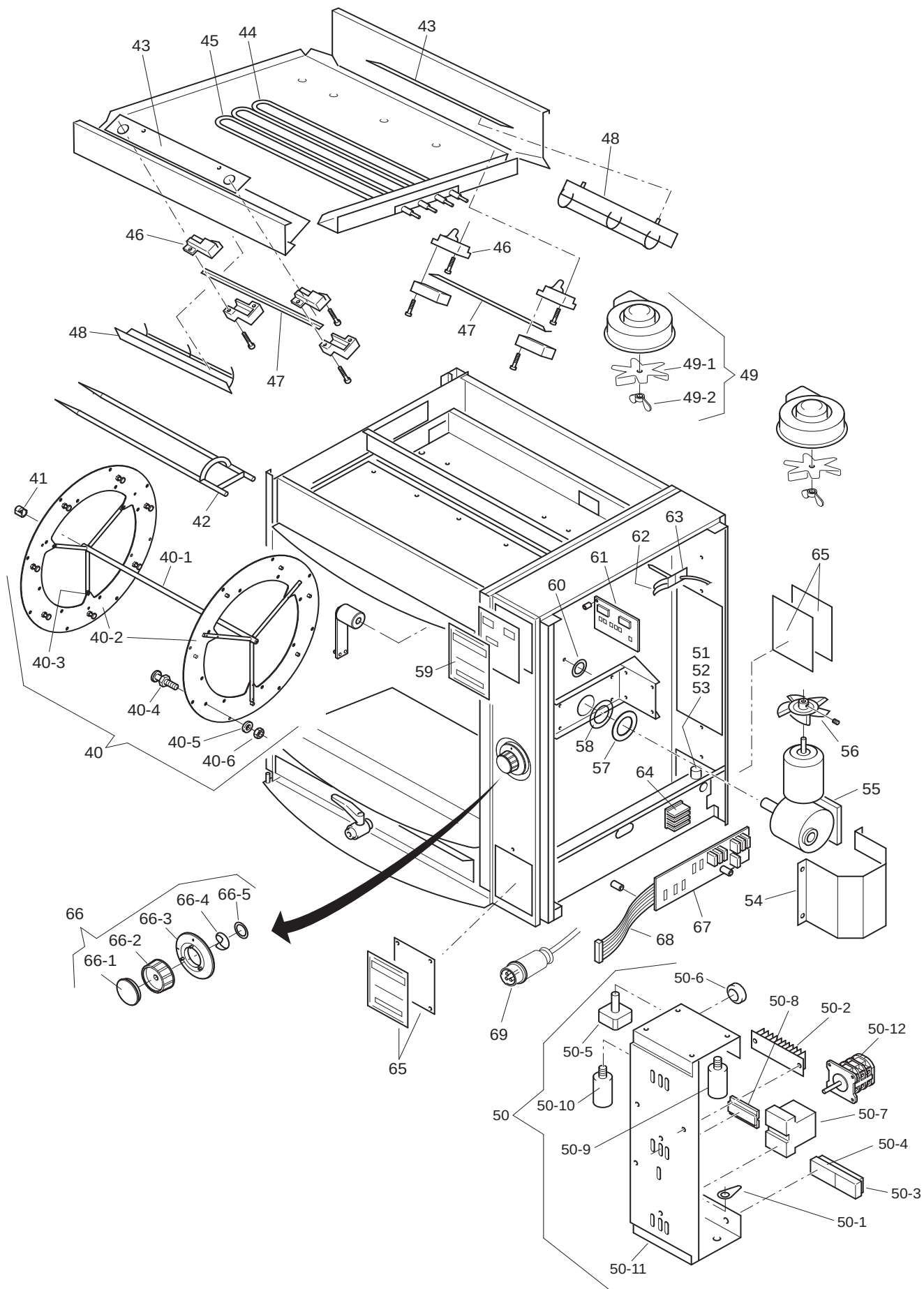
Item	Part number	Qt.	Description	Item	Part number	Qt.	Description
80.S	9179859S	1	Door service side, ass.	82	9179855S	2	Door inside, ass.
80-1	9170441	1	Hinge profile	82-1	9170442	2	Hinge profile
80-2	4288321	2	Screw M5 x 16, SS socket button head	82-2	0211520	4	Bolt M5 x 12 ss hexagon head
80-3	9172080	2	Protection profile	82-3	3702341	16	Flange bush, PTFE 2 mm
80-4	9172054	2	Brass bearing 8 mm	82-4	9174080	2	Cover profile, inner glass
80-5	9172122	4	Brass bearing 8 mm, adjusted	82-5	4285408	8	Nut, M5
80-6	9174079	2	Mounting profile, hinge side	82-6	9174081	2	Holder, magnet
80-7	3702342	8	Flange bush, PTFE 3 mm	82-7	9070141	14	Magnet block
80-8	4311110	4	Washer	82-8	9174084	2	Profile
80-9	0144359	4	Nut, self locking M5	82-9	9172081	4	Spacing pin
80-10	4288320	2	Screw M5x45 SS	83	9170427	1	Hinge, left
80-11	9174680	2	Washer	84	9174026	1	Hinge, right
80-12	9070141	12	Magnet block				
80-13	9174083	1	Fastening, door handle				
80-14	9170464	1	Profile, magnet				
80-15	9174132	1	Door handle				
80-16	9172300	2	Spacing pin				
80-17	9171014	2	Plug, door handle				
81.C	9179860S	1	Door customer side, ass.				
81-1	9170441	1	Hinge profile				
81-2	4288321	2	Screw M5 x 16, SS socket button head				
81-3	9172080	2	Protection profile				
81-4	9172054	2	Brass bearing 8 mm				
81-5	9172122	2	Brass bearing 8 mm, adjusted				
81-6	9174079	1	Mounting profile, hinge side				
81-7	3702342	8	Flange bush, PTFE 3 mm				
81-8	4311110	2	Washer				
81-9	0144359	2	Nut, self locking M5				
81-12	9070141	12	Magnet block				
81-13	9174083	1	Fastening, door handle				
81-14	9170464	1	Profile, magnet				
81-18	4288321	2	Screw M5 x 16, SS socket button head				
81-19	0144359	2	Nut, self locking M5				
81-20	9174680	2	Washer				

STG 7 P - SHEET METAL WORK



Item	Part number	Qty.	Description
1		1	Frame, ass.
2	9171125	4	Leg, rubber 50 mm
2A	9011260	4	Leg, rubber 40 mm (till 01-01-2008)
3	9170419	1	Side panel, left
4	9170531	1	Side panel, right
5	4288322	8	Screw M5 x 10, SS socket button head
6	9110810	1	Indication plate
7	9174099	1	Cover, removable
8	9174004	1	Cap, top
9	9170450	1	Mounting plate, blower
10	9174016	1	Ceiling
11	9170640	1	Cover plate, blower
12	9111913	1	Air guide plate
13	9073149	2	Wingnut M6, SS
14	9170421	2	Side panel, top
15	9174005	1	Cover, removable
16	9174013	1	Reinforcement, side plate, left
17	9170425	1	Reinforcement, side plate, right
18	9174015	1	Cover plate, machine components
19	9172053	8	Nut
20	9170444	1	Support, gear motor
21	9170544	1	Operation panel
22	9174031	1	Panel, customer side
23	9174146	1	Protection plate, electric components
24	9112430	4	Washer, insulation support
25	9172116	2	Sealing profile, Silicon L= 71 cm
26	9174010	2	Bottom plate, stainless steel
26	9172202	2	Bottom plate, coated
27	9170404	1	Heat shield
28	9170451	1	Drawer
29	9171008	1	Drain-tap with handle
30	9174140	1	Spark catcher
31	9174034	1	Mounting plate
32	9261022	1	Strain relief M25
33	9261023	1	Connector M25
34	9172066	2	Swivel castor with brake (only for stacked units)
35	9172125	2	Rigid castor (only for stacked units)

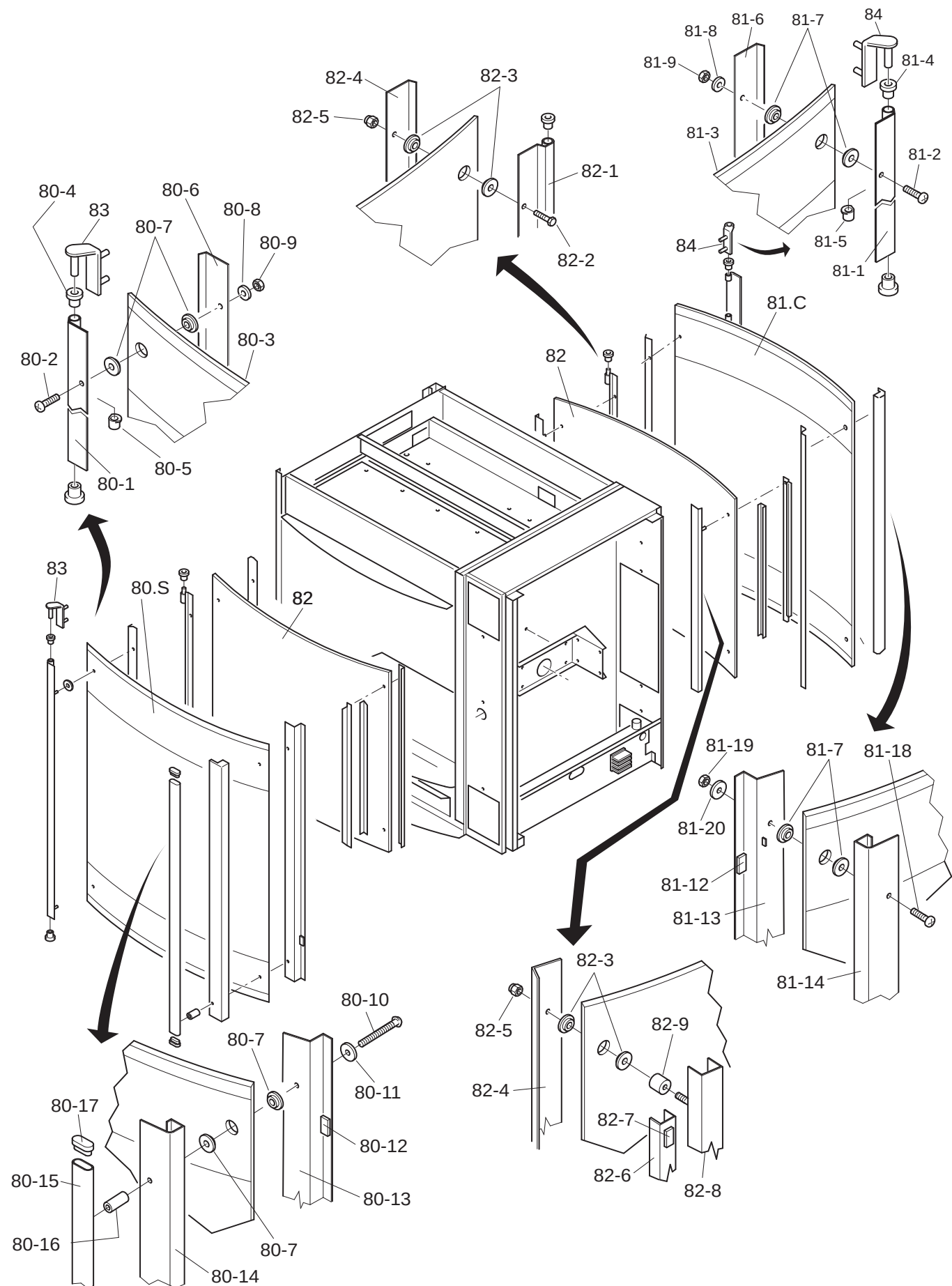
STG 7 P - COMPONENTS



Item	Part number	Qty.	Description
40	9170055	1	Rotorset ass., stainless steel
40-1	9070272	1	Rotor shaft, stainless steel
40-2	9174351	2	Rotor disc 3 mm, stainless steel
40-3	4288231	12	Tensilock bolt M5x10, stainless steel
40-4	9172169	14	Support pin, stainless steel
40-5	0142056	14	Spring washer M8, support pin, stainless steel
40-6	4312271	14	Nut M8, support pin, stainless steel
41	9172063	1	Steel bearing, 14 mm
42	9172153	7	Meatfork 8 mm SS
42	9172242	7	Meatfork 8 mm, coated
43	9112210	2	Mounting plate, lamp holder
44	9040023	2	Heating element 230 V, 2100 W
45	9044653	1	Heating element 230 V, 3100 W
46	9110023	4	Lamp holder, cap + housing
47	9056082	2	Quartz light, 1000 W
48	9116662	2	Protection, lamp
49	9110048	2	Blower
49-1	9110153	2	Fanblade
49-2	9073150	2	Wingnut, left hand threaded
50	9173051	1	Electric panel, ass.
50-1	0166555	1	Earth symbol
50-2	8033659	1	Connecting block, 9-pol.
50-3	9044564	1	Connecting block, 1,2,3
50-4	9044572	1	Connecting block, 4,5,6
50-5	9070531	1	Safety thermostat 50-250 °C
50-6	9070840	2	Grommet
50-7	3500069	1	Contacto
50-8	9077088	1	Rail
50-9	9077101	1	Capacitor 2.5mF
50-9A	9077102	1	Capacitor 3 uF (till serial nr. 100061450)
50-10	9110030	2	Capacitor 1,5 mF
50-11	9174106	1	Electric panel
50-12	9171140	1	Main switch
50-12A	9172328	1	Main switch (till serial number 100050804)

Item	Part number	Qty.	Description
51	9110025	1	Fuse housing
52	9110026	2	Fuse holder
53	9171120	2	Fuse 5x20, ceramic T10A
54	9174161	1	Protection support
55	9173004S	1	Gearmotor, complete with drive arm and capacitor 2.5 uF
56	9172078	1	Fanblade Ø 150 mm, gearmotor
57	9110797	1	Sealring, drive bearing
58	9073131	1	Sealing ring
59	9172045	1	Keypad + backplate
60	9171018	3	Plug
61	9110242	1	Display
62	9044140	1	Sensor cable
63	9070094	1	Temperature sensor
64	9151010	1	Connecting block
65	9172040	2	Name plate Fri-jado, foil + backplate
66	9173017	1	Main power knob assembly
66-1	9172049	1	Back plate, main switch 0-1
66-2	9172021	1	Contron knob, grey
66-3	9172037	1	Back plate, main switch 0-1
66-4	9172052	1	Locking ring
66-5	9110802	1	Seal ring
67	9110276	1	Power and I/O board
68	9172113	1	Flatcable, 34-pol. (P)
69	9070028	1	Connecting cable with plug 16A

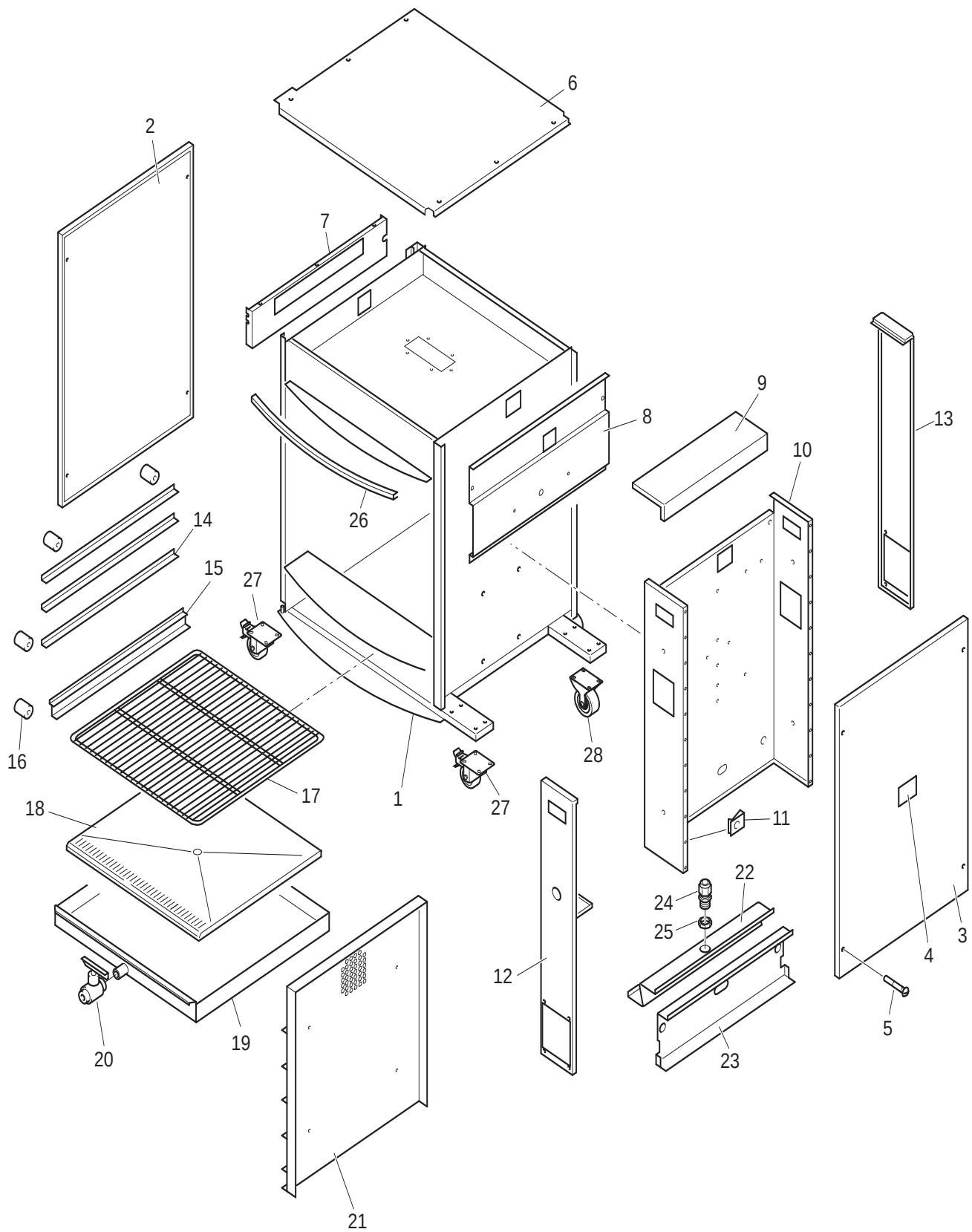
STG 7 P - DOORS



Item	Part number	Qty.	Description
80.S	91798505	1	Door service side, ass.
80-1	9170422	1	Hinge profile
80-2	4288321	2	Screw M5 x 16, SS socket button head
80-3	9172079	2	Protection profile
80-4	9172054	2	Brass bearing 8 mm
80-5	9172122	2	Brass bearing 8 mm, adjusted
80-6	9174022	2	Mounting profile, hinge side
80-7	3702342	8	Flange bush, PTFE 3 mm
80-8	4311110	2	Washer
80-9	0144359	2	Nut, self locking M5
80-10	4288320	2	Screw M5x45 SS
80-11	9174680	2	Washer
80-12	9070141	12	Magnet block
80-13	9174025	1	Fastening, door handle
80-14	9170454	1	Profile, magnet
80-15	9174131	1	Door handle
80-16	9172300	2	Spacing pin
80-17	9171014	2	Plug, door handle
81.C	91798515	1	Door customer side, ass.
81-1	9170422	1	Hinge profile
81-2	4288321	2	Screw M5 x 16, SS socket button head
81-3	9172079	2	Protection profile
81-4	9172054	2	Brass bearing 8 mm
81-5	9172122	2	Brass bearing 8 mm, adjusted
81-6	9174022	2	Mounting profile, hinge side
81-7	3702342	8	Flange bush, PTFE 3 mm
81-8	4311110	2	Washer
81-9	0144359	2	Nut, self locking M5
81-12	9070141	12	Magnet block
81-13	9174025	1	Fastening, door handle
81-14	9170454	1	Profile, magnet
81-18	4288321	2	Screw M5 x 16, SS socket button head
81-19	0144359	2	Nut, self locking M5
81-20	4311110	2	Washer

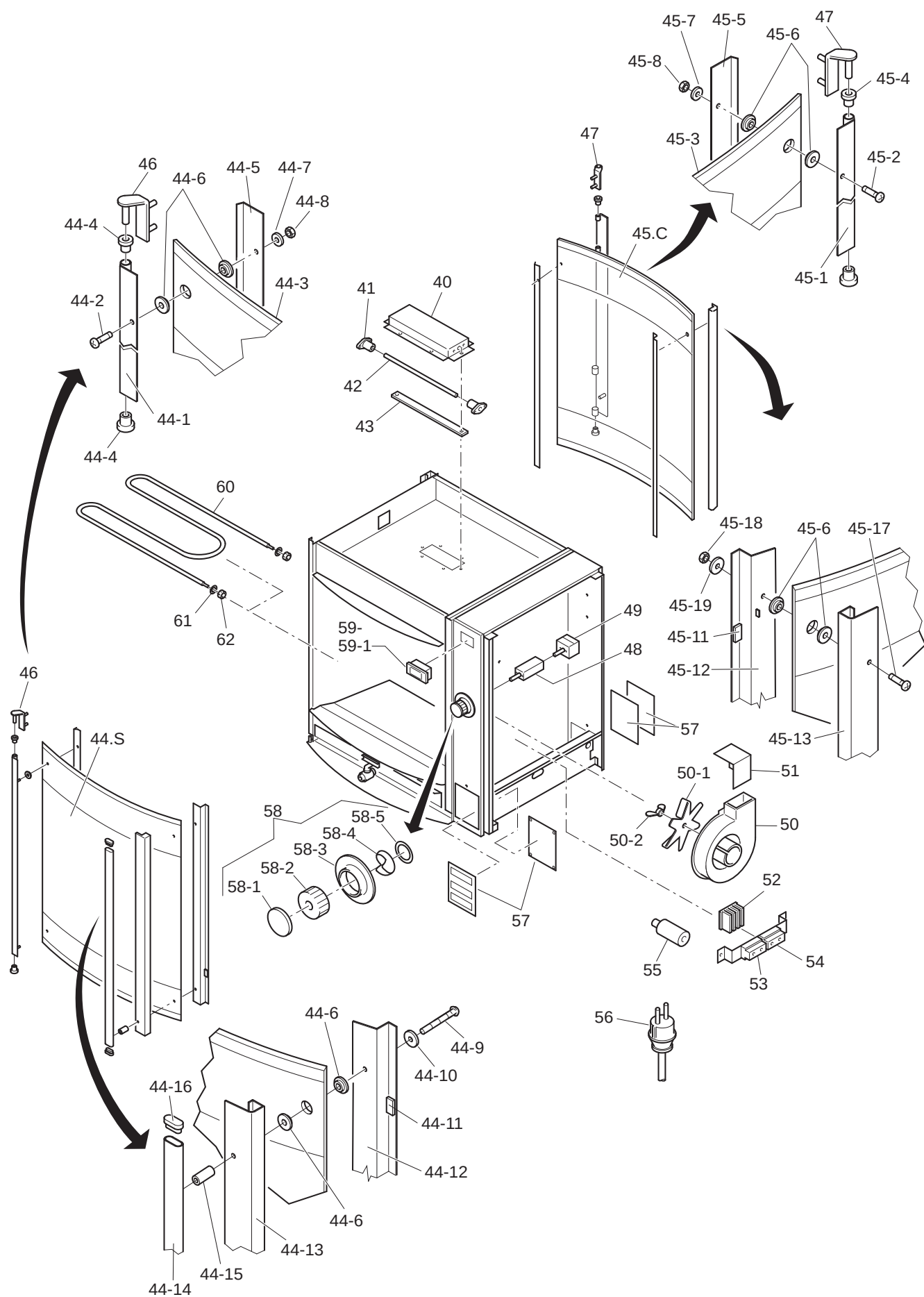
Item	Part number	Qty.	Description
82	91798525	2	Door inside, ass.
82-1	9170423	2	Hinge profile
82-2	0211520	4	Bolt M5 x 12 ss hexagon head
82-3	3702341	16	Flange bush, PTFE 2 mm
82-4	9174029	4	Cover profile, inner glass
82-5	4285408	8	Nut, M5
82-6	9174027	2	Profile
82-7	9070141	20	Magnet block
82-8	9174026	2	Holder, magnet
82-9	9172081	4	Spacing pin
83	9170427	1	Hinge, left
84	9170426	1	Hinge, right

STW 5 - SHEET METAL WORK



Item	Part number	Qty.	Description
1		1	Frame, ass.
2	9170428	1	Side panel, left
3	9170480	1	Side panel, right
4	9110810	1	Indication plate
5	4288322	8	Screw M5 x 10, SS socket button head
6	9174060	1	Cap, top
7	9170432	1	Side panel, top
8	9174092	1	Reinforcement, side plate, right
9	9174061	1	Cover, removable
10	9174095	1	Cover plate, machine components
11	9172053	8	Nut
12	9170460	1	Operation panel
13	9174075	1	Panel, customer side
14	9174117	3	Runner
14A	9170440	1	Runner rack (till 01-05-1999)
15	9174096	1	Profile for bottom plate
16	9171020	8	Spacing pin
17	9142192	3	Display rack
18	9174089	1	Bottom plate
19	9170458	1	Drawer
20	9171008	1	Drain-tap with handle
21	9170439	1	Ventilating plate
22	9174142	1	Spark catcher
23	9174073	1	Mounting plate
24	9222076	1	Strain relief M20
25	9222077	1	Connector M20
26	9172117	2	Sealing profile, Silicon L= 55 cm
27	9172066	2	Swivel castor with brake
28	9172125	2	Rigid castor

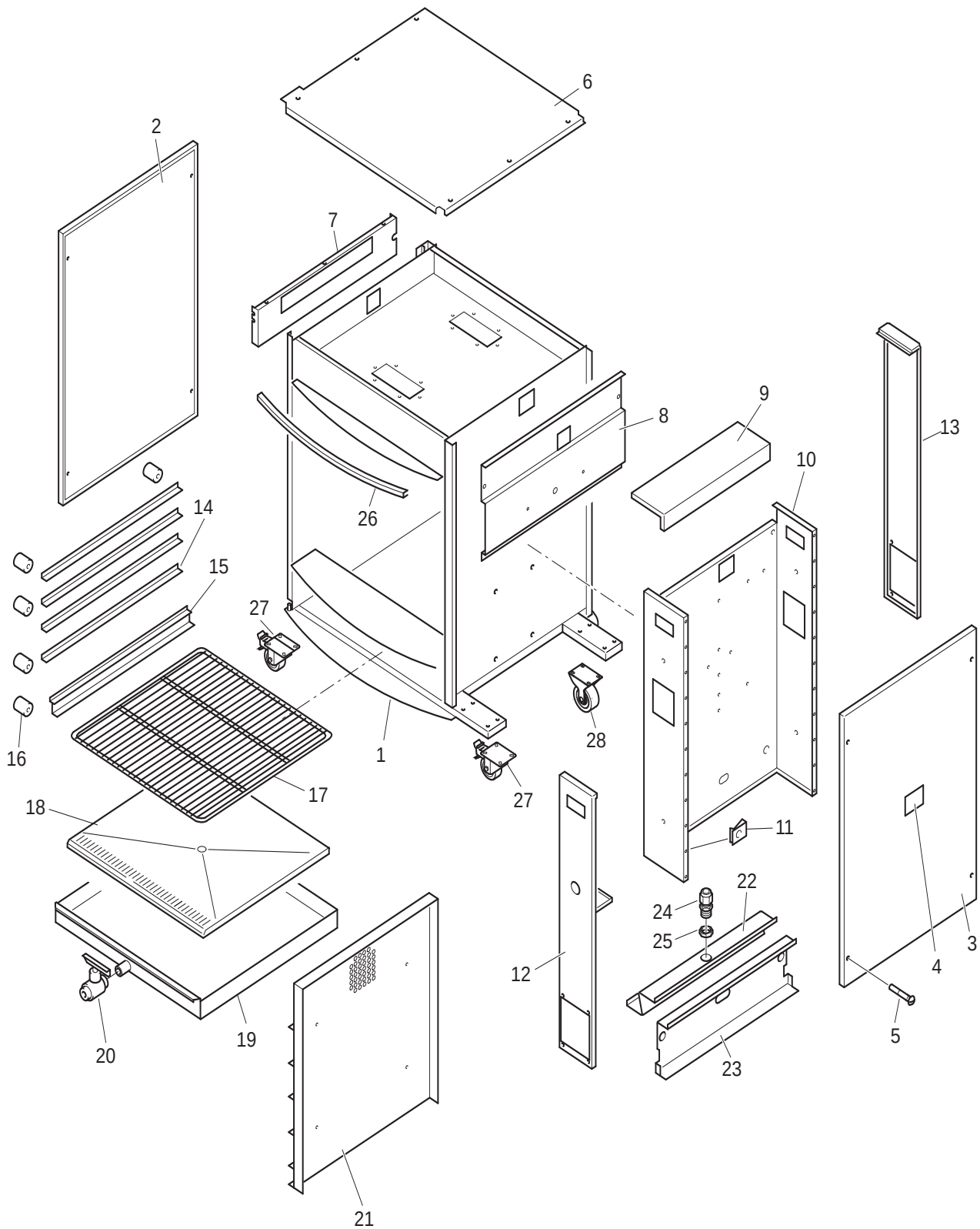
STW 5 - COMPONENTS



Item	Part number	Qty.	Description
40	9174125	1	Lamp shade
41	9052826	2	Lamp holder
42	9082774	1	Lamp, Halotherm 200 W
43	9174115	1	Under plate
44.S	9179859S	1	Door service side, ass.
44-1	9170441	1	Hinge profile
44-2	4288321	2	Screw M5 x 16, SS socket button head
44-3	9172080	2	Protection profile
44-4	9172054	2	Brass bearing 8 mm
44-5	9174079	1	Mounting profile, hinge side
44-6	3702342	8	Flange bush, PTFE 3 mm
44-7	4311110	2	Washer
44-8	0144359	2	Nut, self locking M5
44-9	4288320	2	Screw M5x45 SS
44-10	9174680	2	Washer
44-11	9070141	12	Magnet block
44-12	9174083	2	Fastening, door handle
44-13	9170464	1	Profile, magnet
44-14	9174132	1	Door handle
44-15	9172300	2	Spacing pin
44-16	9171014	2	Plug, door handle
45.C	9179860S	1	Door customer side, ass.
45-1	9170441	1	Hinge profile
45-2	4288321	2	Screw M5 x 16, SS socket button head
45-3	9172080	2	Protection profile
45-4	9172054	2	Brass bearing 8 mm
45-5	9174079	1	Mounting profile, hinge side
45-6	3702342	8	Flange bush, PTFE 3 mm
45-7	4311110	2	Washer
45-8	0144359	2	Nut, self locking M5
45-11	9070141	12	Magnet block
45-12	9174083	2	Fastening, door handle
45-13	9170464	1	Profile, magnet
45-17	4288321	2	Screw M5 x 16, SS socket button head
45-18	0144359	2	Nut, self locking M5
45-19	4311110	2	Washer

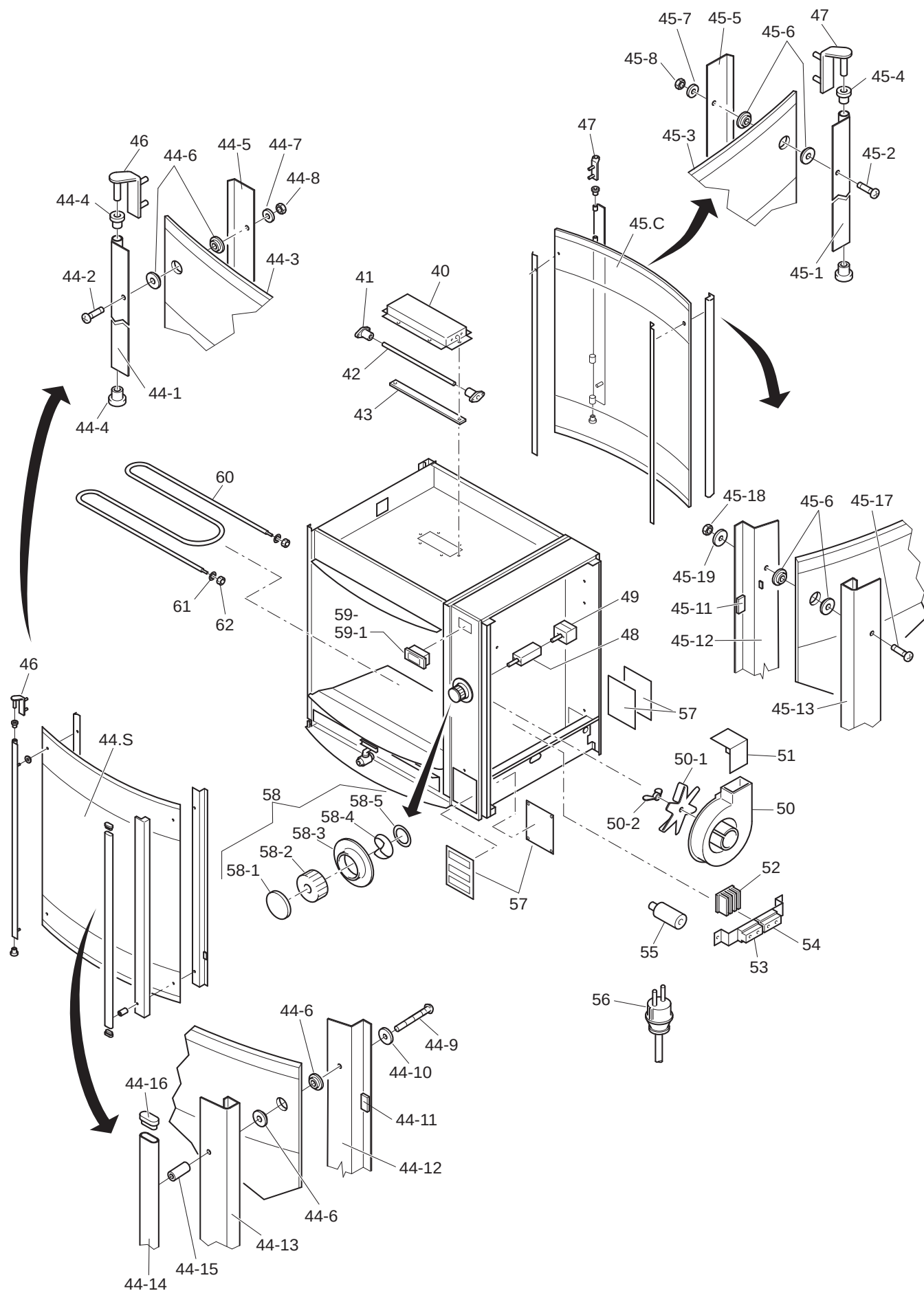
Item	Part number	Qty.	Description
46	9170427	1	Hinge, left
47	9170426	1	Hinge, right
48	9040714	1	Main switch, warmer
49	9082994	1	Thermostat 32-110 °C
50	9110048	1	Blower
50-1	9110153	1	Fanblade
50-2	9073150	1	Wingnut, left hand threaded
51	9142265	1	Spray mouth
52	9040722	1	Connecting block
53	9044564	1	Connecting block, 1,2,3
54	9044572	1	Connecting block, 4,5,6
55	9110030	1	Capacitor 1,5 mF
56	9091383	1	Connecting cable with plug
57	9172040	2	Name plate Fri-jado, foil + backplate
58	9173057	1	Main power/thermostat knob assembly
58-1	9172049	1	Cover, grey
58-2	9172021	1	Contron knob, grey
58-3	9172035	1	Back plate, main switch 0-5
58-4	9172052	1	Locking ring
58-5	9110802	1	Seal ring
59	9171006	1	Thermometer, digital °C
59-1	9079066	1	Battery
60	9160865	1	Heating element, 2500 W
61	0169197	2	Gasket, heating element
62	0169189	2	Nut, heating element

STW 7 - SHEET METAL WORK



Item	Part number	Qty.	Description
1		1	Frame
2	9170419	1	Side panel, left
3	9170479	1	Side panel, right
4	9110810	1	Indication plate
5	4288322	8	Screw M5 x 10, SS socket button head
6	9174045	1	Cap, top
7	9170421	1	Side panel, top
8	9174046	1	Reinforcement, side plate, right
9	9174005	1	Cover, removable
10	9174048	1	Cover plate, machine components
11	9172053	1	Nut
12	9170462	1	Operation panel
13	9174031	1	Panel, customer side
14	9174053	5	Runner
14A	9170411	1	Runner rack (till serial nr. 10006422)
15	9174052	1	Profile for bottom plate
16	9171020	12	Spacing pin
17	9040748	3	Display rack
18	9174044	1	Inner bottom
19	9170451	1	Drawer
20	9171008	1	Drain-tap with handle
21	9170412	1	Cover plate, blower
22	9174140	1	Spark catcher
23	9174034	1	Mounting plate
24	9222076	1	Strain relief M20
25	9222077	1	Connector M20
26	9172116	2	Sealing profile, Silicon L= 71 cm
27	9172066	2	Swivel castor with brake
28	9172125	2	Rigid castor

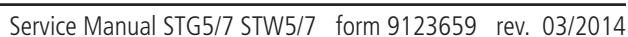
STW 7 - COMPONENTS



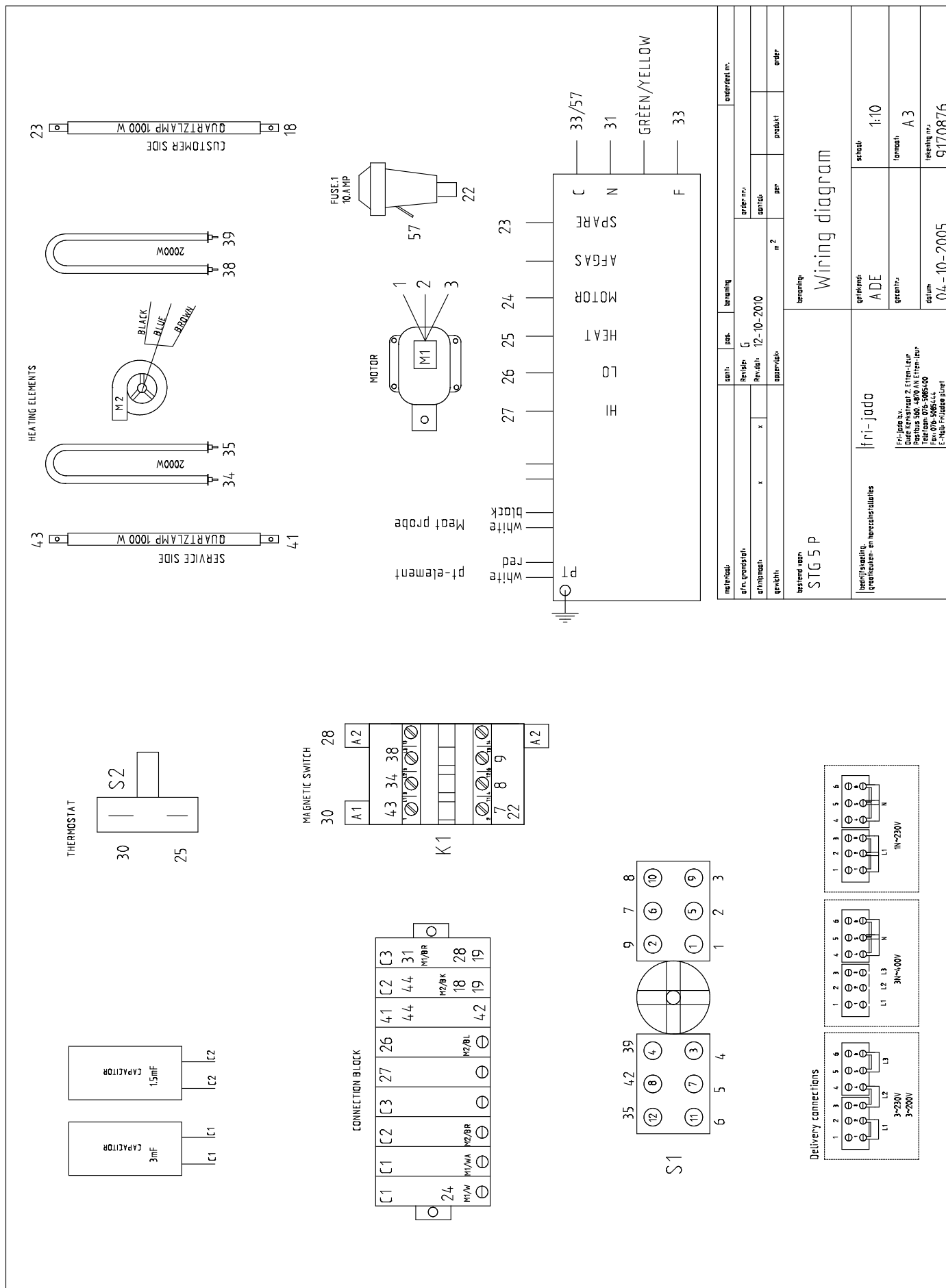
Item	Part number	Qty.	Description
40	9174125	2	Lamp shade
41	9052826	4	Lamp holder
42	9082774	2	Lamp, Halotherm 200 W
43	9174115	2	Under plate
44.S	9179850S	1	Door service side, ass.
44-1	9170422	1	Hinge profile
44-2	4288321	2	Screw M5 x 16, SS socket button head
44-3	9172079	2	Protection profile
44-4	9172054	2	Brass bearing 8 mm
44-5	9174022	1	Mounting profile, hinge side
44-6	3702342	8	Flange bush, PTFE 3 mm
44-7	4311110	2	Washer
44-8	0144359	2	Nut, self locking M5
44-9	4288320	2	Screw M5x45 SS
44-10	9174680	2	Washer
44-11	9070141	12	Magnet block
44-12	9174025	1	Fastening, door handle
44-13	9170454	1	Profile, magnet
44-14	9174131	1	Door handle
44-15	9172300	2	Spacing pin
44-16	9171014	2	Plug, door handle
45.C	9179851S	1	Door customer side, ass.
45-1	9170422	1	Hinge profile
45-2	4288321	2	Screw M5 x 16, SS socket button head
45-3	9172079	2	Protection profile
45-4	9172054	2	Brass bearing 8 mm
45-5	9174022	1	Mounting profile, hinge side
45-6	3702342	8	Flange bush, PTFE 3 mm
45-7	4311110	2	Washer
45-8	0144359	2	Nut, self locking M5
45-11	9070141	12	Magnet block
45-12	9174025	1	Fastening, door handle
45-13	9170454	1	Profile, magnet
45-17	4288321	2	Screw M5 x 16, SS socket button head
45-18	0144359	2	Nut, self locking M5
45-19	4311110	2	Washer

Item	Part number	Qty.	Description
46	9170427	1	Hinge, left
47	9170426	1	Hinge, right
48	9040714	1	Main switch, warmer
49	9082994	1	Thermostat 32-110 °C
50	9110048	1	Blower
50-1	9110153	1	Fanblade
50-2	9073150	1	Wingnut, left hand threaded
51	9174139	1	Spray mouth, blower
52	9040722	1	Connecting block
53	9044564	1	Connecting block, 1,2,3
54	9044572	1	Connecting block, 4,5,6
55	9110030	1	Capacitor 1,5 mF
56	9091383	1	Connecting cable with plug
57	9172040	2	Name plate Fri-jado, foil + backplate
58	9173057	1	Main power/thermostat knob assembly
58-1	9172049	1	Cover, grey
58-2	9172021	1	Contron knob, grey
58-3	9172035	1	Back plate, main switch 0-5
58-4	9172052	1	Locking ring
58-5	9110802	1	Seal ring
59	9082164	1	Thermometer, analogue °F
60	9005251	2	Heating element, 1500 W
61	0169197	4	Gasket, heating element
62	0169189	4	Nut, heating element

ELECTRICAL DIAGRAMS

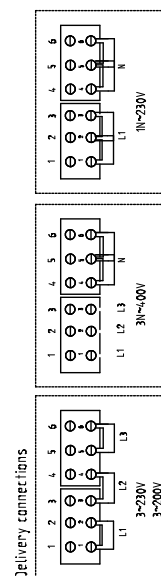


WIRING DIAGRAM STG 5 P

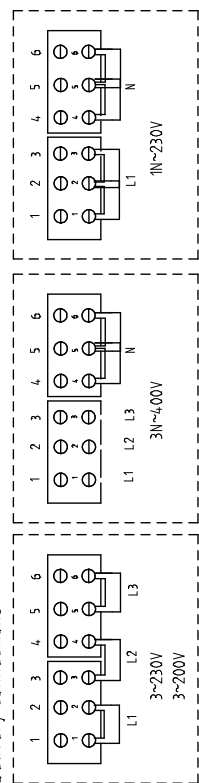
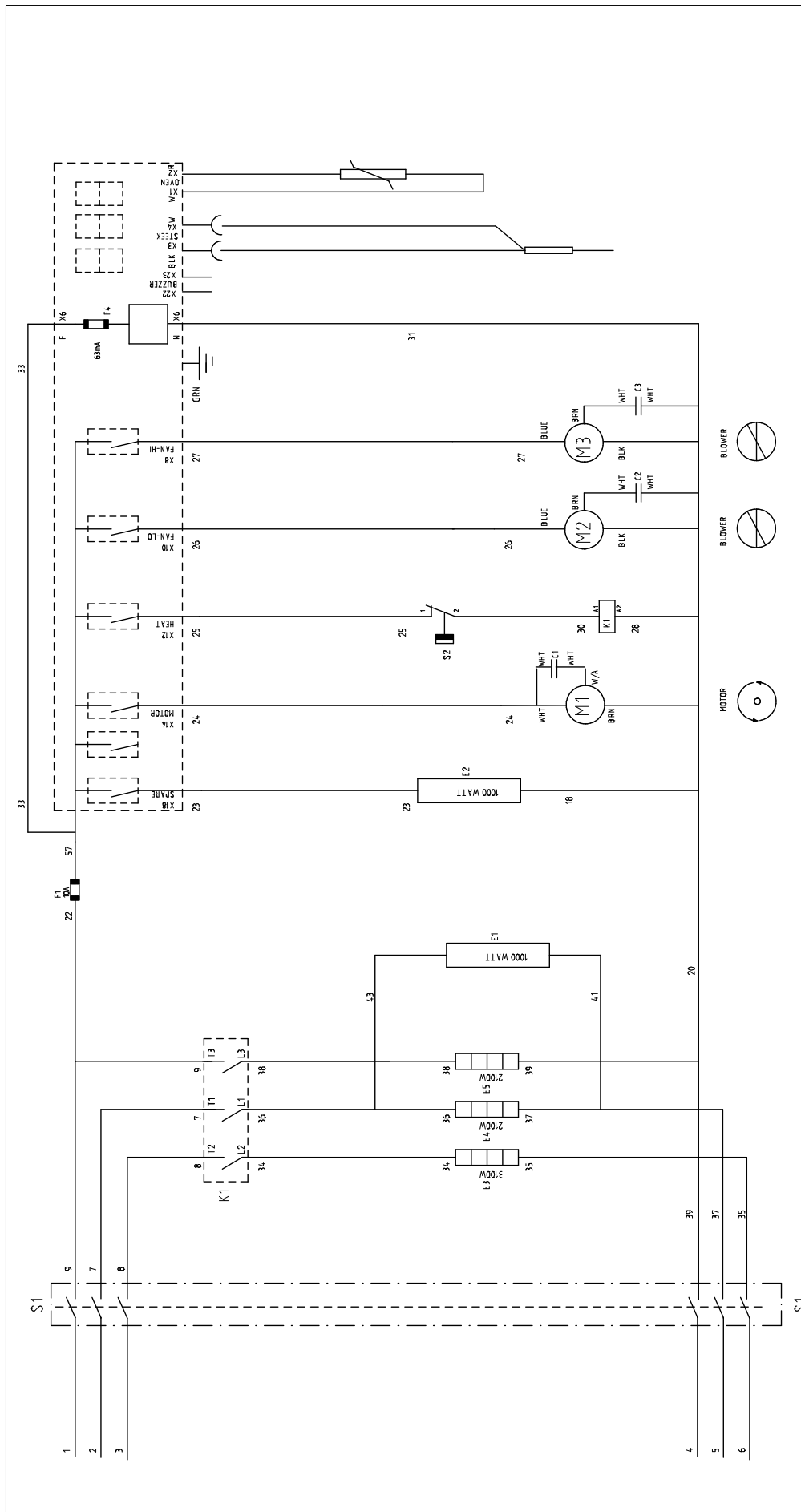


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handtekening geautoriseerd en verantwoordelijk	fri-jado	getekend			schakel	1:10
	geprint			formaat A 3		
Gekopieerd bij: Dienst Technisch 2 Eindhoven Peribus 586, 4870 AN Eindhoven Telefoon 076-5385-00 Fax 076-5385-01 E-mail: fri.jado@stg.nl		datum 04 - 10 - 2005				

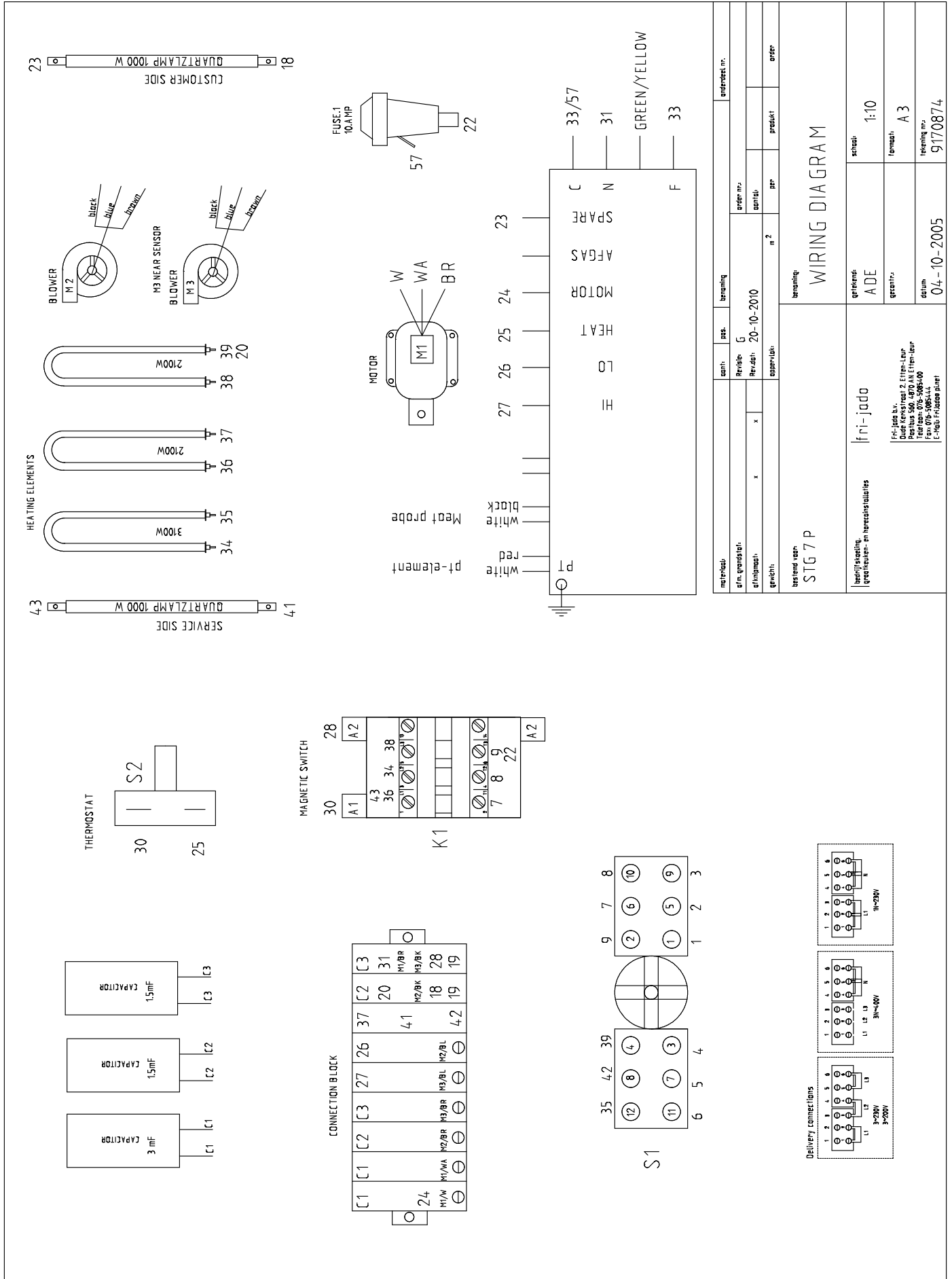


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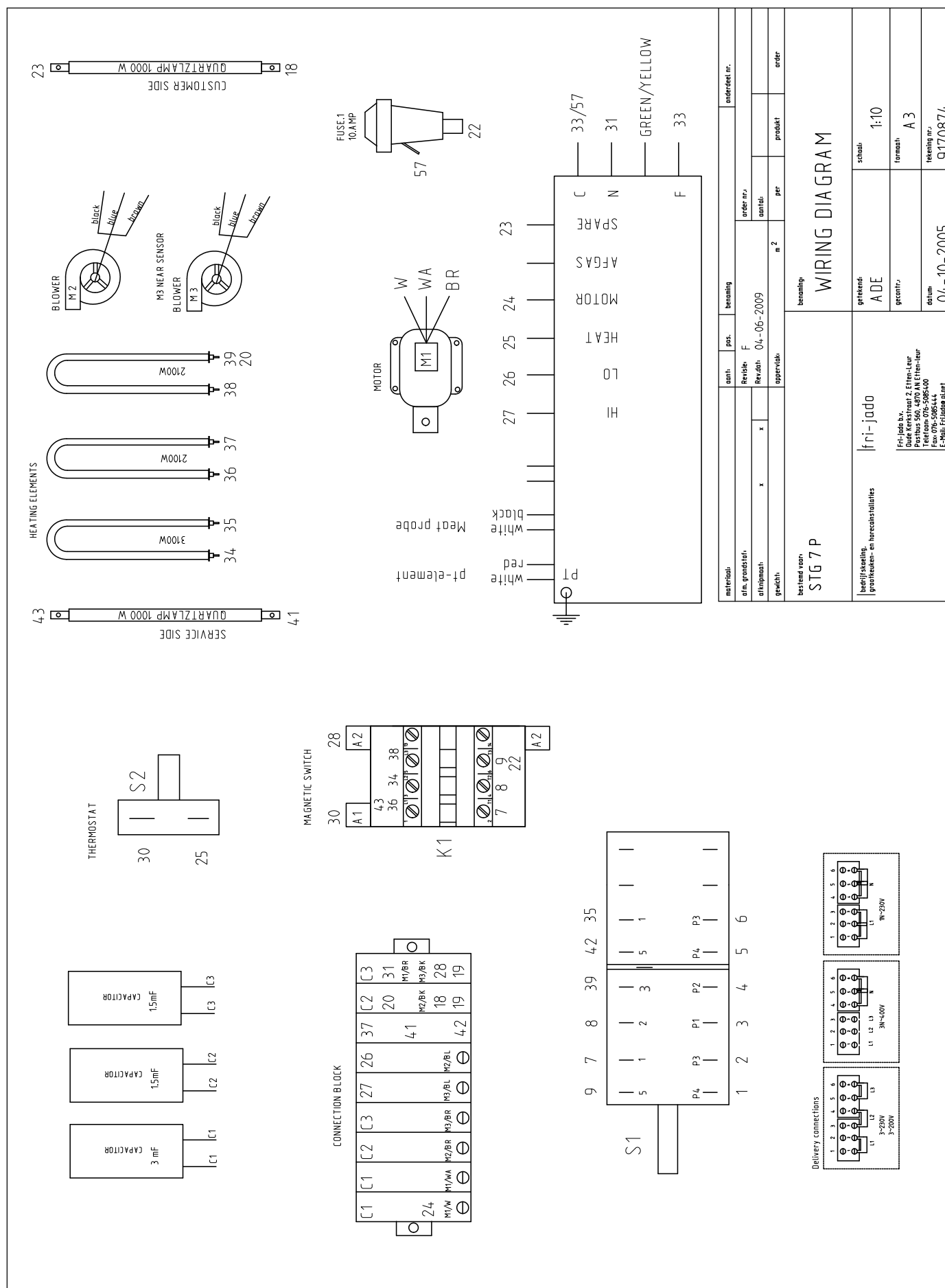


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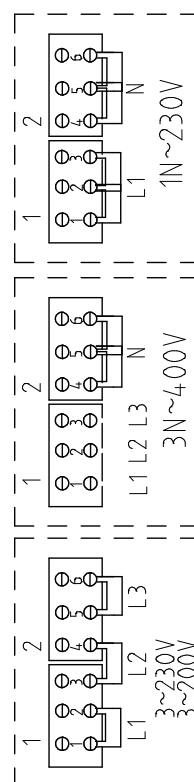
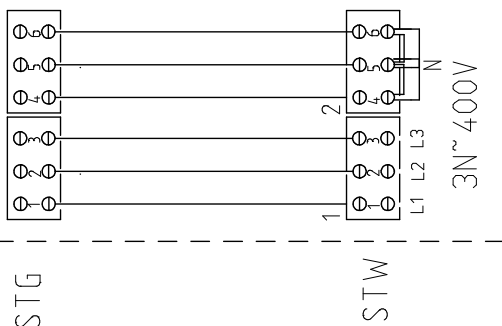
WIRING DIAGRAM STG 7 P



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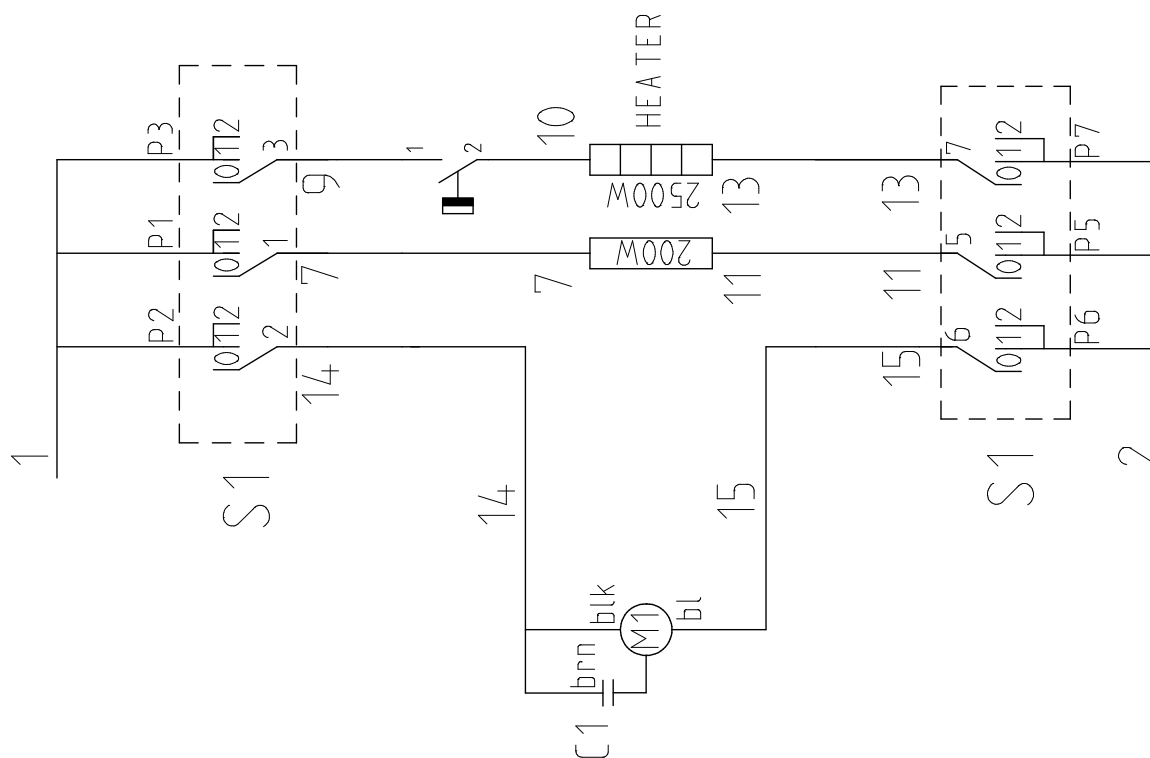
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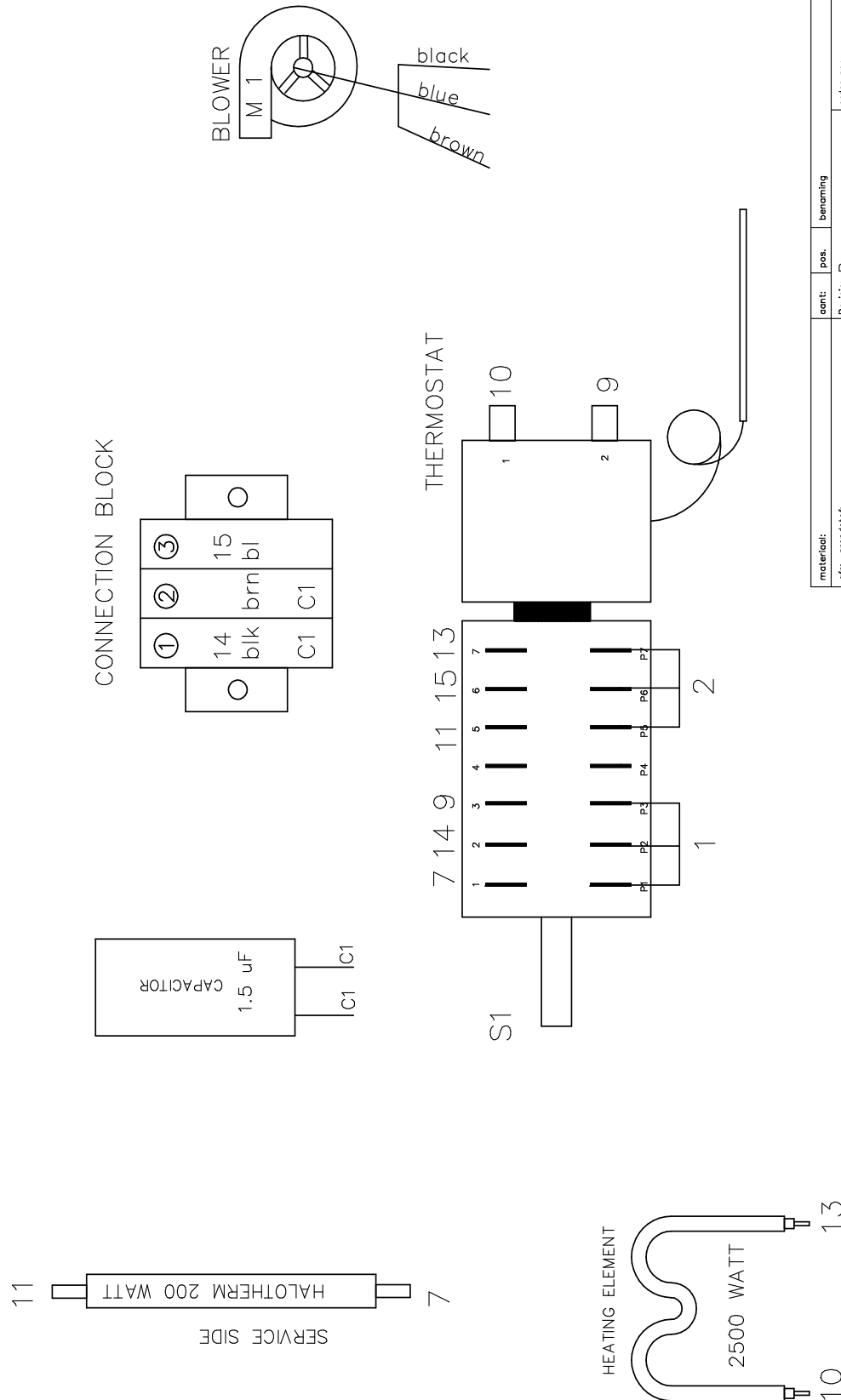
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D	17.06.2009	Added and revised text

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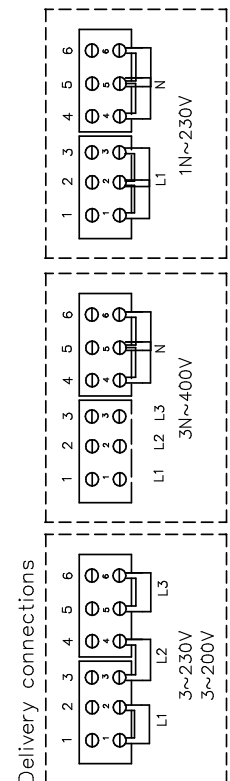
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tel.: +31 (0)76-5985400 fax: +31 (0)76-5985401		drawn by: A. van der Aar drawing number: 0170458	



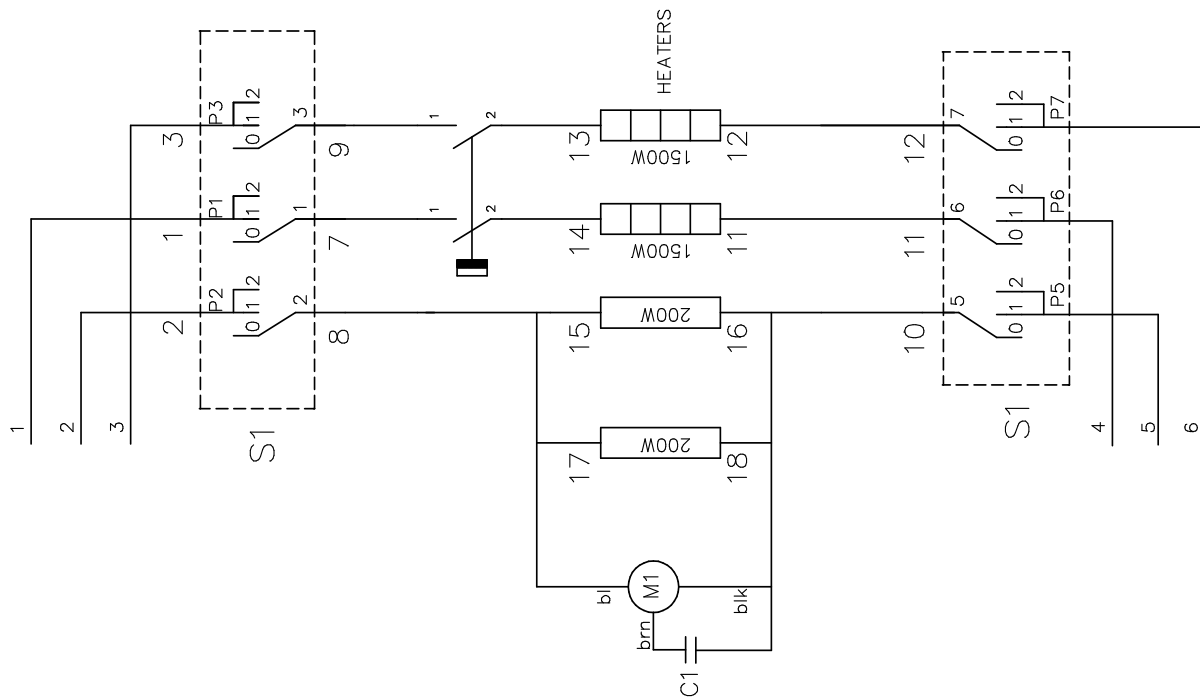
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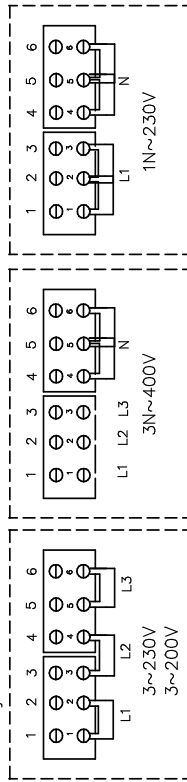
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frijado					
getekend: MBL/ADE					
gecont: 1:2					
frijado b.v. Oudekerkplein 2, Etten-Leur Postbus 960, 4870 AN Etten-Leur					
Telefoon: 076-5085400					
Fax: 076-5085444					
E-Mail: frijado@frijado.net					
datum: 29-08-2005					
tekening nr.: 9170861					



CUIRCUIT DIAGRAM STW 7

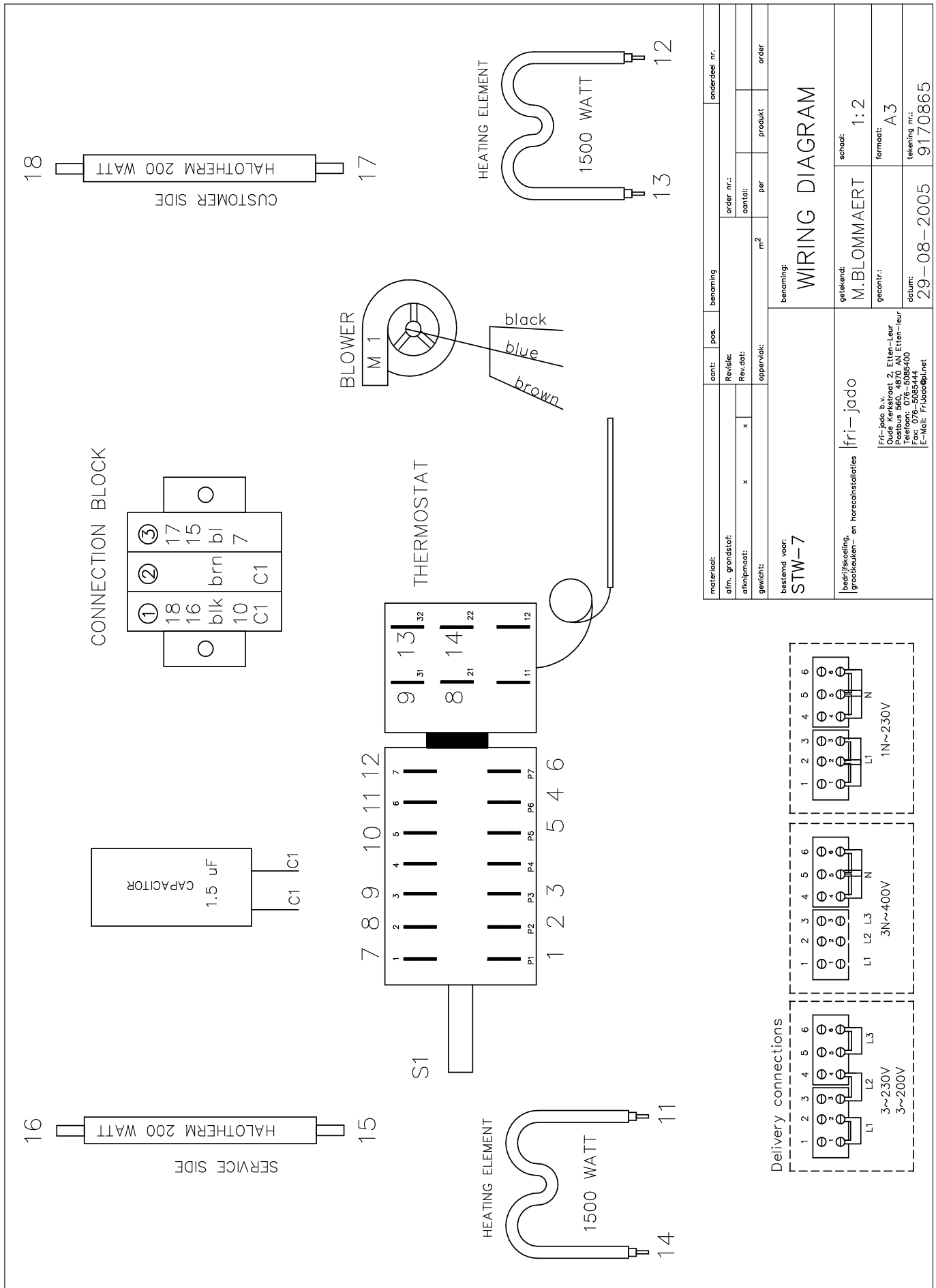


Delivery connections



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Fri-jado b.v. Oude Kerkestraat 2, Etten-Leur Postbus 560, 4870 AN Etten-Leur Telefoon: 076-5485400 Fax: 076-5485401 E-Mail: Fri.jado@fri.net				

WIRING DIAGRAM STW 7



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