SERVICE MANUAL

STG INTELLIGENT - ROTISSERIE OVEN MODELS
STW INTELLIGENT - WARMER MODELS

MODELS

Single units	**STG5 intelligent**
	STG7 intelligent
Stacked units	**STG5+STG5 intelligent**
	STG7+STG7 intelligent
	STG5+STW5 intelligent
	STG7+STW7 intelligent

Model
STG7+STG7 intelligent

- 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 a tralning 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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GENERAL TECHNICAL DATA

This manual covers the STG series intelligent rotisserie ovens and the STG + STW series intelligent combined grills and warmers. Grills are availble in two sizes. Grill and warmer cabinets only come in stacked versions.

- STG 5 i – Grill with five spits (15 to 20 chickens).
- STG 7 i – Grill with seven spits (28 to 35 chickens).
- STG 5 + 5 i – Combined grill cabinet.
- STG 7 + 7 i – Combined grill cabinet.
- STGW 5 i – Combined grill and warming cabinet.
- STGW 7 i – Combined grill and 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 STANDARD MODELS

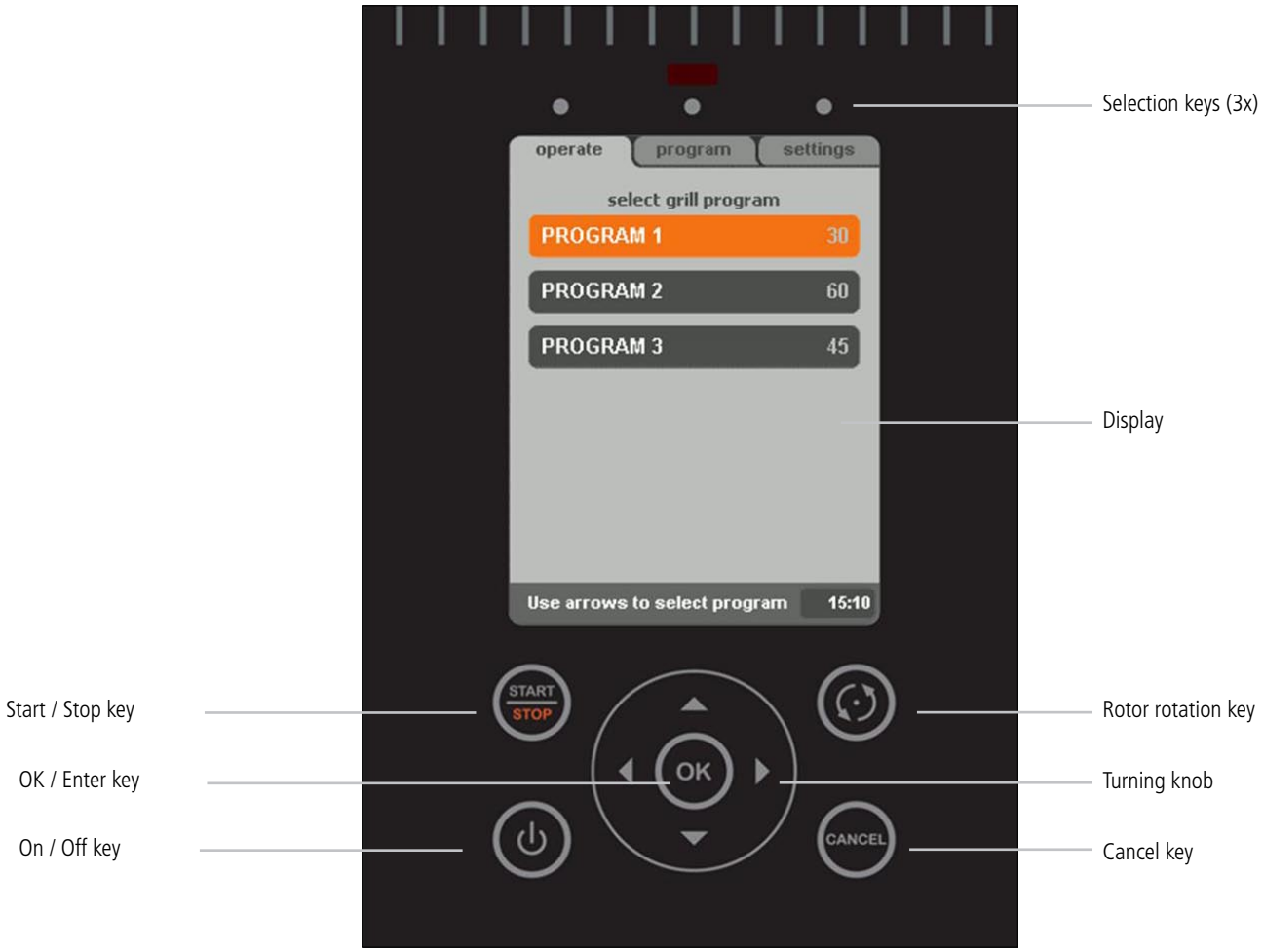
Type	STG 5i	STW 5i	STGW 5i	STG 7i	STW7i	STGW 7i
Power (W)	6100	2800	8900	9500	3500	13000
Fuses needed with power connection 400 V, 3N ~50 Hz (3 phase with neutral)	3x 16 A	–	3x 16 A	3x 16 A	–	3x 32 A
Fuses needed with power connection 200 or 230 V, 3 ~50…60 Hz (3 phases without neutral)	3x 16 A	–	3x 32 A	3x 32 A	–	3x 35 A
Fuses needed with power connection 230 V, 1N ~50 Hz (1 phase with neutral)	–	1x 16 A	–	–	1x 16A	–
Standard plug from factory 5-pole (According to IEC309 and CEE-form)	16A 3P+N+E	–	16A 3P+N+E	16A 3P+N+E	–	32A 3P+N+E
Standard plug from factory single pole	–	16A	–	–	16A	–
Net weight	122 kg	100 kg	222 kg	181 kg	150 kg	331 kg
Gross weight	159 kg	122 kg	260 kg	217 kg	165 kg	382 kg
Height	870 mm	870 mm	1750 mm	1025 mm	1025 mm	2060 mm
Width	825 mm	825 mm	825 mm	985 mm	985 mm	985 mm
Depth	650 mm	650 mm	650 mm	850 mm	850 mm	850 mm

Tools

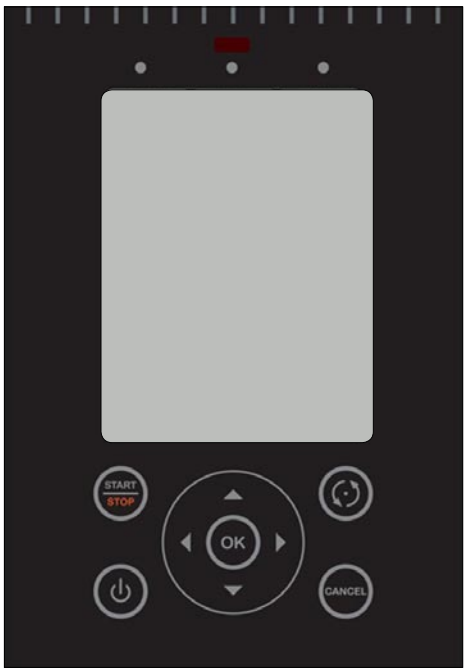
- Standard set of tools.
- Metric wrenches, sockets and hex socket key wrenches.
- Multi-meter and AC current clamp meter.
- Temperature tester.
- Insulation value tester (Megger).
- Field Service Grounding Kit.

PROGRAMMING INSTRUCTIONS FOR THE STG5/STG7 AND STW5/STW7

DISPLAY AND KEYS

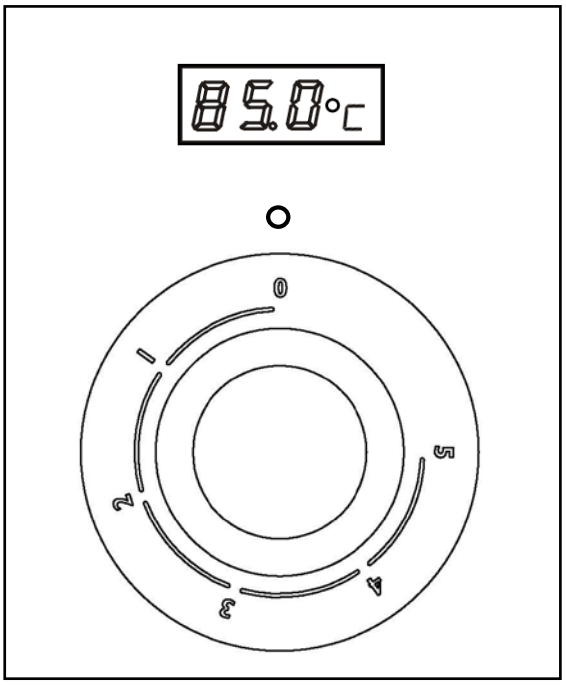


STARTING THE STG



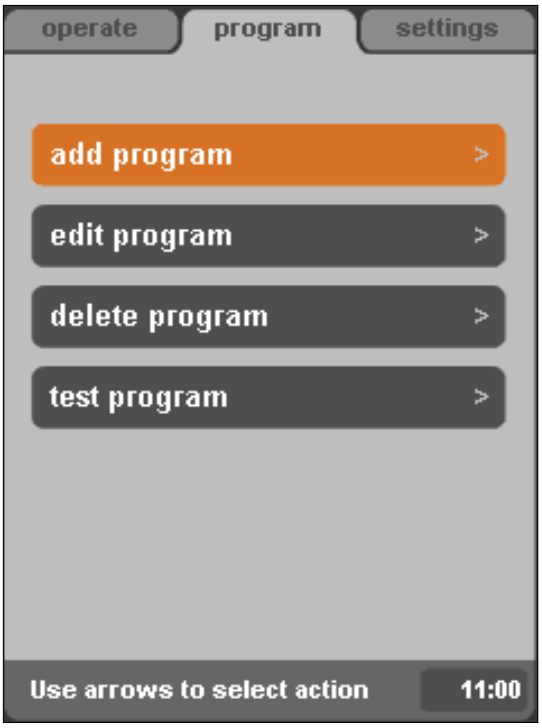
Press and hold the On-Off key for 2 seconds.
The display lights up and the oven is ON.

STARTING THE STW



Turn the thermostat dial to the desired temperature.

ADD A PROGRAM



Press the program key.

Note: when a pin code has been set, first enter the pin code and confirm with OK.

Go to add program with turning knob and confirm with OK.

Add the program name by use of the up and down keys to change the character and left and right to change the position. Confirm with 2x OK.

Select the time row and confirm with OK. Set the time of the cooking step with the turning knob and confirm with OK.

Select the temperature row and confirm with OK. Set the temperature of the cooking step with the turning knob and confirm with OK.

Program more cooking steps if necessary.

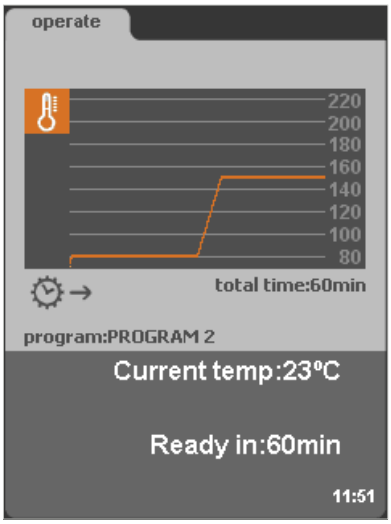
It is possible to program a HOLD temperature. Select the next time row and set this on HOLD by turning the knob counter clockwise and confirm with OK. Select a temperature as described earlier.
The holding step runs infinitely and keeps the oven at the set temperature.
Go to save program and confirm with OK.

START A PROGRAM

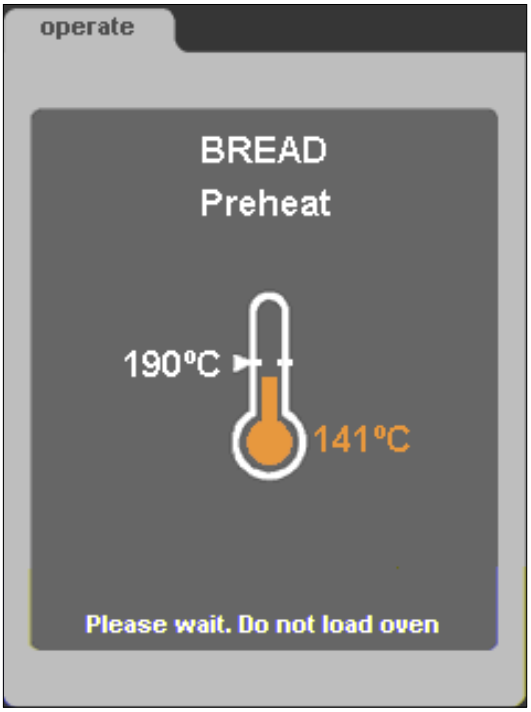
Press the operate key.

Select a program with turning knob and confirm with OK.

When no preheating is activated, the process starts and is indicated by means of a heating diagram.



PRE HEATING



When the pre-heating option is activated in the manager menu, the oven will start up with a pre-heat program when starting a program. After reaching the pre-heat temperature the display will indicate: LOAD PRODUCTS.

LOADING PRODUCTS

Press rotor key to start turning the rotor.

Press rotor key again to stop.

Load the rotisserie with products.

Close the door and press the start key.

PROGRAM STOP

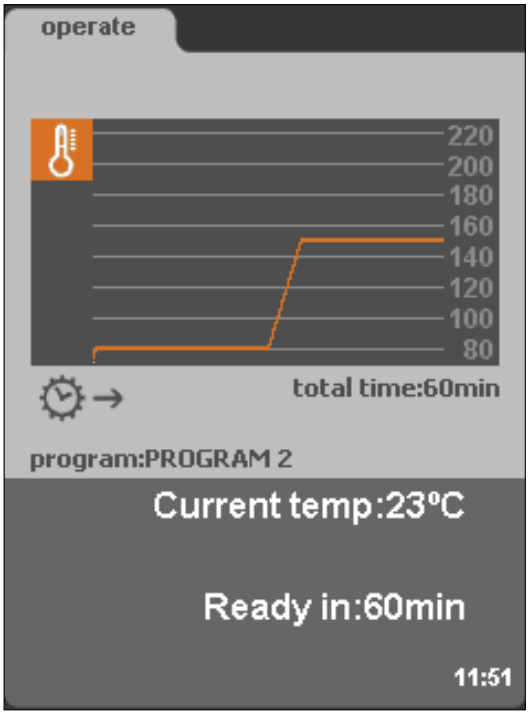
Press the cancel key.

Select yes with the turning knob and confirm with OK key.

OPTIONAL FUNCTIONS

- Interrupting an active program
- Adding extra time to a program
- Editing a program
- Deleting a program
- Testing a program
- Alphabetic sorting of programs
- Setting a timer
- Demonstration mode

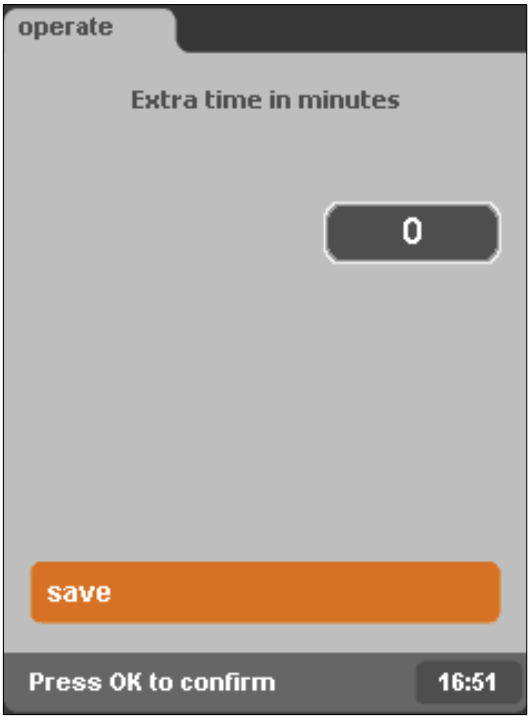
INTERRUPTING A PROGRAM



Press start/stop key. Heating, blowers and rotation stops.

Press start/stop key again to resume.

ADDING EXTRA TIME TO A PROGRAM



Extra time can be added to a program either during a program or after a program has ended by pressing the power button.

Extra time is added to the end of the program, the window for adding extra time (shown on the left) always shows the total amount of extra time added to the program.

Note: Extra time can be added unlimited times.
Extra time can be added till max. 10 minutes after ending of the cooking time.

EDITING A PROGRAM

Press program key.

Note: when a pin code has been set, first enter the code and confirm with OK.

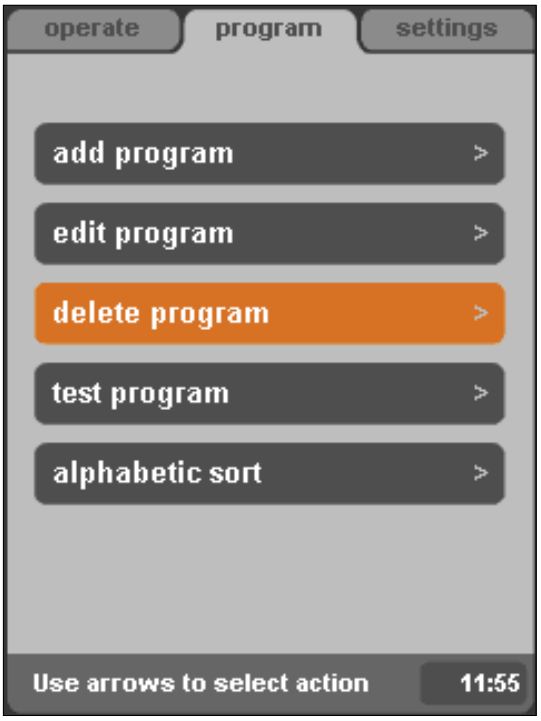
Go to “edit program” with the turning knob and confirm with OK.

Select the program from the list and confirm with OK

If necessary change the name of the program and confirm with OK.

Change time and temperature if necessary. Then go to save program and confirm with OK.

DELETING A PROGRAM



Press the program key.

Note: when a pin code has been set, first enter the code and confirm with OK.

Go to “delete program” with the turning knob and confirm with OK.

Select the program to delete and confirm with OK.

Confirm the deletion by selecting YES and confirm with OK.

Note: To delete all programs go to “delete all programs”.
Deleting a program is permanent.

TESTING A PROGRAM

With the test program you can run a program while it is possible to change time and temperature during the process.

Press the program key.

Note: when a pin code has been set, first enter the code and confirm with OK.

Go to "test program" with the turning knob and confirm with OK.

Select the program to test and confirm with OK. **By pressing the OK key during the running of the program, settings can be changed.**

Go to save program and confirm with OK. New settings are now saved.

ALPHABETIC SORTING OF PROGRAMS

With this function it is possible to alphabetically sort the programs.

Press the program key.

Go to "alphabetic sort" with the turning knob and confirm with OK.

Note: This function is only availble when there are several programs programmed into the memory.

SETTING A TIMER

A timer can be programmed to start a program up to 14 days in advance. To be able to use this function the option “auto recipe start” needs to be set to “yes” in the manager menu.

To set a timer, go to the special recipe titled “timer: *off*” when no timer is set and “timer:<program name>” when a timer is set. Select this item and press OK.

In the menu first set the timer on, by setting the first option to “on”.

The second option is used to select the program that will be started. Select a program from the list and confirm the selection with OK.

Now select the set time item and confirm with OK. Select the time at which the program should start, and confirm with OK.

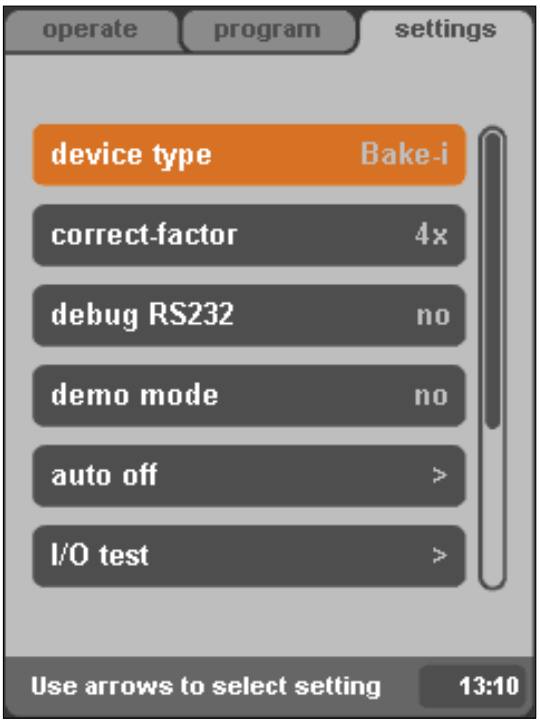
The last item allows the selection of the day on which the program should start. The day can be increased or decreased by using the left and right arrows of the turning knob.

After all settings are programmed, select the save button and press ok. Even when turning the timer off the save button has to be activated.

When a timer is active a clock symbol will start blinking in the top left corner of the screen.

Note: A timer can be set to a maximum of 14 days after the current date.

DEMONSTRATION MODE

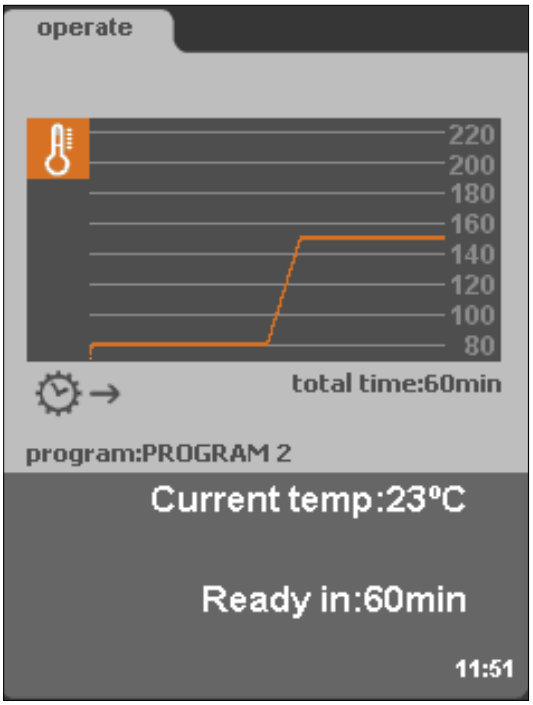


In the demo mode a cooking cycle can be simulated. This function is used for exhibitions, the heater will not switch on in this mode.

Go to the service menu and use the access code 4878 to gain entry to the menu.

Go to “demo mode” with the turning knob and adjust this to YES.

Go to “operate” and select a program with the turning knob and confirm with OK.



Start the program and now on the display the program is simulated by means of a heating diagram.

Note: A grill in demonstration mode only utilises 1-phase of its power connection. This is because the heaters are not switched on.

SWITCHING OFF THE UNIT

Press and hold both keys On/Off and Settings until the display light goes out and the oven is turned OFF.

REMOVAL AND REPLACEMENT OF PARTS FOR THE STG5I AND STG7I

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

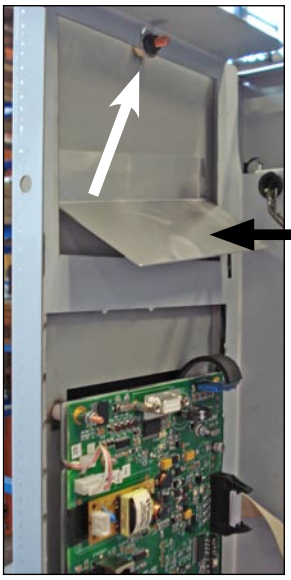
1. Remove the screws that secure the panel to the frame.
2. Remove the panel.
3. Reverse the procedure to install.

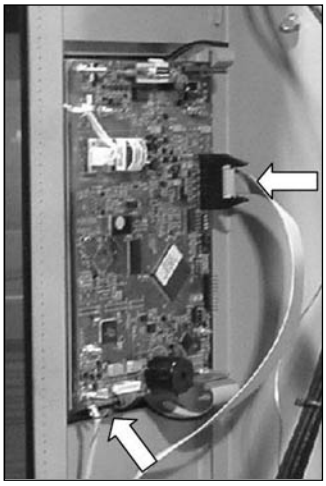
TOP COVER

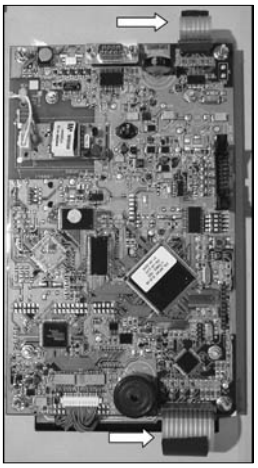
1. Remove the left side panel according to prior procedure.
2. Remove the screws securing both large and small top covers.
3. Remove the top cover. (Lift at left side and remove to the left).
4. Reverse the procedure to install.

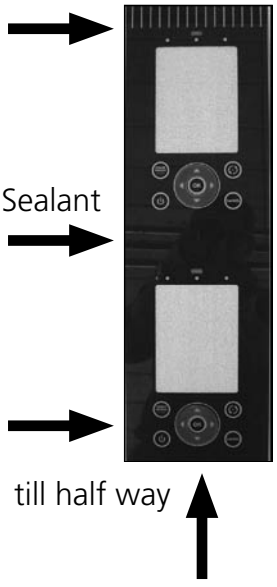
Note: the STG 5 has an optional special top cover for access to the circulation blower. Standard no cover for the blower.

GLASS OPERATION PANEL WITH BACKPLATE







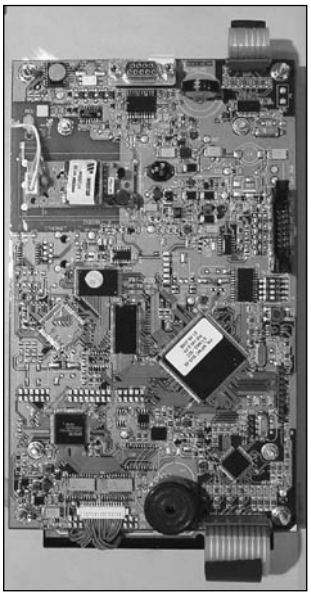


1. Remove the right side panel according to prior procedure.
2. Remove the screws that secure the small top cover plate and remove the cover plate.
3. Remove the 2 nuts on the backside of the operating panel.
4. Remove the nut from the earth wire on the main board and remove the earth wire.
5. Remove the grey flat cable and both keypad flat cables from the CPU board.
6. Use a stanley knife or any other long bladed knife to loosen the sealant between the front panel, on the left side, and the machine frame. Also loosen the sealant on the bottom side from the left to half way of the panel.
7. Lift the operating panel slightly and turn the outside of the panel towards the inside of the machine (to break the sealant).
8. Remove the 4 nuts that secure the CPU board and remove the board.
9. Reverse the procedure to install.

Note 1: When reversing the procedure do not forget to apply sealant again over the total height and half way on the bottom side of the panel. The Fri-Jado partnumber for this sealant is 4302375 (Dow Corning 732).

Note 2: Use a stanley knife or any other long bladed knife to loosen the tape between the backplate of the panel and the drip protection plate. Apply a new tape on the protection plate and glue this on the backplate again.

CPU BOARD AND DISPLAY (CENTRAL PROCESSOR UNIT)



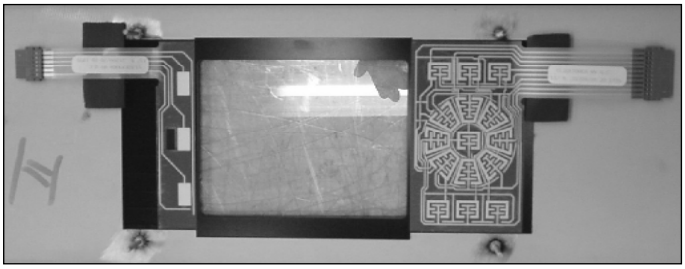
Before changing the CPU board and display be sure to download or write down the grilling programs.

1. Remove the right side panel according to prior procedure.
2. Disconnect the wiring and flat cables on the board.
3. Remove the 4 nuts and bushings that secure the main board and remove the board.
4. Reverse the procedure to install.

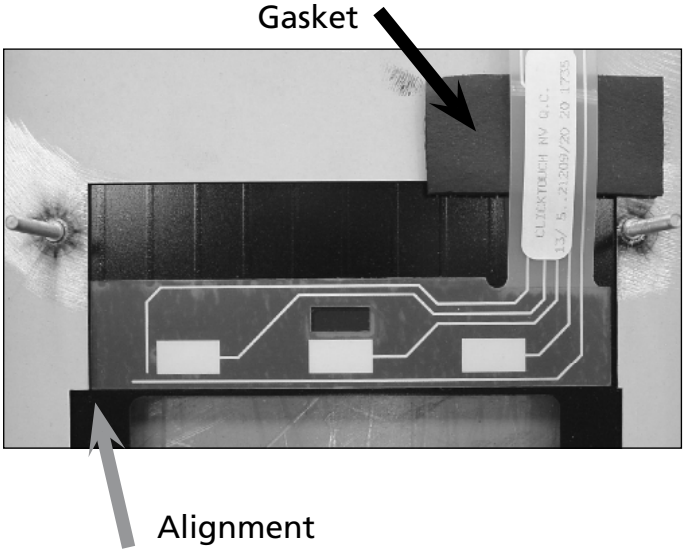
Note 1: Check the dip switches on the board. 1+2 = off; 3+4 = on.

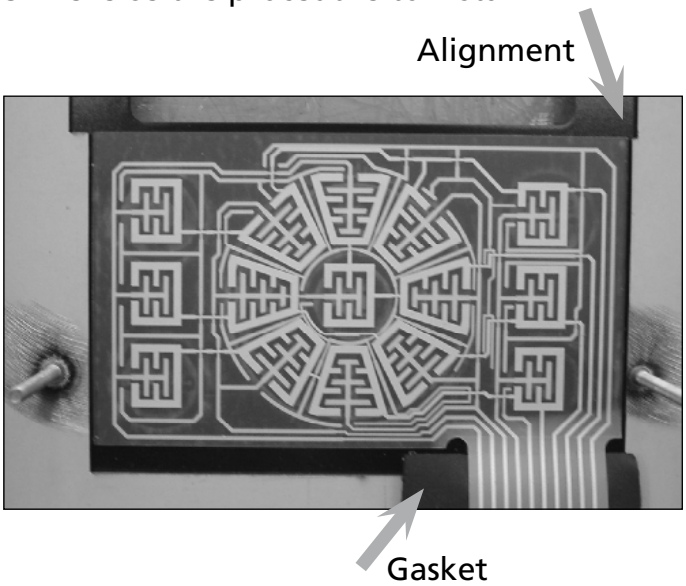
Note 2: When installing a new CPU board and display, check all settings in the manager and service menu and load the programs. First set the specific device type in the service menu.

KEYPAD

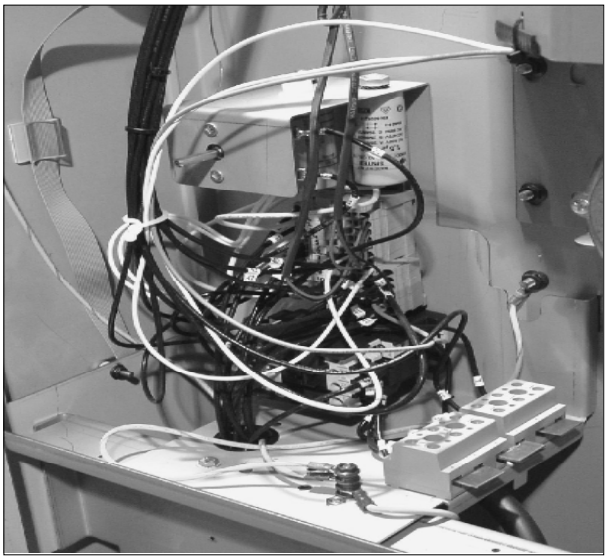


1. Remove the glass panel with back plate according prior procedure.
2. Remove the CPU board according prior procedure.
3. Remove the decal and degrease the surface of the glass.
4. Glue the new decal on its place. The corners on the steel back plate are the frame of reference for the decal.
5. Reverse the procedure to install.



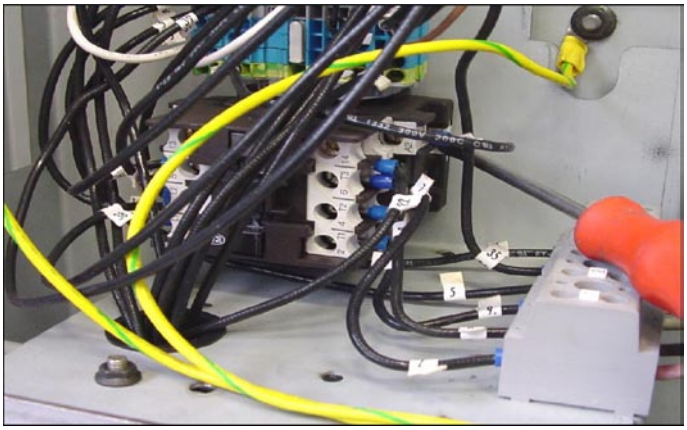


ELECTRIC PANEL



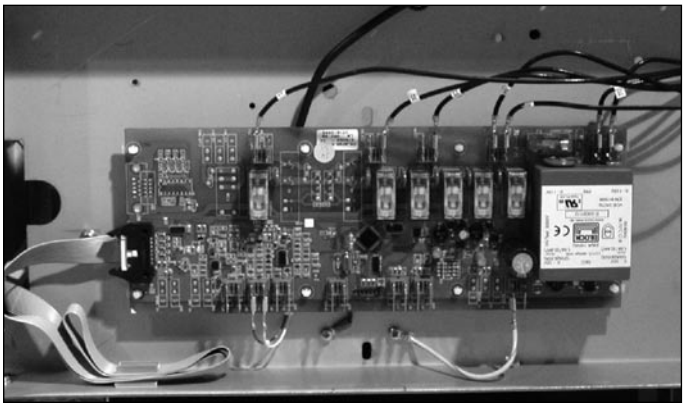
1. Remove the right side panel according prior procedure.
2. Remove the bolt and nuts on the inside bottom of the electric panel.
3. Disconnect the wiring.
4. Lift the electric panel out of the locking slots and remove the panel.
5. Reverse the procedure to install.

CONTACTOR



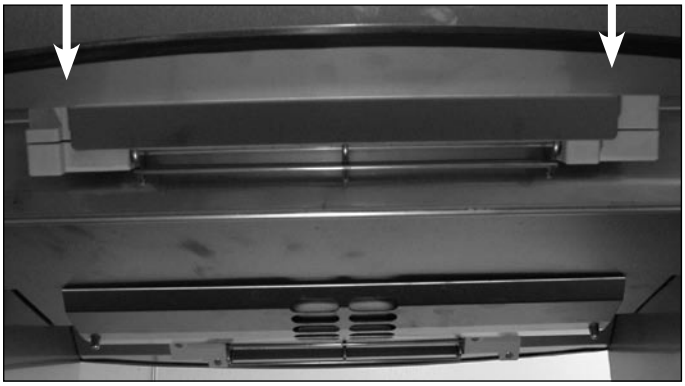
1. Remove the right side panel according to prior procedure.
2. Disconnect the lead wires to the switch.
3. Push down on the locking tab and lift out and then up to remove it from the mounting bracket.
4. Reverse the procedure to install.

POWER AND I/O BOARD



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

QUARTZ LAMP

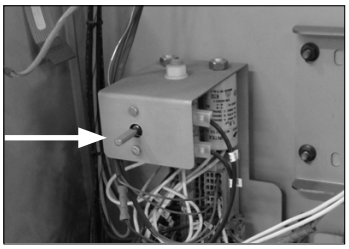


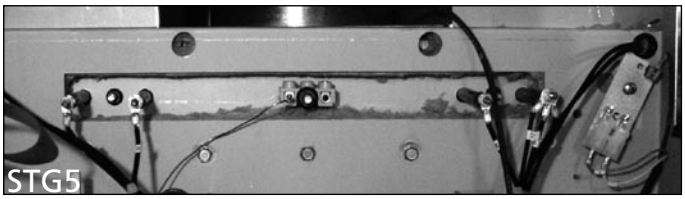
Caution: Do not touch the glass. Moisture from hands could affect the live span of the lamp. The moisture can be removed with alcohol while the lamp is cold.

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 when tightening the bolts to prevent the metal from twisting and damaging the lamp.
4. Tighten the insulators evenly to prevent damage.

HIGH LIMIT THERMOSTAT

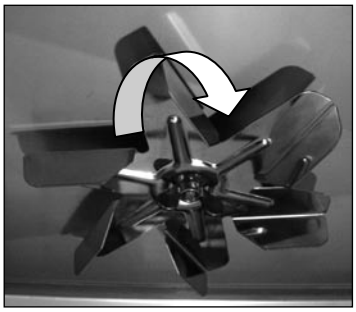


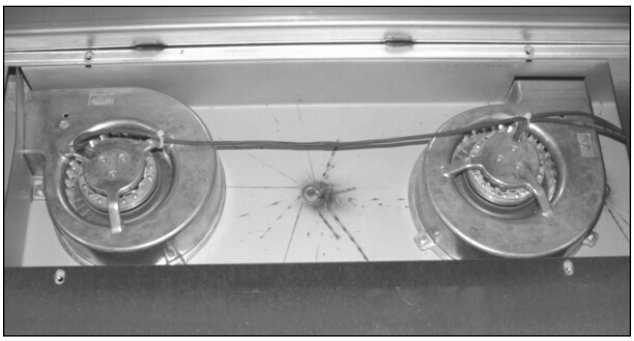


1. Remove the right side panel according to prior procedure.
2. Remove the suction and fan plate on the inside of the oven.
3. (STG 5 only) Remove the nut on the clamp and slide clamp towards yourself. Loosen the screw in the clamp that secures the probe and remove the probe.
4. (STG 7 only) Remove the 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.

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 in 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: Check the direction of rotation of the motor (clockwise) and change the wiring if necessary.

BLOWER MOTOR BOTTOM ROTISSERIE (STACKED STG)

1. Remove the right side panel according to prior procedures.
2. Remove the rotor discs, suction and fan plate in the bottom oven.
3. Remove the wing nut on the fan blade and remove 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 the 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.

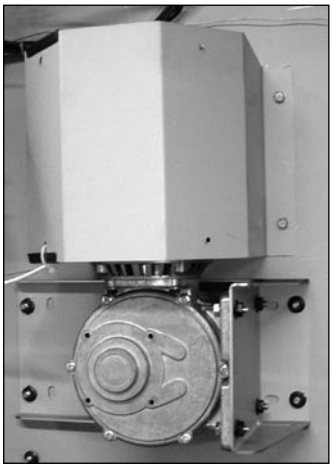
Note: Check the direction of rotation of the motor (clockwise) and change the wiring if necessary.

PT1000 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.

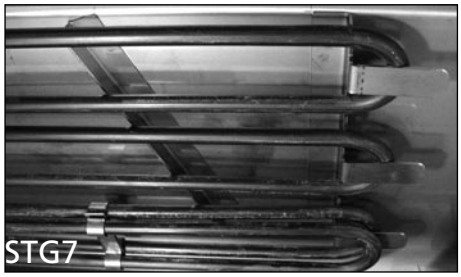
DRIVE MOTOR



1. Remove the right side panel and rotor discs according to 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. (STG 5 only) Remove the nuts that secure the motor and remove the motor.
5. (STG 7 only) Set the drive arm in a position vertical downwards. This can be done manually or by turning the fan blade by hand.
6. Mark the position of the motor support with a marker.
7. Remove the bolts that secure the motor and the nuts that secure the motor support and remove the motor.
8. Check the white Teflon ring. Replace if necessary.
9. Install the fan blade on the new motor.
10. Reverse the procedure to install.

Note: Always make a test run on maximum temperature to insure the motor is well mounted and adjusted.

HEATING ELEMENT


STG7

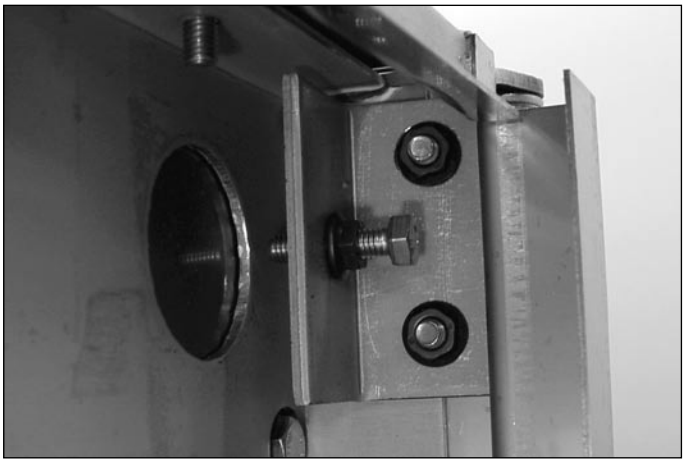

STG5

1. Remove the rotor discs, right side panel, suction and fan plate according to 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.

DOOR GLASS OUTSIDE

1. Lift the inner door out of the hinges and lay the door aside.
2. Remove the left side panel according prior procedure.
3. Remove the 2 nuts behind the top hinge. The door must be closed.
4. Hold the door on both sides and move this towards yourself, before lifting it out of the hinges. Place the door with the rounded side down on a table.
5. Remove the screws, cap nuts and rings on the profiles of the door and remove the profiles.
6. Mount the profiles on the new glass. Do not forget the teflon rings of 3 mm inside the holes.
7. Reverse the procedure to install.

DOOR ADJUSTMENT (LEFT SIDE)



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

DOOR GLASS INSIDE

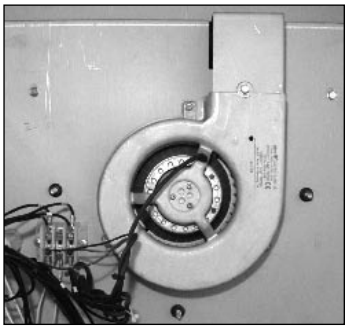
1. Lift the door upward out of the hinges and place the door on a table.
2. Remove the cap nuts and rings on the profiles of the door.
3. Remove the profiles from the glass.
4. Mount the profiles on the new glass. Do not forget the teflon rings of 2 mm inside the holes.
5. Mount the cap nuts and rings.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

Note: Tightening of nuts max. 4.2 Nm.

REMOVAL AND REPLACEMENT OF PARTS FOR THE STW5 AND STW7

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.

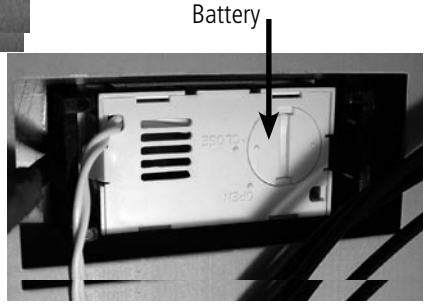
BLOWER MOTOR



1. Remove the right side panel according to 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. Check the direction of rotation of the motor (clockwise, seen from inside) and change the wiring if necessary.

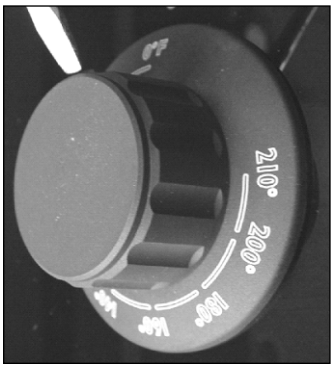
THERMOMETER

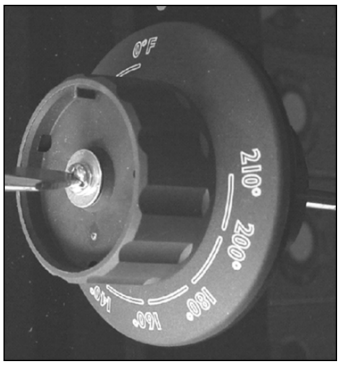


1. Remove the right side panel and the fan plate according to prior procedure.
2. Remove the thermometer probe from the clamp inside the cavity and guide it outside through the opening.
3. Remove the nuts that secure the thermometer and remove the thermometer with clamping plates.
4. Reverse the procedure to install. Be sure to remove the protection paper from the battery.

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

KNOB

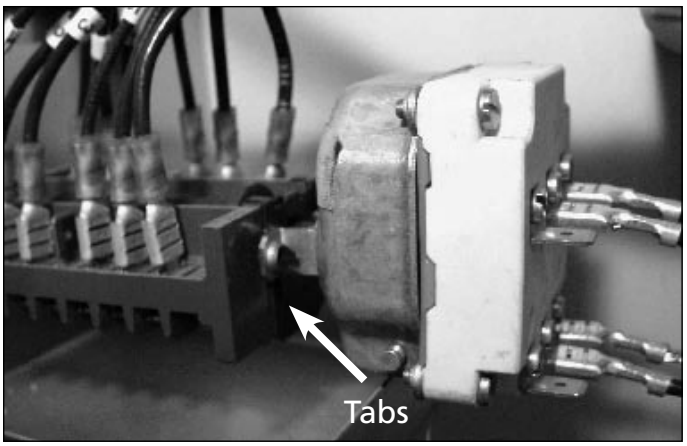




1. Remove cover plate on the knob with a small screw driver.
2. Loosen the screw inside the knob.
3. Remove the knob with ring.
4. Reverse the procedure to install.

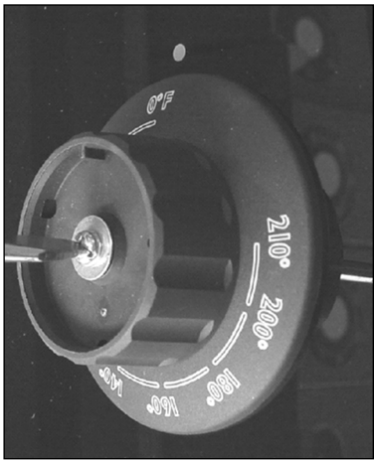
Note: check that the back plate is in the right position and runs free from the panel.

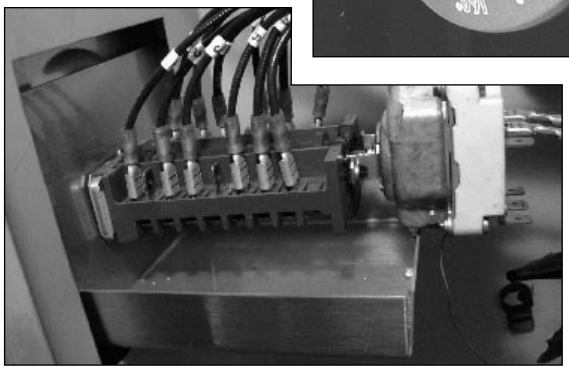
THERMOSTAT



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

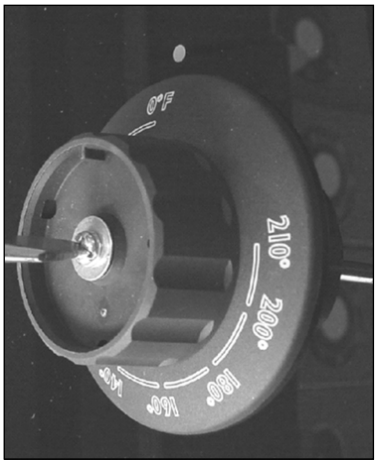
MAIN SWITCH

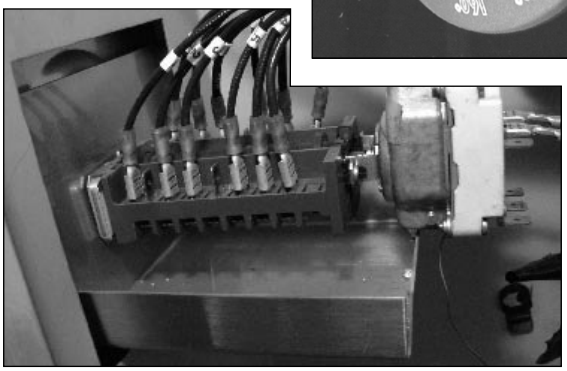




1. Remove the right side panel according to prior procedure.
2. Remove the knob according to prior procedure.
3. Remove the screws that secure the main switch and remove the switch.
4. Disconnect the wiring from the switch.
5. Remove the thermostat from the main switch according to prior procedure.
6. Reverse the procedure to install.

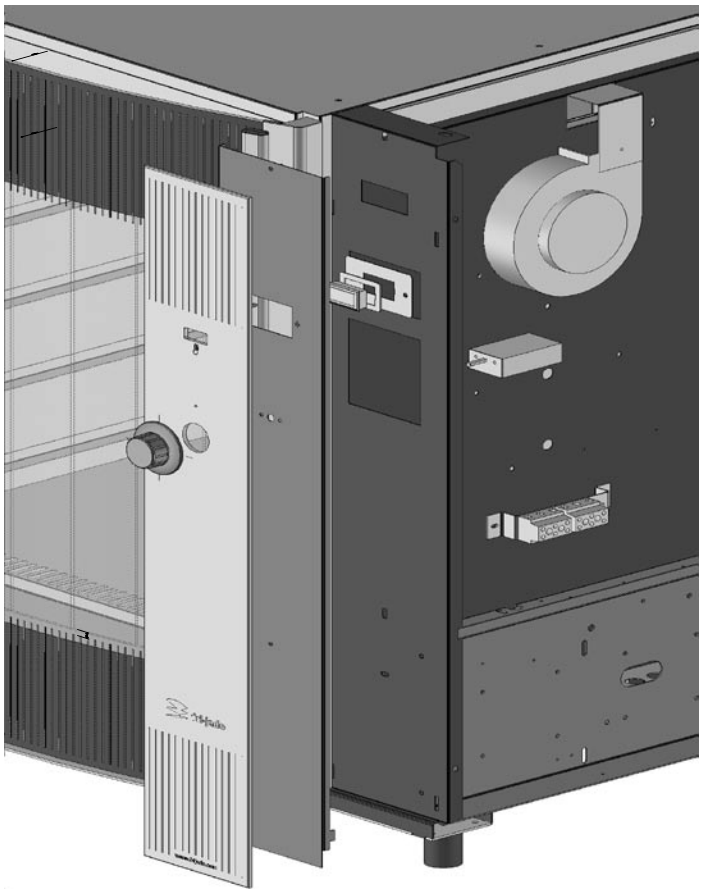
GLASS OPERATION PANEL WITH BACKPLATE

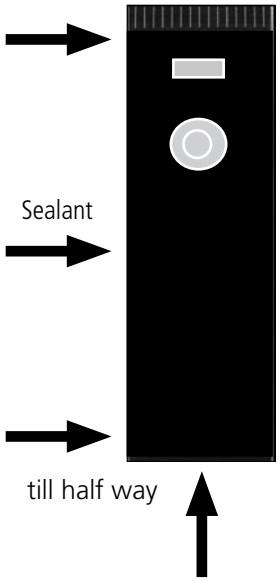




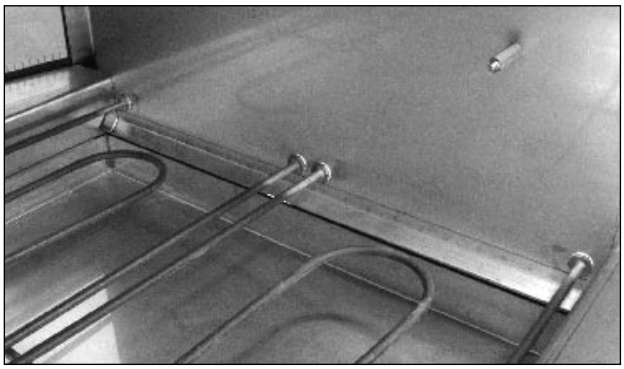
1. Remove the right side panel and the knob and the thermometer display according to prior procedures.
2. Remove the 2 screws that secure the main switch.
3. Remove the 2 nuts on the backside of the operating panel.
4. Use a stanley knife or any other long bladed knife to loosen the sealant between the front panel, on the left side, and the machine frame. Also loosen the sealant on the bottom side from the left to half way of the panel.
5. Lift the operating panel slightly and turn the outside of the panel towards the inside of the machine (to break the sealant).
6. Reverse the procedure to install.

Note: When reversing the procedure do not forget to apply sealant again over the total height of the panel and half way on the bottom side. The Fri-Jado partnumber for this sealant is 4302375 (Dow Corning 732).



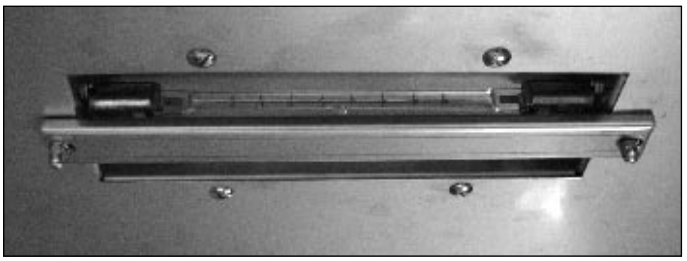


HEATING ELEMENT



1. Remove the right side panel, racks, bottom plate and the fan plate according to 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 on the bottom side.

ADDITIONAL SOFTWARE

THE FIPS APPLICATION

The FIPS application (Fri-Jado Intelligent Program System) can be used to load and download the cooking programs and to load the system software.

The full describtion of the FIPS application can be found in the Service Manual:

I-CONTROL SOFTWARE.

Listed below are the features of the FIPS application:

- Updating the unit software
- Loading of recipies to and from the unit.
- Creation of recipes.
- Modification of recipes.
- Deletion of recipes.
- Sorting of recipes.
- Loading and saving recipes from/to file.
- Adding a single recipe to the listing.
- Loading HACCP data from the unit.

PARAMETER LISTINGS

PARAMETER LIST STG-I

The explanation and listing of the parameters for the i-control system can be found in the Service Manual:

I-CONTROL SOFTWARE.

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.

PT1000 SENSOR TEST

Temperature		Resistance Ω
°F	°C	± 5 Ohms
32	0	1000
60	16	1062
70	21	1082
80	27	1106
90	32	1124
100	38	1148
125	52	1202
150	65	1252
200	94	1362
250	121	1464
350	177	1674
450	233	1880

Note: When testing the resistance of the sensor remove the wiring. Refer to the removal and replacement part of the manual on how to do this.

1. Remove the wiring from the sensor.
2. Connect a temperature sensor to the probe for comparison.
3. Test the probe with an Ohmmeter.

HEATING ELEMENT TEST

Type	Wattage/Voltage	Resistance Ω -5% + 10%	Current A
STG 5	2000 / 208 2000 / 230	21.5 26.5	9.6 8.6
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 (9.8 at 208V)
STW 7	1500 / 230	35.0	6.5 (5.9 at 208V)

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

KEYPAD TEST

To perform a keypad test the unit must be switched off first. Another possibility is to activate this in the "service menu" under "I/O test" and "front panel".

There are 2 keypads. One for the selection keys in the top and one for the function keys below.

1. Press and hold the On/Off key during 5 seconds. On display the front panel is indicated.
2. Press all keys and the turning knob to execute a full test of all keys. This is indicated by an orange square on the key.
3. Press the "cancel" key to exit.

CHANGING QUARTZ LIGHT FUNCTIONS

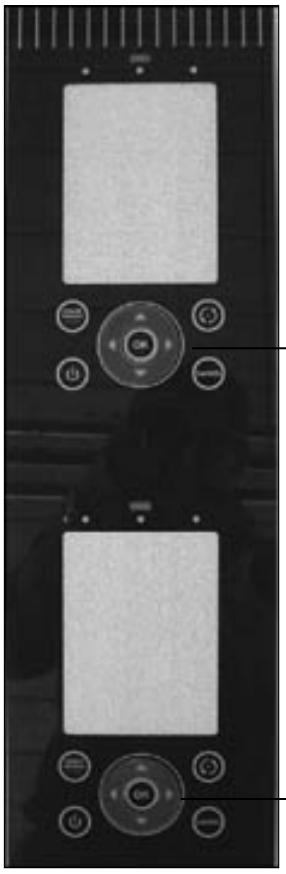
For the standard rotisseries (with doors on both sides) the Quartz light on customer side is always on during the process and the light on service side switches on and off with the heating elements. In some cases it is desirable that the lights work the other way around. To do this you have to change 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 and 7 i 3N~400V and 1N~230V:
Switch the wires 40 and 42 on the connector block.
Switch the wires 41 and 43 on the connector block.
Note: One of the wires might need to be extended.

STG 5 and 7 i 3~200/230V:
Switch the wires 40 and 42 on the connector block.
Switch the wires 41 and 43 on the connector block.
Note: One of the wires might need to be extended.

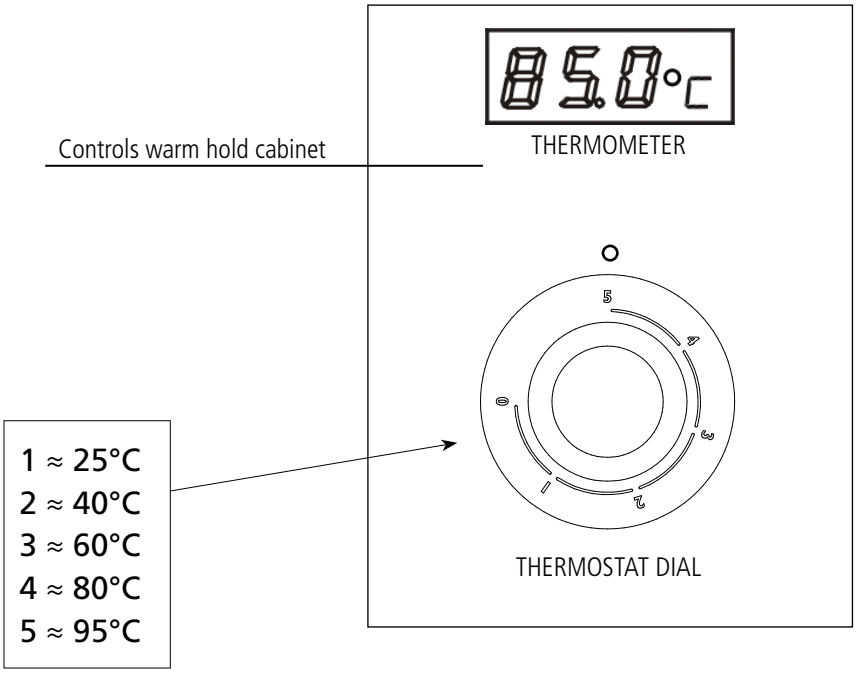
CONTROL LOCATION

Single version



Stacked version top rotisserie controls

Stacked version bottom rotisserie controls



GENERAL TROUBLESHOOTING LIST

TROUBLESHOOTING THE STG5/7 ROTISSERIE

Symptom	Possible causes
No power to rotisserie controls.	1. Main breaker open. 2. Fuse burned. 3. Electronic control inoperative. 4. Wiring or flatcable loose.
Main fuse or breaker blows.	1. Wiring incorrectly. 2. Heating element, drive motor, blower or magnetic switch shorted. 3. Wiring shorted.
Drive motor does not run in program mode.	1. Capacitor malfunction. 2. Wiring loose. 3. Power and I/O board malfunction. 4. Motor malfunction.
Blower motor does not run.	1. Capacitor malfunction. 2. Wiring loose. 3. Power and I/O board malfunction. 4. Motor inoperative.
All functions connected to the I/O board fail to work.	1. Flatcable loose or broken. 2. CPU board malfunction. 3. Power and I/O board malfunction.
Oventemperature differs from temperature setting in program mode.	1. Safety thermostat malfunction. 2. Blower motor(s) inoperative (turning direction?) 3. Electronic control inoperative. 4. PT-1000-sensor malfunction. 5. 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 and I/O board malfunction. 4. Wiring loose.
Oven does not reach desired temperature in program mode.	1. Safety thermostat malfunction. 2. PT-1000-sensor malfunction. 3. Electronic control inoperative. 4. Heater(s) inoperative. 5. Incorrect line voltage.
No display and/or keypad does not function.	1. Flatcable loose or broken. 2. Display and/or electronic control malfunction. 3. Keypad(s) malfunction.

TROUBLESHOOTING THE STW5/7 WARMER

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.
Lamps do not operate.	1. Lamp malfunction. 2. Switch malfunction. 3. Wiring loose.
Warmer does not reach desired temperature.	1. Incorrect line voltage. 2. Heater(s) inoperative. 3. Thermometer malfunction. 4. Thermostat malfunction. 5. Blower motor inoperative (turning direction?) 6. Dirty fanguard or fanblade.
No indication on thermometer display.	1. Battery empty. 2. Thermometer malfunction.
Products dry out too fast.	1. No water in tray.

ANALYTIC TROUBLESHOOTING LIST

SERVICING AND REPAIRING OF THE ROTISSERIE STG5/7

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. Analyse the symptoms.
2. Cross reference with possible causes.
3. Solving of the problem: checking/action and prevention of the problem occuring again by:
4. Replacing of problematic or defective parts and testing if the problem is resolved.
   4.1 Replacing instructions can be found in the removal and replacement chapter.
   4.2 For testing see the programming instructions in this manual.

Description of part	Symptoms	Possible causes	Solving: checking/action
Inside door	Broken glass	Slamming of door.	Give instruction to operator.
		Fastening bolts and nuts are loose.	Tighten all fastenings.
		No sealing ring between steel and glass.	Mount new glass with sealing rings between glass and steel.
Outside door	Broken glass	Slamming of door.	Give instructions to operator
		Fastening bolts and nuts are loose	Tighten all fastenings
		No sealing ring between steel and glass.	Mount new glass with sealing rings between glass and steel.
	Door adjustment	Door not well adjusted anc closes against bottom side	Adjust door on hinge and tighten the hinge plate.
Heating element	Rotisserie does not reach adjusted temperature	Wiring.	Check the wiring. Check the power on the element.
		Element malfunc-tion.	Check the current with AC current tester.
	Duration of grilling time is too long	Wiring.	Check the wiring.
		Element malfunc-tion.	Check the current with AC current tester. See table on page 30.

Description of part	Symptoms	Possible causes	Solving: checking/action
PT-sensor	Temperature indication on display of 317°C / 603°F	No connection between wires.	Check the wiring. Check thin wire on sensor.
	Temperature indication on display does not go up	Full contact between wires of sensor.	Check the wiring.
		Short circuit in sensor.	Measure resistance of sensor. This is zero.
	Rotisserie does not reach adjusted temperature	Malfunction sensor.	Measure resistance of sensor with a thermometer probe next to the sensor. See table in this manual.
		Sensor not in right position.	Check position of sensor
	Temperature indication on display runs up too fast	Malfunction Sensor	Measure resistance of sensor. See table on page 30.
Safety thermostat	Contactor does not come in after starting of program	Wiring.	Check the wiring.
		Thermostat malfunction.	Check if the thermostat is making contact.
	Contactor switches off before reaching the adjusted temperature in program	Thermostat malfunction.	Check if the thermostat is turned fully clockwise (contact closed).
		Thermostat probe not in right position.	Check the position of the thermostat probe.
Contactor	Contactor does not come in	Wiring.	Check the wiring.
		Coil malfunction.	Check resistance of the coil. This should be ~ 525Ω.
		Contact burned.	Check the contacts of the contactor
Capacitor	Drive motor or blower do not work	Wiring.	Check the wiring.
		Capacitor malfunctions.	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.
Keypad(s) on operation panel	No possibility to make a program	One or more keys don't function.	Check functions of keypad(s). See keypad test in this manual. Check flat cable connection on CPU board. Check flat cable. Check if keypad is correctly glued to the glass.

Description of part	Symptoms	Possible causes	Solving: checking/action
Display/CPU on operation panel and power I/O board	No illumination on display	Wiring.	Check the wiring. Check the power on the power I/O board by the green LED.
		Fuse burned.	Check the 125 mA fuse on the power I/O board. Check the fuse F1 and F2.
		Flat cable.	Check grey flat cable connection. Check functions after connecting a new grey flat cable.
		Display malfunction.	Check power to display by the 2 green LED's and the red flashing LED on the CPU board. Check the connectors of the display on the display and CPU board. Check functions after installing a new CPU board with display.
		Power board malfunction.	Check functions after installing a new power I/O board.
	One or more functions don't work or stay activated.	Relay malfunction.	Check relay on function with problem.
	Display shows strange things.	Parameters not on right settings.	Check parameters.
		Wrong software or loss of data.	Check software version or upload latest software.
		Dipswitches on CPU board	Dipswitch 1 + 2 = off. Dipswitch 2 + 3 = on.

Description of part	Symptoms	Possible causes	Solving: checking/action
Drive motor	Motor does not run	Wiring.	Check the wiring. Check the power to the motor.
		Coil malfunction.	Check resistance of the coils. Between whiteA and white wire 234Ω. Between whiteA and brown wire 117Ω. Between white and brown wire 117Ω.
		Reduction gearbox.	Check if reduction gearbox is blocked.
		Relay on power board.	Check power on relay X14.
	Motor runs after starting it up by hand	Capacitor malfunction.	Check capacitor (see capacitor) or connect new capacitor.
	Motor stops during process and comes in again after a period of time	Coil overheated, thermistor switches off (105°C – 221°F).	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 does not run	Wiring.	Check the wiring. Check the power on the blower.
		Coil malfunction.	Check resistance of the coils. 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.
		Relay on power board.	Check power on relays.
	Blower runs after starting it up by hand	Capacitor malfunction.	Check capacitor (see capacitor), or connect new capacitor.
	Blower stops during process and comes in again after a period of time	Coil overheated, thermistor switches off (150°C – 302°F).	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)	Blower does not turn and heat stays in top of cavity	Check the wiring. Check the power on the blower.
	Fuse F1 or F2 burned	Short circuit in coil to earth	Check insulation value of coil with a Megger on 500V. Minimum value is 0.5 MΩ.

SERVICING AND REPAIRING OF THE WARMERS STW5/7

Description of part	Symptoms	Possible causes	Solving: checking/action
Outside door	Broken glass.	Slamming of door.	Give instructions to operator.
		Fastening bolts and nuts are loose.	Tighten all fastenings.
		No sealing ring between steel and glass.	Mount new glass with sealing between glas and steel.
	Door adjustment.	Door not well adjusted and closes against bottom side.	Adjust door on hinge and tighten the hinge plate.
Heating element	Warmer does not reach adjusted temperature.	Wiring.	Check the wiring. Check the power on the element.
		Element malfunction.	Check the current with an AC current tester. See table on page 30.
Thermostat	Warmer does not reach adjusted temperature.	Wiring.	Check the wiring.
		Thermostat malfunction.	Check if the thermostat is making contact. Check the position of the thermostat probe.
	Warmer does not heat up	Thermostat malfunction.	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.
	No indication on display.	Battery empty.	Check battery.
Main Switch	No power to all, or some oven controls.	Wiring.	Check the wiring.
		Malfunction of the cams on the switch.	Check the cams.
		Contacts burned.	Check the contacts on the switch.

Description of part	Symptoms	Possible causes	Solving: checking/action
Capacitor	Drive motor or blower does not work	Wiring.	Check the wiring.
		Capacitor malfunction.	Check function after connecting a new capacitor. Checking of the capacitor: Discharge capacitor with a screwdriver. Set meter on MΩ and connect the pins of the meter to the contacts, value goes up. Change the pins on the contacts, value goes up again. This means the capacitor is OK.
Blower	Blower does not run	Wiring.	Check the wiring. Check the power on the blower.
		Coil malfunction.	Check the resistance of the coils. Between blue and brown wire: 310Ω. Between blue and black wire: 320Ω. Between brown and blakc wire: 630Ω.
	Blower runs after starting it up by hand	Capacitor malfunction.	Check capacitor (see capacitor), or connect new capacitor.
	Blower stops during process and comes in again after a period of time	Coil overheated, thermistor switches off (150°C - 302°F)	Check cooling circuit of blower.
			Check if warmer is close to another heat source.
			Measure temperature during process.
	Fuse burned	Short circuit in coil to earth	Check insulation value of coil with a Megger on 500V. Minimum value is 0.5MΩ.

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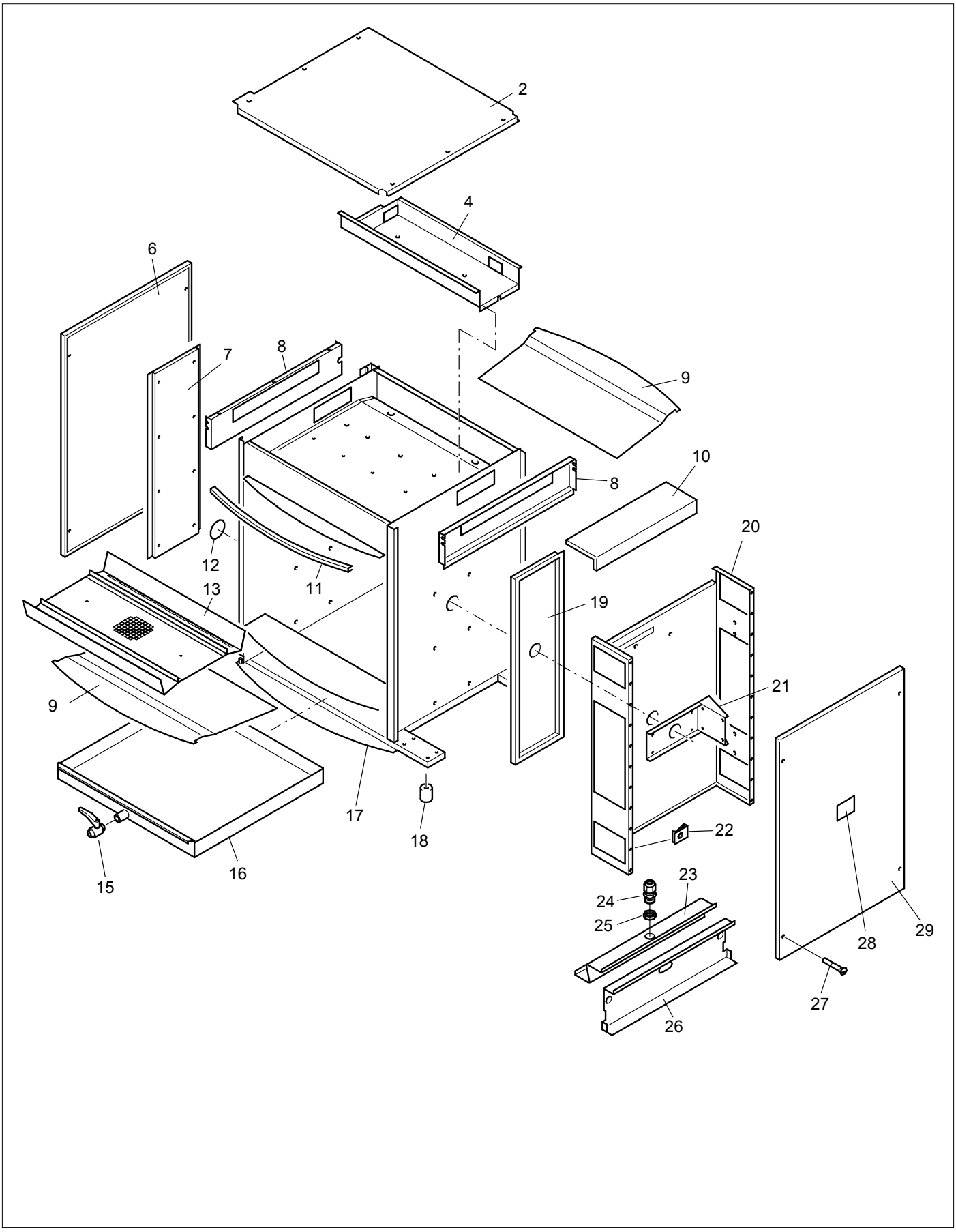
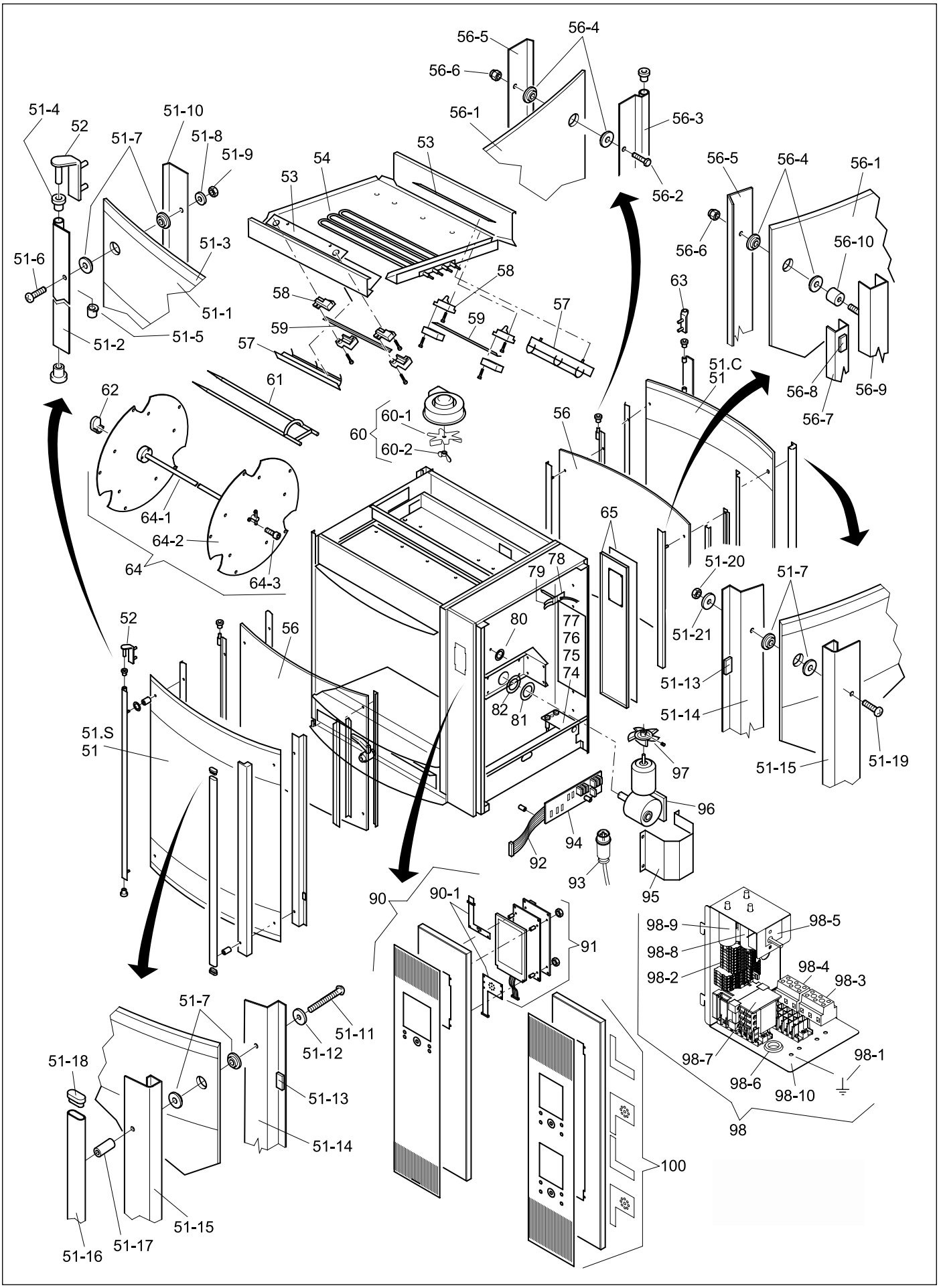
EXPLODED VIEWS & PARTLISTS

STG 5 I COATED OR STAINLESS STEEL - SHEET METAL WORK



Item	Partnum-ber	Qty	Description
2	9174060	1	Cap, top
4	9146544	1	Mounting plate, blower
6	9170428	1	Side panel, left
7	9174071	1	Reinforcement, side plate, left
8	9170432	2	Side panel, top
9	9172220	2	Bottom plate, coated
9	9174069	2	**Bottom plate, stainless steel**
10	9174061	1	Cover, removable
11	9171012	2	Sealing profile, silicon
12	9112430	4	Washer, insulation support
13	9141845	1	Plate, air guide
15	9171008	1	Drain-tap with handle
16	9170458	1	Drawer
17	9170446	1	Frame, ass.
18	9171125	4	Leg, rubber
19	9170445	1	Reinforcement, side plate, right
20	9174072	1	Cover plate, machine components
21	9170444	1	Support, gear motor
22	9172053	1	Nut M5
23	9174141	1	Spark catcher
24	9261022	1	Strain relief M25
25	9261023	1	Connector M25
26	9174073	1	Mounting plate
27	4288322	8	Screw M5 x 10, SS socket button head
28	9110810	1	Indication plate
29	9170532	1	Plate, outer, right

STG 5 I COATED OR STAINLESS STEEL - COMPONENTS



Item	Part-number	Qty	Description
51.S	9179859	1	Door service side, ass.
51	9172108	1	Glass black, outer incl. hinge profile
51-1	9172020	1	Glass black, outer
51-2	9170441	1	Hinge profile
51-3	9172080	2	Protection profile
51-4	9172054	2	Brass bearing 8 mm
51-5	9172122	2	Brass bearing 8 mm, adjusted
51-6	4288321	2	Screw M5 x 16, SS socket button head
51-7	3702342	8	Flange bushe, PTFE 3 mm
51-8	4311110	2	Washer
51-9	9087570	2	Nut M 5, serrated
51-10	9174079	1	Mounting profile, hinge side
51-11	4288320	2	Screw M5x45 SS
51-12	9174680	2	Washer
51-13	9070141	24	Magnet block
51-14	9174083	2	Fastening, door handle
51-15	9170464	2	Profile, magnet
51-16	9174132	1	Door handle
51-17	9172300	2	Spacing pin
51-18	9171014	2	Plug, door handle
51.C	9179851	1	Door customer side, ass.
51	9172108	1	Glass black, outer incl. hinge profile
51-1	9172020	1	Glass black, outer
51-2	9170441	1	Hinge profile
51-3	9172080	2	Protection profile
51-4	9172054	2	Brass bearing 8 mm
51-5	9172122	2	Brass bearing 8 mm, adjusted
51-6	4288321	2	Screw M5 x 16, SS socket button head
51-7	3702342	8	Flange bushe, PTFE 3 mm
51-8	4311110	2	Washer
51-9	9087570	2	Nut M 5, serrated
51-10	9174079	1	Mounting profile, hinge side
51-11	4288320	2	Screw M5x45 SS
51-12	9174680	2	Washer
51-13	9070141	24	Magnet block
51-14	9174083	2	Fastening, door handle
51-15	9170464	2	Profile, magnet
51-19	4288321	2	Screw M5 x 16, SS socket button head
51-20	0144359	2	Nut, self locking M5
51-21	4311110	2	Washer
52	9170427	1	Hinge, left
53	9112210	2	Mounting plate, lamp holder
54	9140019	2	Heating element, 2000 W

Item	Part-number	Qty	Description
56	9179855	2	Door inside, ass.
56-1	9172016	2	Glass, inner
56-2	0211520	4	Bolt M5 x 12 ss hexagon head
56-3	9170442	2	Hinge profile
56-4	3702341	16	Flange bush, PTFE 2 mm
56-5	9174080	4	Cover profile, inner glass
56-6	4285408	8	Nut, M5
56-7	9174084	2	Profile
56-8	9070141	20	Magnet block
56-9	9174081	2	Holder, magnet
56-10	9172081	4	Spacing pin
57	9116662	2	Protection, lamp
58	9110023	4	Lamp holder, cap + housing
59	9056082	2	Quartz light, 1000 W
60	9140027	2	Blower
60-1	9141934	2	Fan blade
60-2	9073150	2	Wingnut, left hand threaded
61	9172222	7	Meatfork TG STG 5, coated
61	9010549	7	**Meatfork, stainless steel**
62	9172062	1	Steel bearing, 12 mm
63	9170426	1	Hinge, right
64	9172219	1	Rotorset ass., coated
64-1	9172250	1	Rotor shaft, incl. disc studs, coated
64-2	9172251	2	Rotor disc 3 mm (5-holes), coated
64-3	0142975	6	Socket-head screw M6x20 SS
64	9146951	1	**Rotorset ass., stainless steel**
64-1	9170571	1	**Rotor shaft, incl. disc studs, stainless steel**
64-2	9174369	2	**Rotor disc 3 mm (5-holes), stainless steel**
64-3	0142975	6	**Socket-head screw M6x20 SS**
65	9170075	1	Back panel, ass. Glass + backplate
68	4289966	4	Distance ring, outerglass
74	9171120	2	Fuse 5x20, ceramic T10A
75	9142520	1	Fastening plate, fuse holder
76	9110025	2	Fuse housing
77	9110026	2	Fuse holder
78	9172310	1	Temperature sensor PT 1000
79	9044140	1	Sensor cable
80	9171018	1	Plug
81	9110797	1	Sealring, drive bearing
82	9073131	1	Sealing ring
86	4289966	4	Distance ring, outerglass

Item	Part-number	Qty	Description
90	9170073	1	Operation panel, ass. Glass + backplate + keypads
90-1	9172329	1	Keypads, 15 keys and 3 keys
91	9172317	1	CPU board + LCD + cable, ass.
92	9172314	1	Flatcable, 14-pol. (i)
93	9070028	1	Connecting cable with plug
94	9192202	1	Power & I/O board
95	9174161	1	Protection support
96	9173005	1	Gearmotor, complete with drive head
97	9172078	1	Fanblade, motor
98	9173060	1	Electric panel, ass.
98-1	0166555	1	Earth symbol
98-2	9172330	1	Connecting block with bracket
98-3	9044564	1	Connecting block, 1,2,3
98-4	9044572	1	Connecting block, 4,5,6
98-5	9070531	1	Thermostat 50-250 °C
98-6	9070840	2	Grommet
98-7	3500069	1	Contactor
98-8	9077102	1	Capacitor 3 mF
98-9	9110030	2	Capacitor 1,5 mF
98-10	9174712	1	Electric panel
100	9170060	1	***Operation panel, ass. Glass + back-plate + keypads. For stacked models only***

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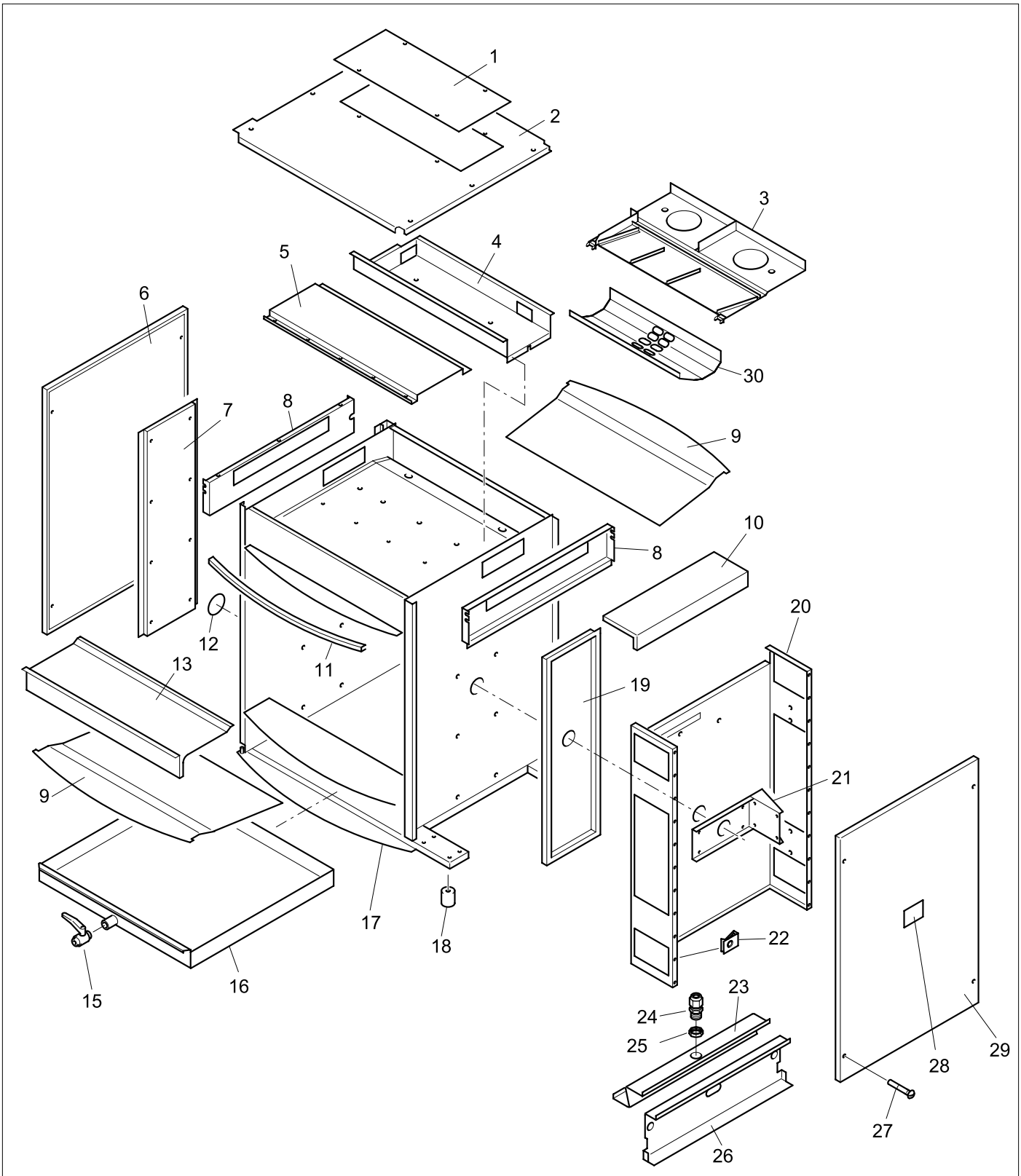
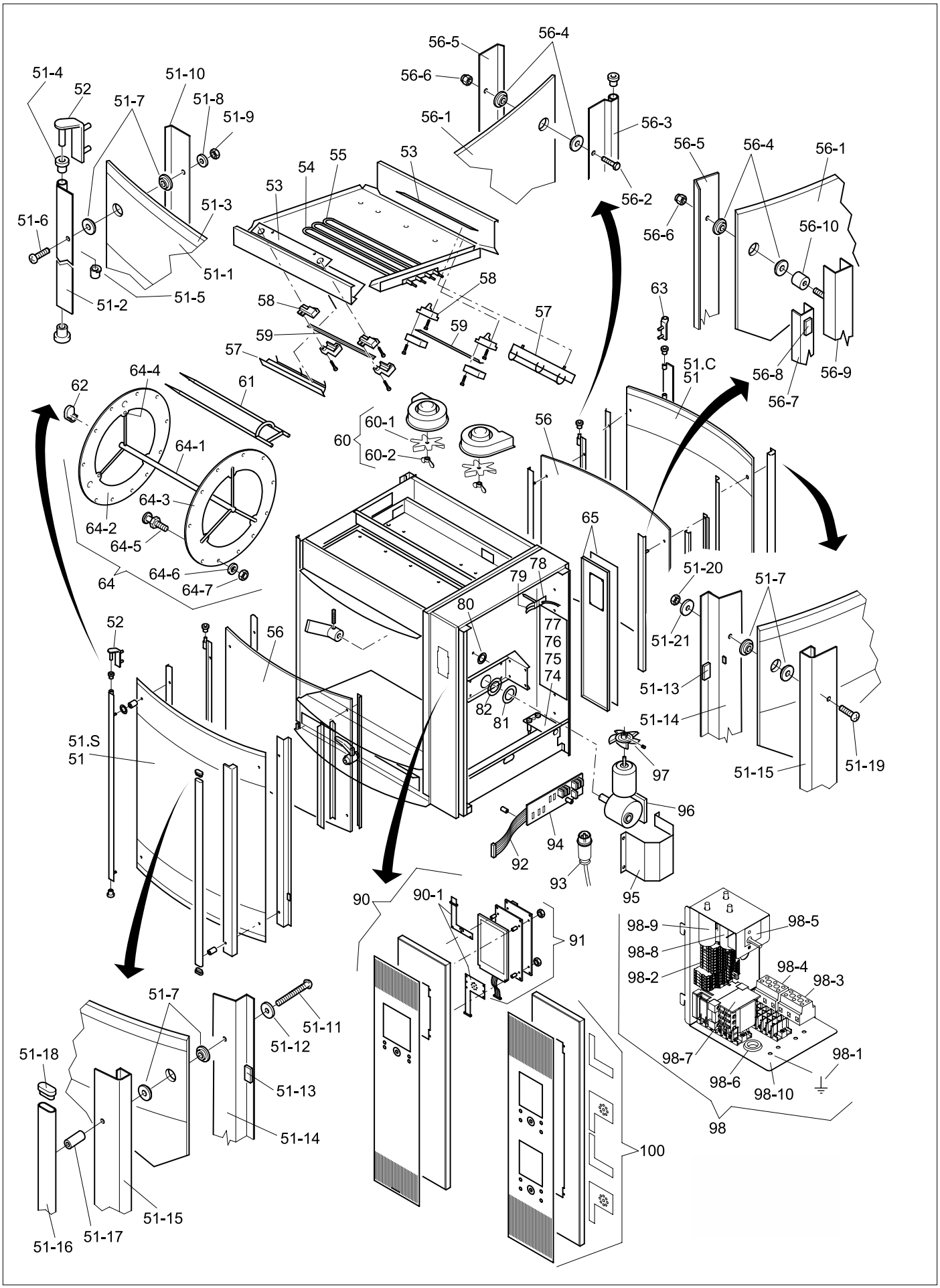
STG 7 I COATED OR STAINLESS STEEL - SHEET METAL WORK



Item	Partnum-ber	Qty	Description
1	9174099	1	Cover, removable
2	9174004	1	Cap, top
3	9170640	1	Cover plate, blower
4	9170450	1	Mounting plate, blower
5	9174016	1	Ceiling
6	9170419	1	Side panel, left
7	9174013	1	Reinforcement, side plate, left
8	9170421	2	Side panel, top
9	9172202	2	Bottom plate, coated
9	9174010	2	**Bottom plate, stainless steel**
10	9174005	1	Cover, removable
11	9172116	2	Sealing profile, Silicon L= 71 cm
12	9112430	4	Washer, insulation support
13	9170404	1	Heat shield
15	9171008	1	Drain-tap with handle
16	9170451	1	Drawer
17	9170448	1	Frame, ass.
18	9171125	4	Leg, rubber
19	9170425	1	Reinforcement, side plate, right
20	9174015	1	Cover plate, machine components
21	9170444	1	Support, gear motor
22	9172053	1	Nut M5
23	9174140	1	Spark catcher
24	9261022	1	Strain relief M25
25	9261023	1	Connector M25
26	9174034	1	Mounting plate
27	4288322	8	Screw M5 x 10, SS socket button head
28	9110810	1	Indication plate
29	9170531	1	Side panel, right
30	9111913	1	Air guide plate

STG 7 I COATED OR STAINLESS STEEL - COMPONENTS



Item	Part-number	Qty	Description
51.S	9179850	1	Door service side, ass.
51	9172107	1	Glass black, outer incl. hinge profile
51-1	9172019	1	Glass black, outer
51-2	9170422	1	Hinge profile
51-3	9172079	2	Protection profile
51-4	9172054	2	Brass bearing 8 mm
51-5	9172122	2	Brass bearing 8 mm, adjusted
51-6	4288321	4	Screw M5x16, SS butto head
51-7	3702342	8	Flange bush, PTFE 3 mm
51-8	4311110	2	Washer
51-9	9087570	2	Nut, self locking M5
51-10	9174022	1	Mounting profile, hinge side
51-11	4288320	2	Screw M5x45 SS
51-12	9174680	2	Washer
51-13	9070141	12	Magnet block
51-14	9174025	1	Fastening, door handle
51-15	9170454	2	Profile, magnet
51-16	9174131	1	Door handle
51-17	9172300	2	Spacing pin
51-18	9171014	2	Plug, door handle
51.C	9179851	1	Door customer side, ass.
51	9172107	1	Glass black, outer incl. hinge profile
51-1	9172019	1	Glass black, outer
51-2	9170422	1	Hinge profile
51-3	9172079	2	Protection profile
51-4	9172054	2	Brass bearing 8 mm
51-5	9172122	2	Brass bearing 8 mm, adjusted
51-6	4288321	4	Screw M5x16, SS butto head
51-7	3702342	8	Flange bush, PTFE 3 mm
51-8	4311110	2	Washer
51-9	9087570	2	Nut, self locking M5
51-10	9174022	1	Mounting profile, hinge side
51-11	4288320	2	Screw M5x45 SS
51-12	9174680	2	Washer
51-13	9070141	12	Magnet block
51-14	9174025	1	Fastening, door handle
51-15	9170454	2	Profile, magnet
51-19	4288321	2	Screw M5x16, SS button head
51-20	0144359	2	Nut, self locking M5
51-21	4311110	2	Washer
52	9170427	1	Hinge, left
53	9112210	2	Mounting plate, lamp holder
54	9044653	1	Heating element, 3100 W
55	9040023	2	Heating element, 2100 W
56	9179852	2	Door inside, ass.
56-1	9172001	2	Glass, inner
56-2	0211520	4	Bolt M5x12 ss hexagon
56-3	9170423	2	Hinge profile
56-4	3702341	16	Flange bush, PTFE 2 mm

Item	Part-number	Qty	Description
56-5	9174029	4	Cover profile, inner glass
56-6	4285408	8	Nut, M5
56-7	9174027	2	Profile
56-8	9070141	20	Magnet block
56-9	9174026	2	Holder, magnet
56-10	9172081	4	Spacing pin
57	9116662	2	Protection, lamp
58	9110023	4	Lamp holder, cap + housing
59	9056082	2	Quartz light, 1000 W
60	9110048	2	Blower
60-1	9110153	2	Fanblade
60-2	9073150	2	Wingnut, left handed thread
61	9172242	7	Meatfork STG7 (8 mm) coated steel
61	9172153	7	**Meatfork STG7 (8mm) stainless steel**
62	9172063	1	Steel bearing, 14 mm
63	9170426	1	Hinge, right
64	9170045	1	Rotorset ass., coated
64-1	9172205	1	Rotor shaft, ass., coated
64-2	9172248	1	Rotor disc 3mm, left coated, incl. support pins
64-3	9172249	1	Rotor disc 3mm, right coated, incl. support pins
64-4	9172252	12	Tensilock bolt M5x10 coated
64-5	-	-	Support pin. Part of rotor disc for coated versions (see 64-2 and 64-3)
64-6	-	-	Spring washer. Part of rotor disc for coated versions (see 64-2 and 64-3)
64-7	-	-	Nut M8. Part of rotor disc for coated versions (see 64-2 and 64-3)
64	9170055	1	**Rotorset ass., stainless steel**
64-1	9070272	1	**Rotor shaft, ass., stainless steel**
64-2	9174351	2	**Rotor disc 3 mm, stainless steel**
64-3			**See item 64-2**
64-4	4288231	12	**Tensilock bolt M5x10 stainless steel**
64-5	9172169	14	**Support pin**
64-6	0142056	14	**Spring washer 8mm stainless steel**
64-7	4312271	14	**Nut M8 stainless steel**
65	9170076	1	Back panel, ass. Glass + backplate
68	4289966	4	Distance ring, outerglass
74	9171120	2	Fuse 5x20, ceramic T10A
75	9142520	1	Fastening plate, fuse holder
76	9110025	2	Fuse housing
77	9110026	2	Fuse holder
78	9172310	1	Temperature sensor, PT1000
79	9044140	1	Sensor cable
80	9171018	1	Plug
81	9110797	1	Sealring, drive bearing

Item	Part-number	Qty	Description
82	9073131	1	Sealing ring
86	4289966	4	Distance ring, outerglass
90	9170074	1	Operation panel, ass. Glass + backplate + keypads
90-1	9172329	1	Keypads, 15 keys and 3 keys
91	9172317	1	CPU board +LCD + cable, ass.
92	9172314	1	Flat cable, 14 pins
93	9070028	1	Connecting cable with plug
94	9192202	1	Power & I/O board
95	9174161	1	Protection support
96	9173004	1	Gearmotor, complete with drive arm
97	9172078	1	Fanblade, motor
98	9173060	1	Electric panel, ass.
98-1	0166555	1	Earth symbol
98-2	9172330	1	Connecting block with bracket
98-3	9044564	1	Connecting block, 1,2,3
98-4	9044572	1	Connecting block, 4,5,6
98-5	9070531	1	Thermostat 50-250°C
98-6	9070840	2	Grommet
98-7	3500069	1	Contactor
98-8	9077102	1	Capacitor 3 µF
98-9	9110030	2	Capacitor 1,5 µF
98-10	9174712	1	Electric panel
100	9170061	1	***Operation panel, ass. Glass + backplate + keypads. For stacked models only***

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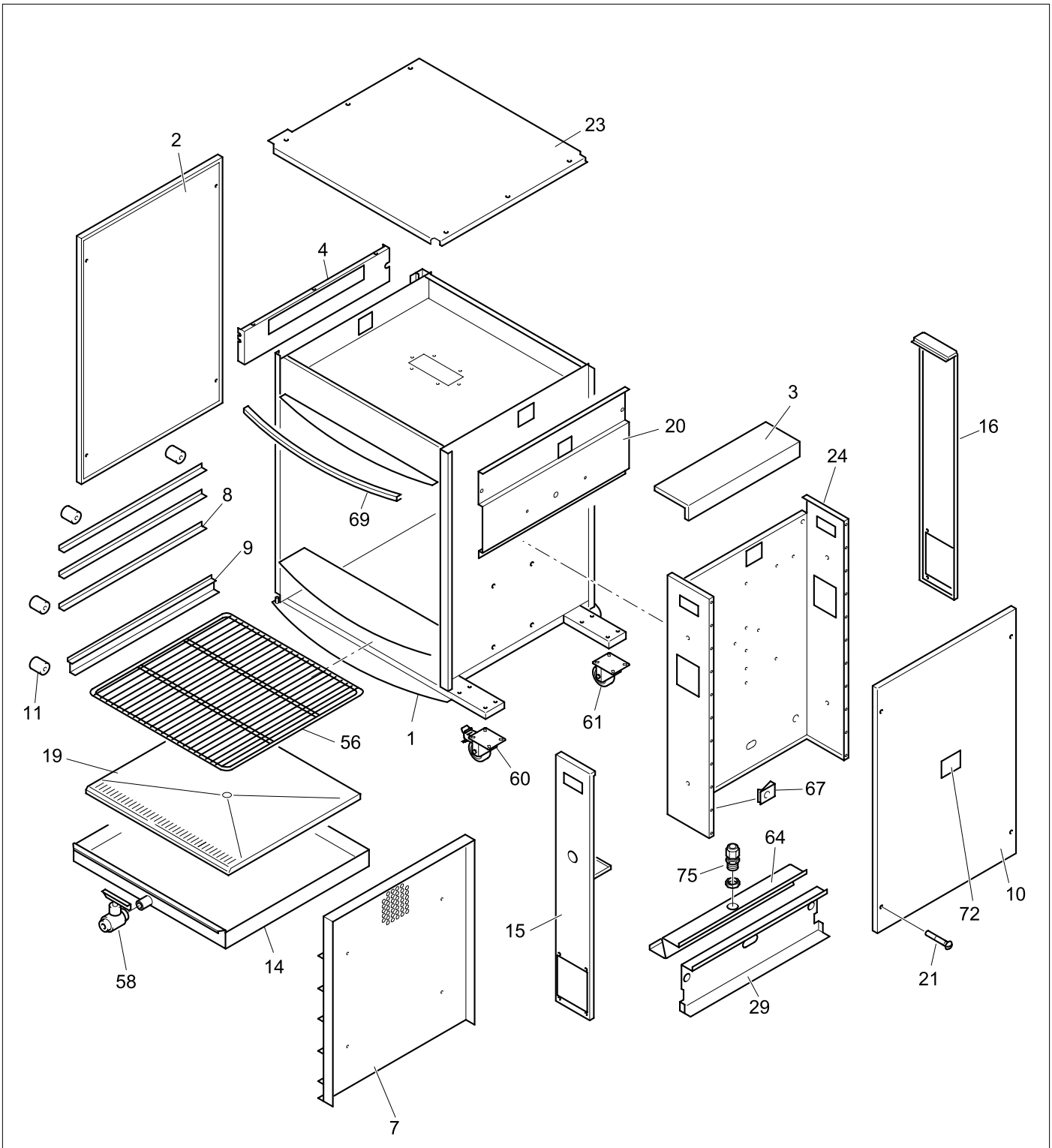
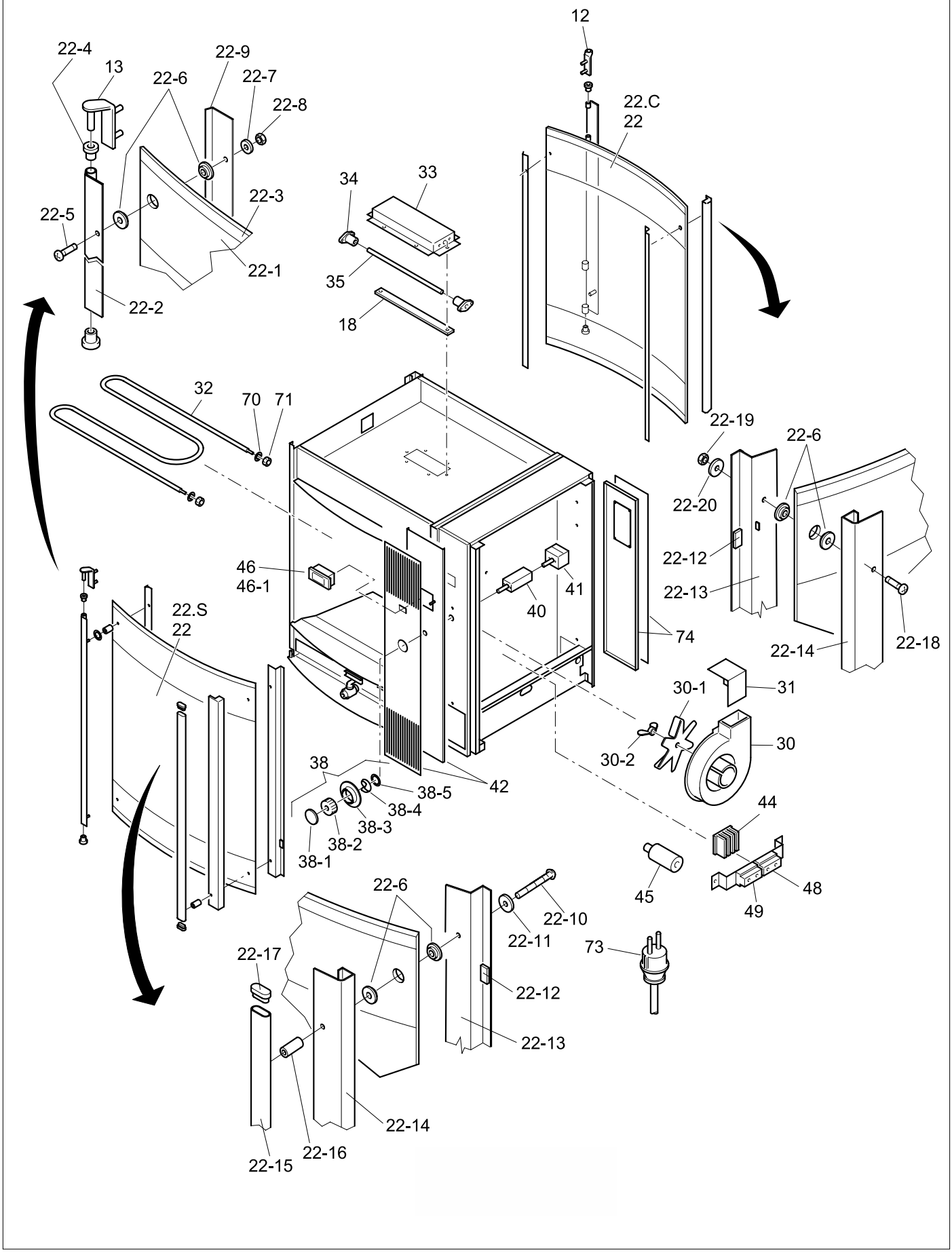
STW 5 I SHEET METAL WORK



Item	Part number	Qt.	Description
1	9170447	1	Frame, ass.
2	9170428	1	Side panel, left
3	9174061	1	Cover, removable
4	9170432	1	Side panel, top
7	9170439	1	Ventilating plate
8	9174117	3	Runner
9	9174096	1	Profile for bottom plate
10	9170480	1	Side panel, right
11	9171020	8	Spacing pin
14	9170458	1	Drawer
16	9174075	1	Panel, customer side
19	9174089	1	Bottom plate
20	9174092	1	Reinforcement, side plate, right
21	4288322	8	Screw M5 x 10, SS socket button head
23	9174060	1	Cap, top
24	9174095	1	Cover plate, machine components
29	9174073	1	Mounting plate
56	9142192	3	Display rack
57	9172066	2	Castor with brake
58	9171008	1	Drain-tap with handle
60	9172065	2	Castor without brake
64	9174142	1	Spark catcher
67	9172053	8	Nut
69	9172117	2	Sealing profile, Silicon L= 55 cm
72	9110810	1	Indication plate
75	9261022	1	Strain relief M25
76	9261023	1	Connector M25

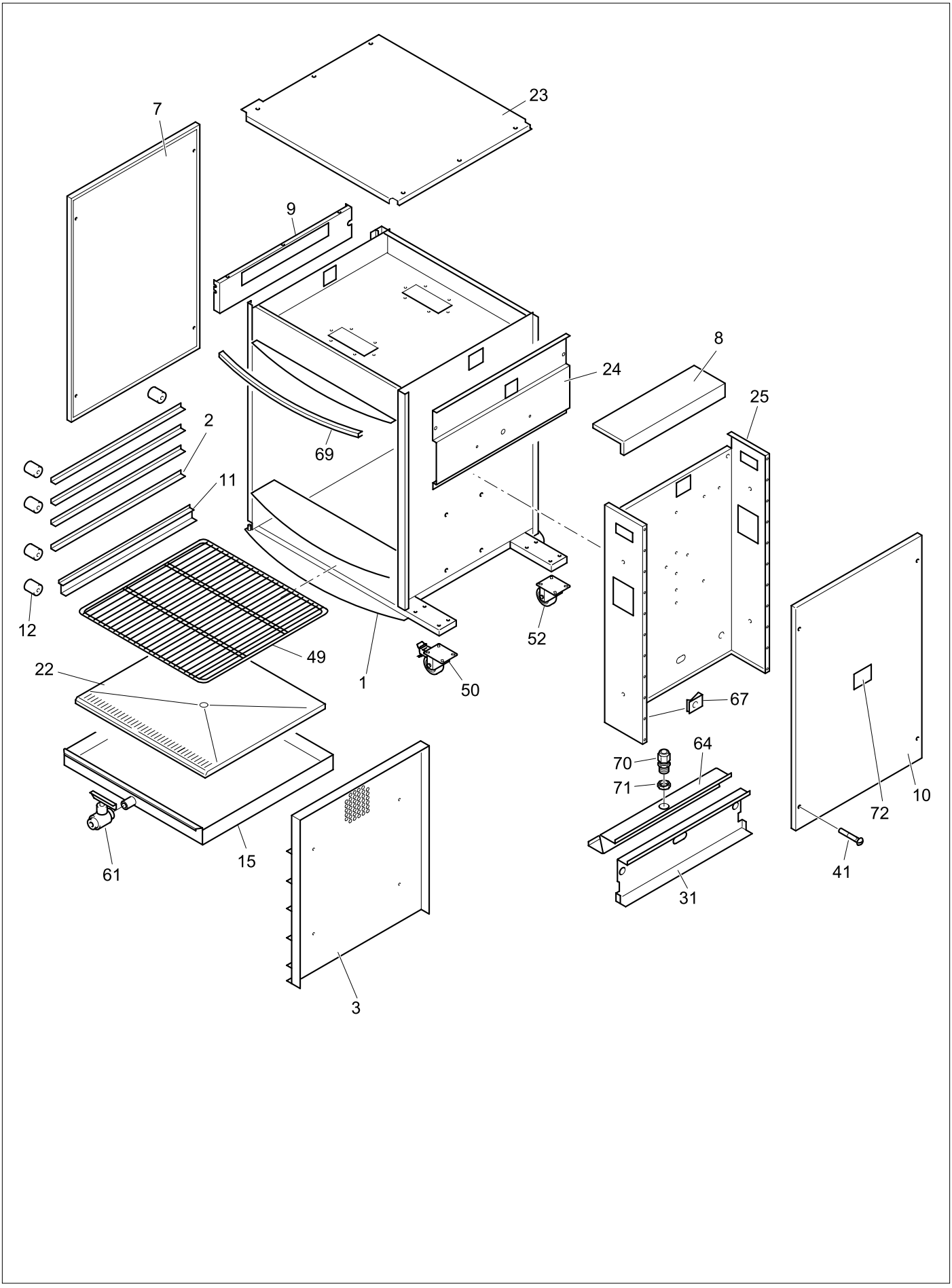
STW 5 I COMPONENTS



Item	Part number	Qt.	Description
12	9170426	1	Hinge, right
13	9170427	1	Hinge, left
18	9174115	1	Under plate
22.S	9179859	1	Door service side, ass.
22	9172108	1	Glass black, outer incl. hinge profile
22-1	9172020	1	Glass black, outer
22-2	9170441	1	Hinge profile
22-3	9172080	3	Protection profile
22-4	9172054	2	Brass bearing 8 mm
22-5	4288321	2	Screw M5 x 16, SS socket button head
22-6	3702342	8	Flange bush, PTFE 3 mm
22-7	4311110	2	Washer
22-8	0144359	2	Nut, self locking M5
22-9	9174079	1	Mounting profile, hinge side
22-10	4288320	2	Screw M5x45 SS
22-11	9174680	2	Washer
22-12	9070141	24	Magnet block
22-13	9174083	2	Fastening, door handle
22-14	9170464	2	Profile, magnet
22-15	9174132	1	Door handle
22-16	9172300	2	Spacing pin
22-17	9171014	2	Plug, door handle
22.C	9179851	1	Door customer side, ass.
22	9172108	1	Glass black, outer incl. hinge profile
22-1	9172020	1	Glass black, outer
22-2	9170441	1	Hinge profile
22-3	9172080	3	Protection profile
22-4	9172054	2	Brass bearing 8 mm
22-5	4288321	2	Screw M5 x 16, SS socket button head
22-6	3702342	8	Flange bush, PTFE 3 mm
22-7	4311110	2	Washer
22-8	0144359	2	Nut, self locking M5
22-9	9174079	1	Mounting profile, hinge side
22-10	4288320	2	Screw M5x45 SS
22-11	9174680	2	Washer
22-12	9070141	24	Magnet block
22-13	9174083	2	Fastening, door handle
22-14	9170464	2	Profile, magnet
22-18	4288321	2	Screw M5 x 16, SS socket button head
22-19	0144359	2	Nut, self locking M5
22-20	4311110	2	Washer

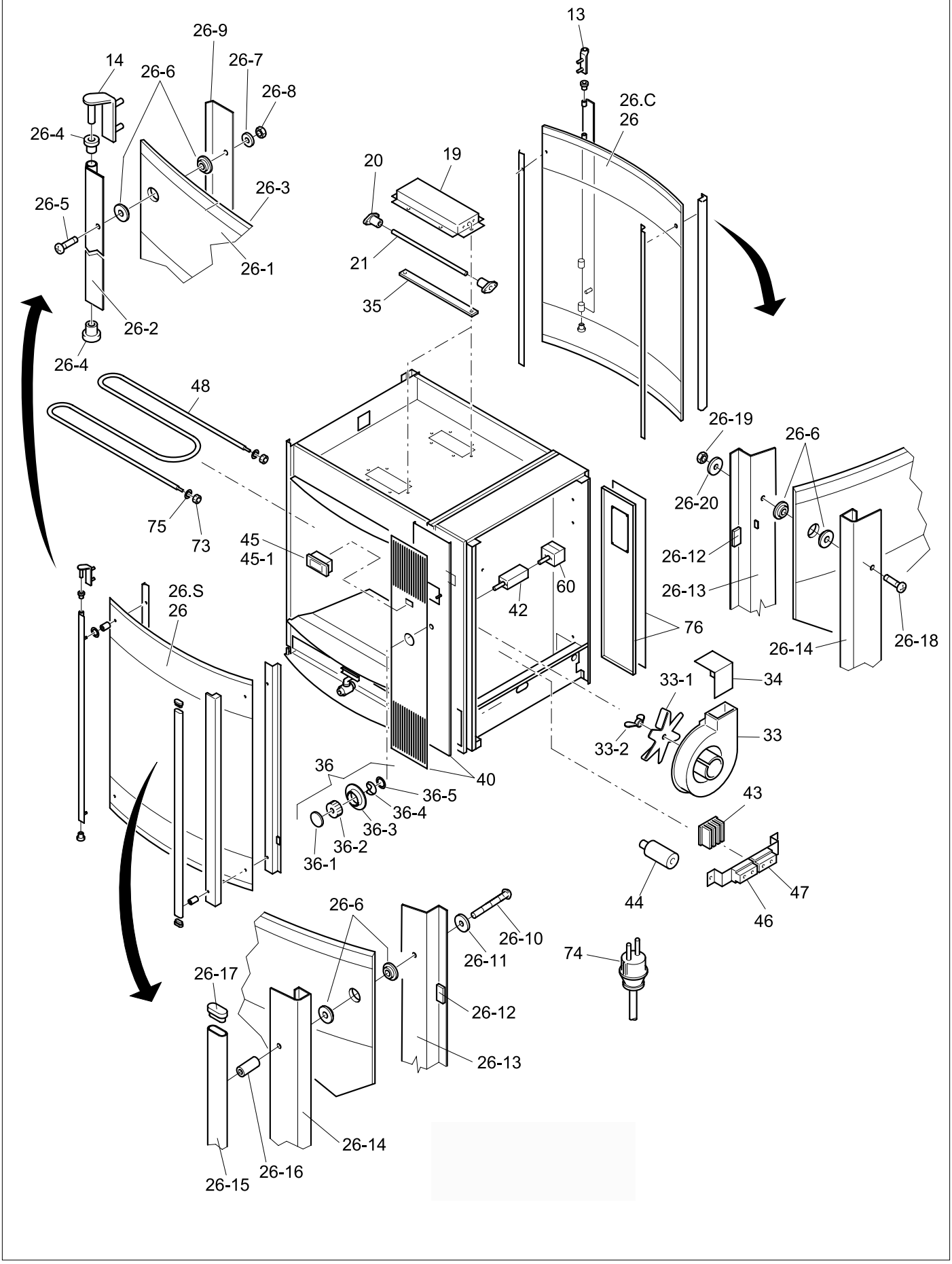
Item	Part number	Qt.	Description
30	9110048	1	Blower
30-1	9110153	1	Fanblade
30-2	9073150	1	Wingnut, left hand threaded
31	9142265	1	Spray mouth
32	9160865	1	Heating element, 2500 W
33	9174125	1	Lamp shade
34	9052826	2	Lamp holder
35	9082774	1	Lamp, Halotherm 200 W
36	4289966	4	Distance ring, outerglass
38	9173056	1	Main power/thermostat knob assembly
38-1	9172049	1	Cover, knob
38-2	9172021	1	Control knob, grey
38-3	9172035	1	Back plate, 0-5
38-4	9172052	1	Locking ring, knob
38-5	9110802	1	Plug
40	9040714	1	Main switch, warmer
41	9082994	1	Thermostat 32-110 °C
42	9170077	2	Operation panel, ass. Glass + backplate
44	9040722	1	Connecting block
45	9110030	1	Capacitor 1,5 mF
46	9171006	1	Thermometer, digital °C
46-1	9079066	1	Battery
48	9044572	1	Connecting block, 4,5,6
49	9044564	1	Connecting block, 1,2,3
70	0169197	2	Gasket, heating element
71	0169189	2	Nut, heating element
73	9091383	1	Connecting cable with plug
74	9170075	1	Back panel, ass. Glass + backplate

STW 7 I SHEET METAL WORK



Item	Part number	Qt.	Description
1	9170449	1	Frame
2	9174053	5	Runner
3	9170412	1	Cover plate, blower
7	9170419	1	Side panel, left
8	9174005	1	Cover, removable
9	9170421	1	Side panel, top
10	9170479	1	Side panel, right
11	9174052	1	Profile for bottom plate
12	9171020	12	Spacing pin
15	9170451	1	Drawer
22	9174044	1	Inner bottom
23	9174045	1	Cap, top
24	9174046	1	Reinforcement, side plate, right
25	9174048	1	Cover plate, machine components
31	9174034	1	Mounting plate
41	4288322	8	Screw M5 x 10, SS socket button head
49	9040748	3	Display rack
50	9172066	2	Castor with brake
52	9172065	2	Castor without brake
61	9171008	1	Drain-tap with handle
64	9174140	1	Spark catcher
67	9172053	1	Nut
69	9172116	2	Sealing profile, Silicon L= 71 cm
70	9261022	1	Strain relief M25
71	9261023	1	Connector M25
72	9110810	1	Indication plate

STW 7 I COMPONENTS



Item	Part number	Qt.	Description
13	9170426	1	Hinge, right
14	9170427	1	Hinge, left
19	9174125	2	Lamp shade
20	9052826	4	Lamp holder
21	9082774	2	Lamp, Halotherm 200 W
26.S	9179850	1	Door service side, ass.
26	9172107	1	Glass black, outer incl. hinge profile
26-1	9172019	1	Glass black, outer
26-2	9170422	1	Hinge profile
26-3	9172079	2	Protection profile
26-4	9172054	2	Brass bearing 8 mm
26-5	4288321	2	Screw M5 x 16, SS socket button head
26-6	3702342	8	Flange bush, PTFE 3 mmSeal ring
26-7	4311110	2	Washer
26-8	0144359	2	Nut, self locking M5
26-9	9174022	1	Mounting profile, hinge side
26-10	4288320	2	Screw M5x45 SS
26-11	9174680	2	Washer
26-12	9070141	12	Magnet block
26-13	9174025	1	Fastening, door handle
26-14	9170454	1	Profile, magnet
26-15	9174131	1	Door handle
26-16	9172300	2	Spacing pin
26-17	9171014	2	Plug, door handle
26.C	9179851	1	Door customer side, ass.
26	9172107	1	Glass black, outer incl. hinge profile
26-1	9172019	1	Glass black, outer
26-2	9170422	1	Hinge profile
26-3	9172079	2	Protection profile
26-4	9172054	2	Brass bearing 8 mm
26-5	4288321	2	Screw M5 x 16, SS socket button head
26-6	3702342	8	Flange bush, PTFE 3 mmSeal ring
26-7	4311110	2	Washer
26-8	0144359	2	Nut, self locking M5
26-9	9174022	1	Mounting profile, hinge side
26-10	4288320	2	Screw M5x45 SS
26-11	9174680	2	Washer
26-12	9070141	12	Magnet block
26-13	9174025	1	Fastening, door handle
26-14	9170454	1	Profile, magnet
26-18	4288321	2	Screw M5 x 16, SS socket button head
26-19	0144359	2	Nut, self locking M5
26-20	4311110	2	Washer

Item	Part number	Qt.	Description
33	9110048	1	Blower
33-1	9110153	1	Fanblade
33-2	9073150	1	Wingnut, left hand threaded
34	9174139	1	Spray mouth, blower
35	9174115	2	Under plate
36	9173056	1	Main power/thermostat knob assembly
36-1	9172049	1	Cover, knob
36-2	9172021	1	Control knob, grey
36-3	9172035	1	Back plate, 0-5
36-4	9172052	1	Locking ring, knob
36-5	9110802	1	Plug
40	9170078	1	Operation panel, ass. Glass + backplate
42	9040714	1	Main switch, warmer
43	9040722	1	Connecting block
44	9110030	1	Capacitor 1,5 mF
45	9171006	1	Thermometer, digital °C
45-1	9079066	1	Battery
46	9044564	1	Connecting block, 1,2,3
47	9044572	1	Connecting block, 4,5,6
48	9005251	2	Heating element, 1500 W
60	9082994	1	Thermostat 32-110 °C
73	0169189	4	Nut, heating element
74	9091383	1	Connecting cable with plug
75	0169197	4	Gasket, heating element
76	9170076	1	Back panel, ass. Glass + backplate

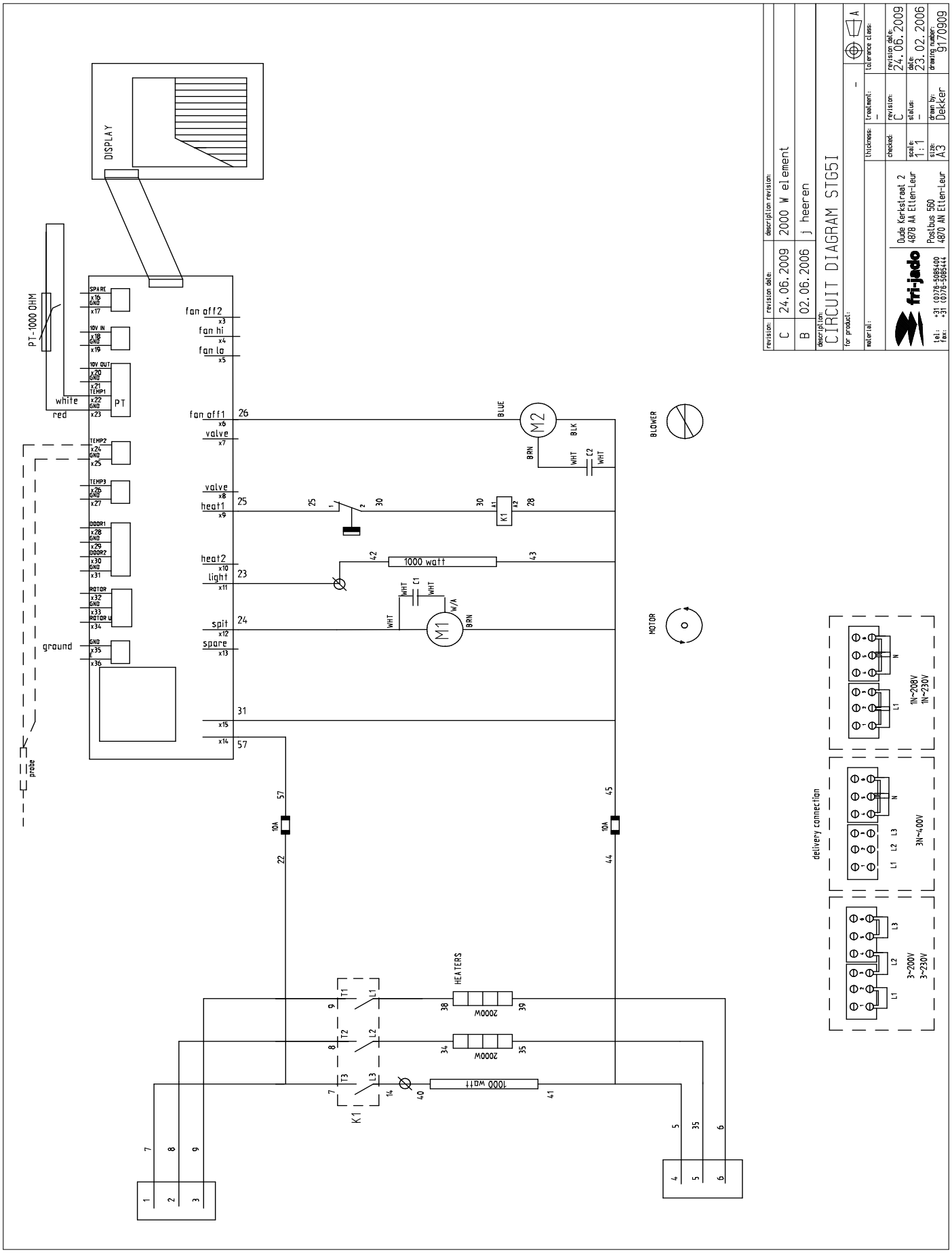
OTHER PARTS

Fasteners not mentioned in the exploded views			
Model	Qty	Partnum-ber	Description
All models	25	0142307	Nut M4 SS, DIN 934
All models	2	0142315	Nut M5 SS, DIN 934
All models	49	4285092	Nut Self Securing M6
All models	40	9087570	Nut M5 tensilock
All models	4	4312027	Nut M5, 6-sided fastening
All models	1	6390168	Nut blind rivet, 6F0300
All models	13	4287620	Screw ST4,2x13, DIN 7981
All models	2	2204244	Screw M4x16, DIN 7500
All models	4	4285135	Screw taptite M5x10, DIN 7500
All models	2	0147674	Screw M4x25, DIN 7985
All models	6	0147153	Screw M5x30, DIN 84
All models	1	4280555	Screw M6x16, DIN 85
All models	2	0195910	Cap nut M6, DIN 1587
All models	10	9008178	Bolt M5x8, DIN 933
All models	4	4280110	Bolt M6x20, DIN 933
All models	8	4280173	Bolt M6x10, DIN 933
All models	16	9070688	Bolt M8x12, DIN 933
All models	3	4285076	Bolt M8x16, DIN 933
All models	8	4285084	Bolt ST4,8x19, DIN 7504
All models	14	4285319	Bolt 4,8x13, DIN7504
All models	6	9009213	Blind rivet D33BS2,4x5,1
All models	2	9044378	Pressure rivet nr. 615 black

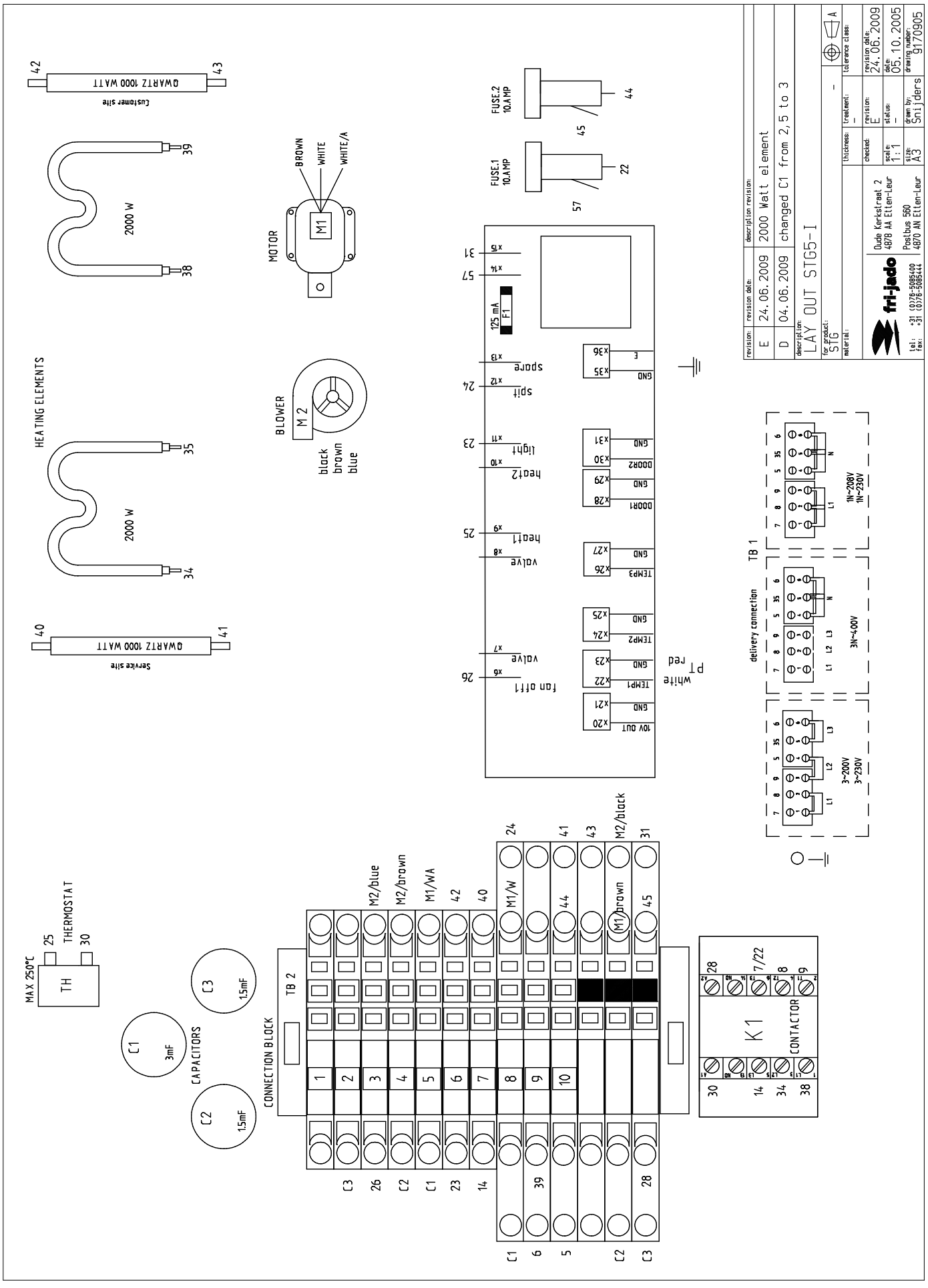
Miscellanious items not mentioned in the exploded views			
Model	Qty	Partnum-ber	Description
All models	1	0018647	Distance bush
All models	4	0149296	Distance bush 4,2x8x10
All models	4	0142048	Spring washer M6 SS, DIN 137A
All models	14	0142129	Locking ring M4 SS, DIN 125
All models	10	0142103	Locking ring M5 SS, DIN 125
All models	2	0142111	Locking ring M6 SS, DIN 125
All models	2	0146987	Locking ring M8 SS, DIN 125
All models	12	0188750	Ring 4,3x9x1,4
All models	10	0199817	Spring washer M4, IN1587
All models	1	0211520	Cable clamp 15,9mm
All models	2	9110072	Cable clamp, 11503-100-300
All models	9	2005913	Tie wrap 98x2,5mm
All models	1	4302065	Silicone rubber glue
All models	1	4302373	Transparant sealant, Dowcorning 732
All models	1	4302375	Black sealant, Dowcorning Q3-1566
All models	5	4310070	Isolation fastening clip 3x38
All models	1	9008518	Lock washer M8 SS, DIN 6798
All models	4	9082211	Grommet SB-562-7

ELECTRICAL DIAGRAMS

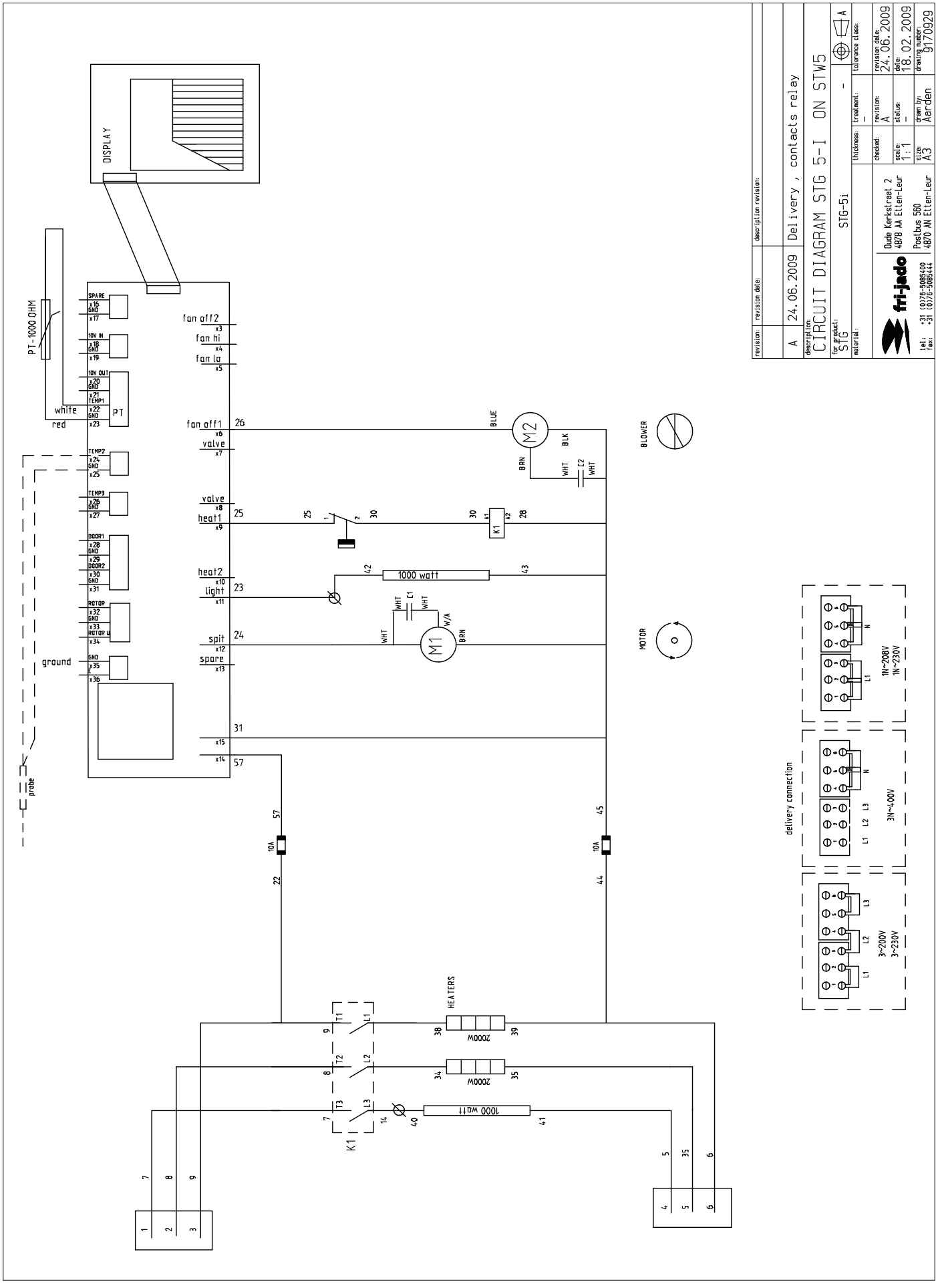
STG 5 I - CIRCUIT DIAGRAM



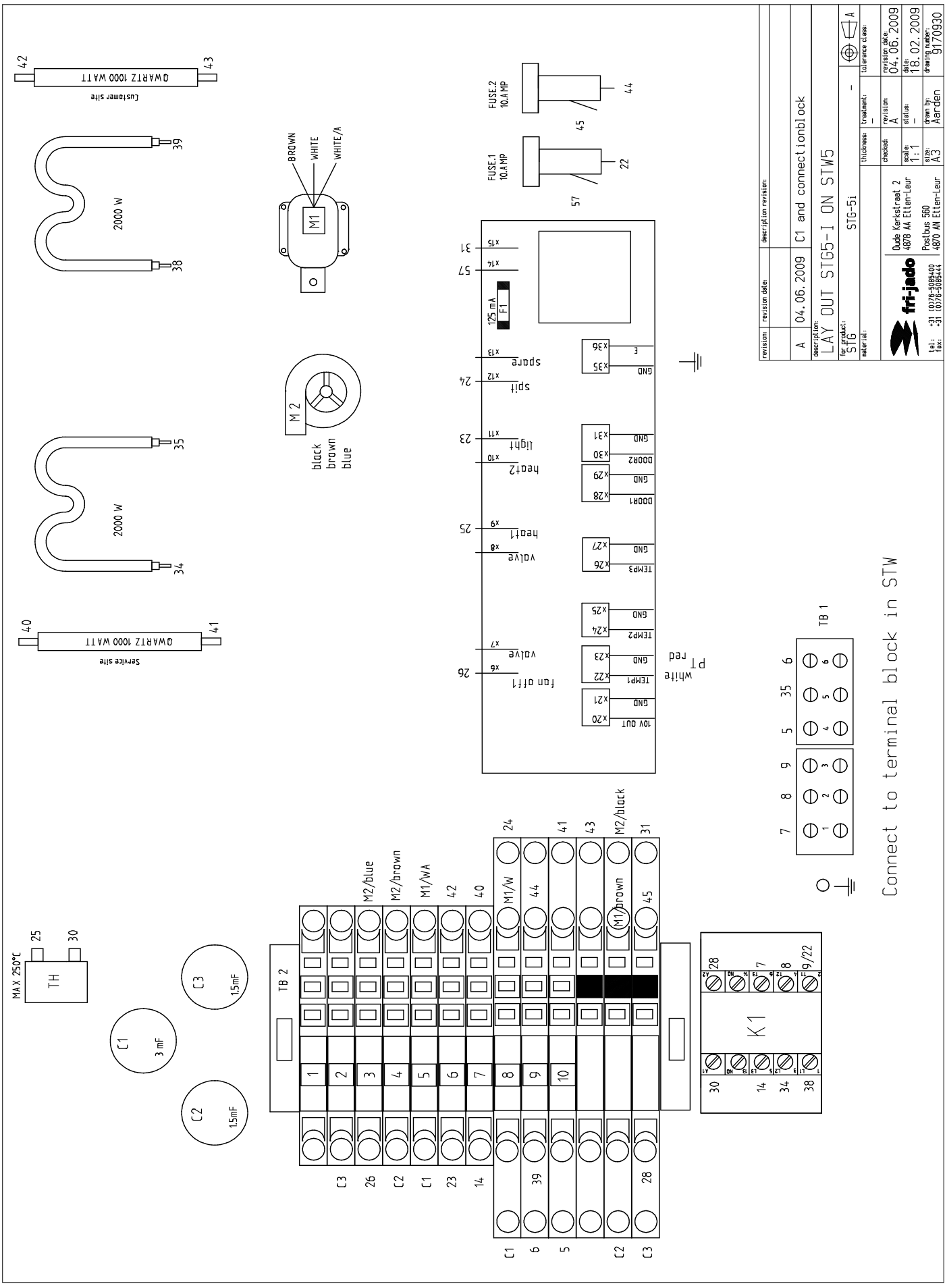
STG 5 I - WIRING DIAGRAM



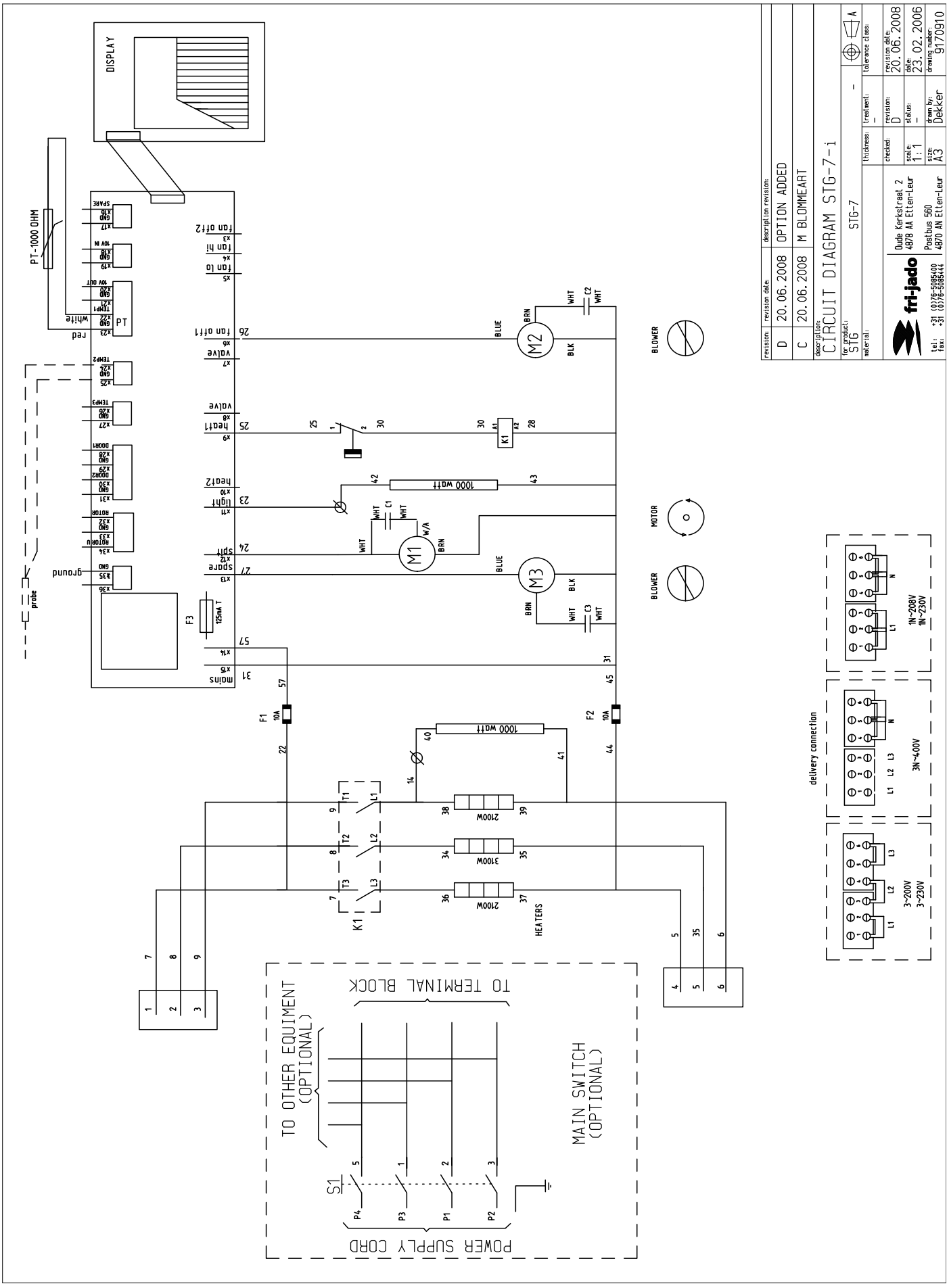
STG 5 I + STW 5 - CIRCUIT DIAGRAM



STG 5 I + STW 5 - WIRING DIAGRAM



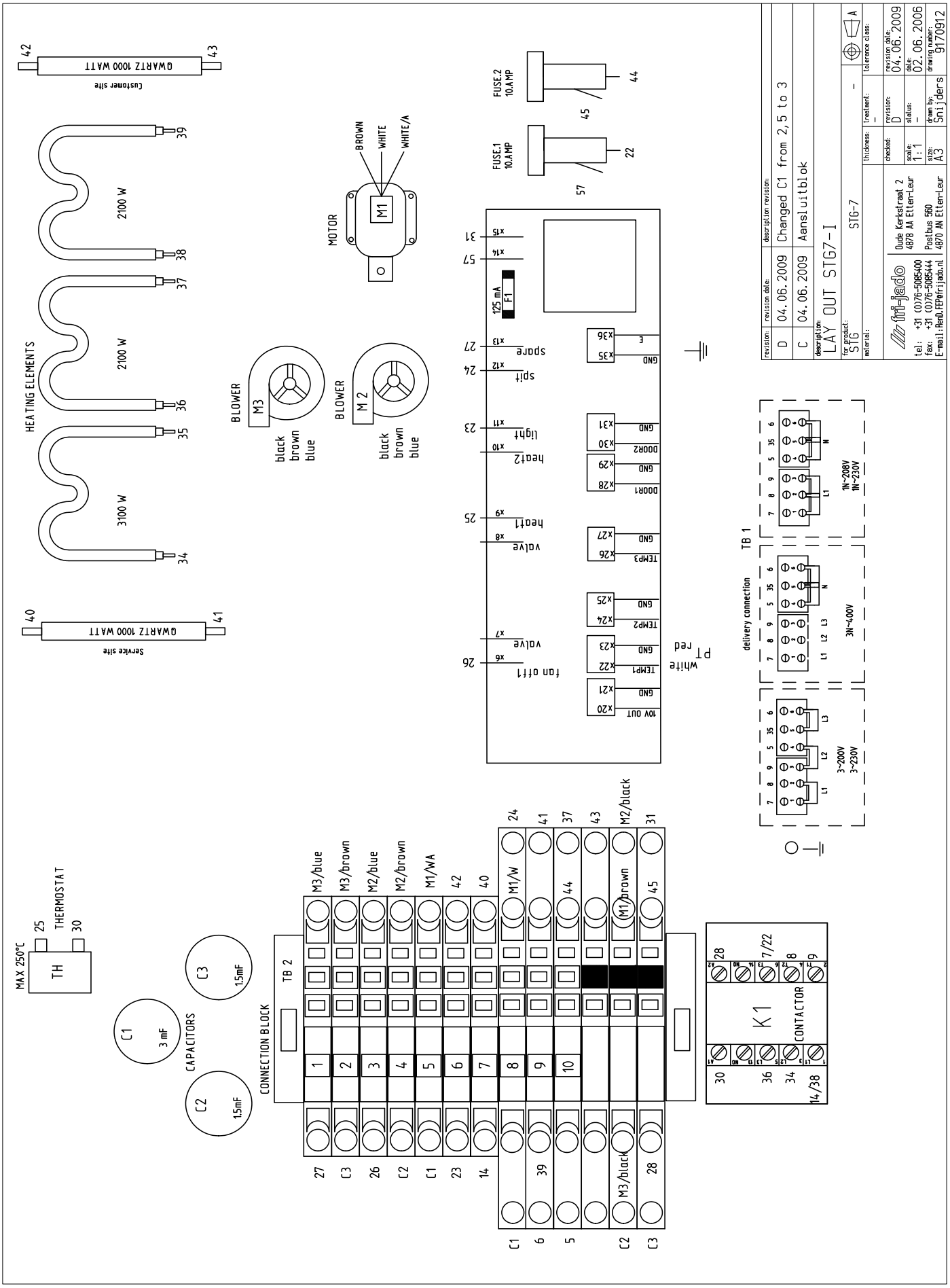
STG 7 I - CIRCUIT DIAGRAM



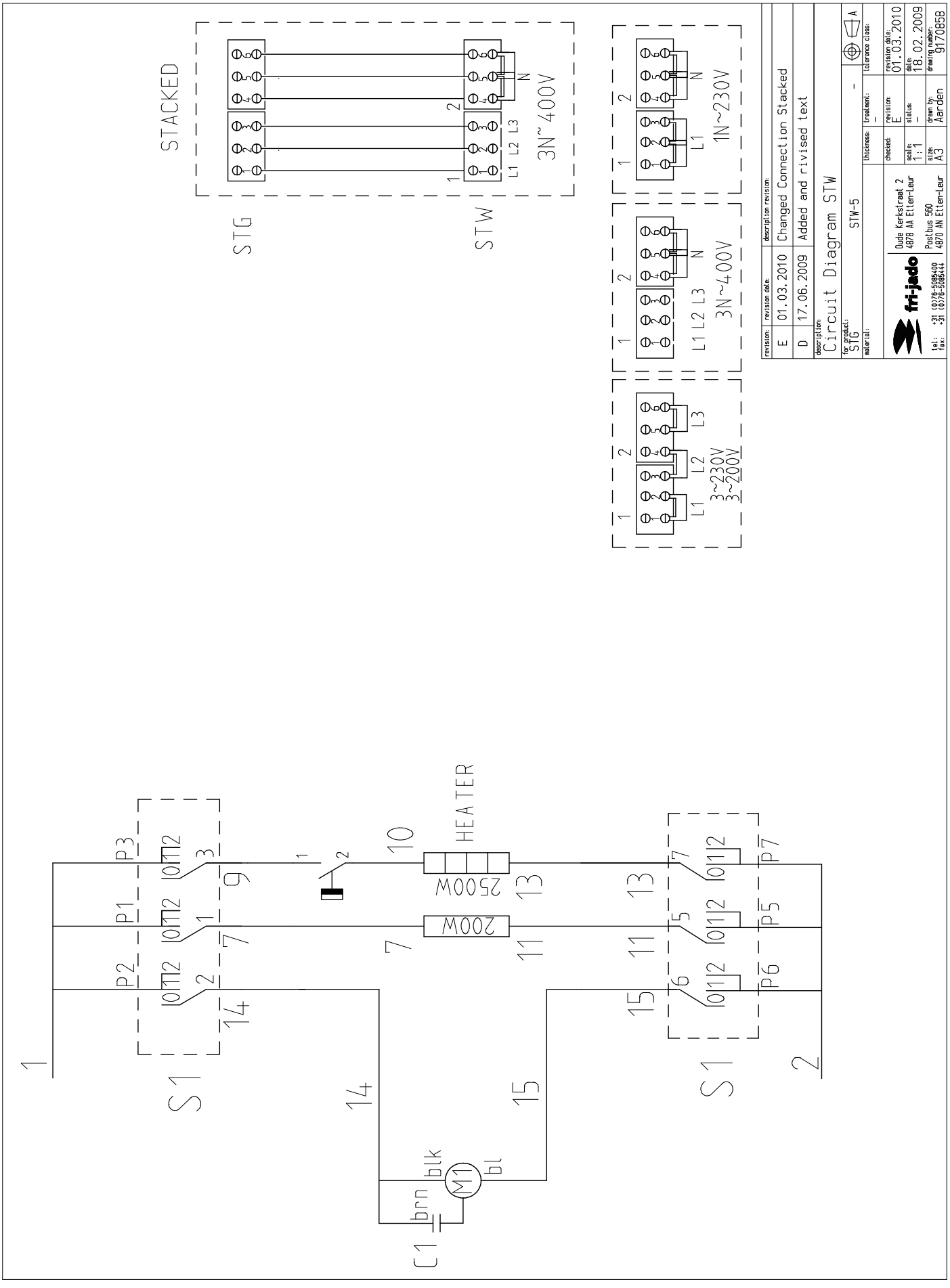
revision:	revision date:	description revision:
D	20.06.2008	OPTION ADDED
C	20.06.2008	M BLOMMEART

description: CIRCUIT DIAGRAM STG-7-i
for product: STG | STG-7 | - | A
material: | thickness: | treatment: - | tolerance class:
fri-jado | Oude Kerkstraat 2, 4878 AA Etten-Leur | checked: | revision: D | revision date: 20.06.2008
Postbus 560, 4870 AN Etten-Leur | scale: 1:1 | status: - | date: 23.02.2006
tel.: +31 (0)76-5085400 fax: +31 (0)76-5085444 | size: A3 | drawn by: Dekker | drawing number: 9170910

STG 7 I - WIRING DIAGRAM



STW 5 I - CIRCUIT DIAGRAM



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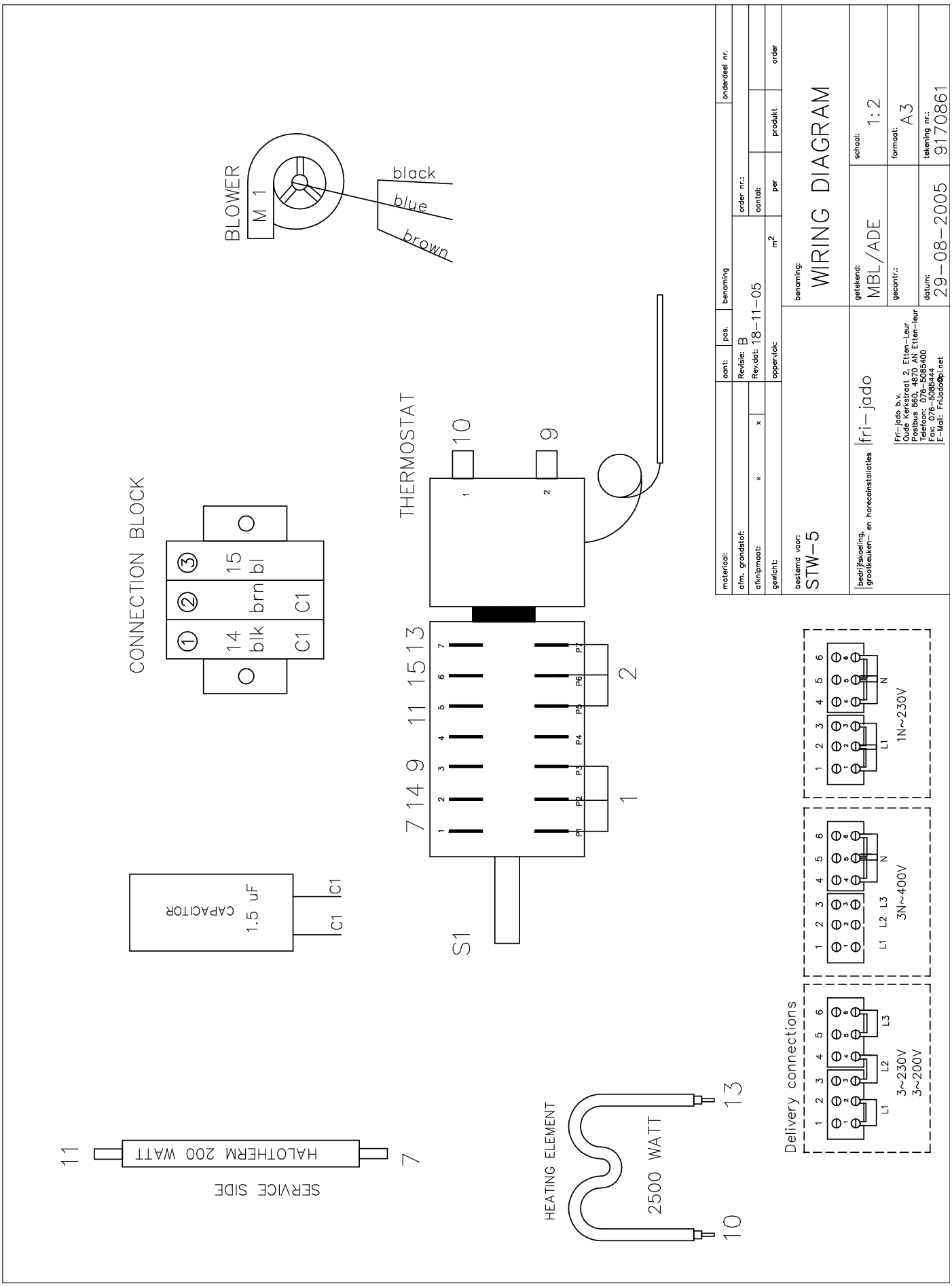

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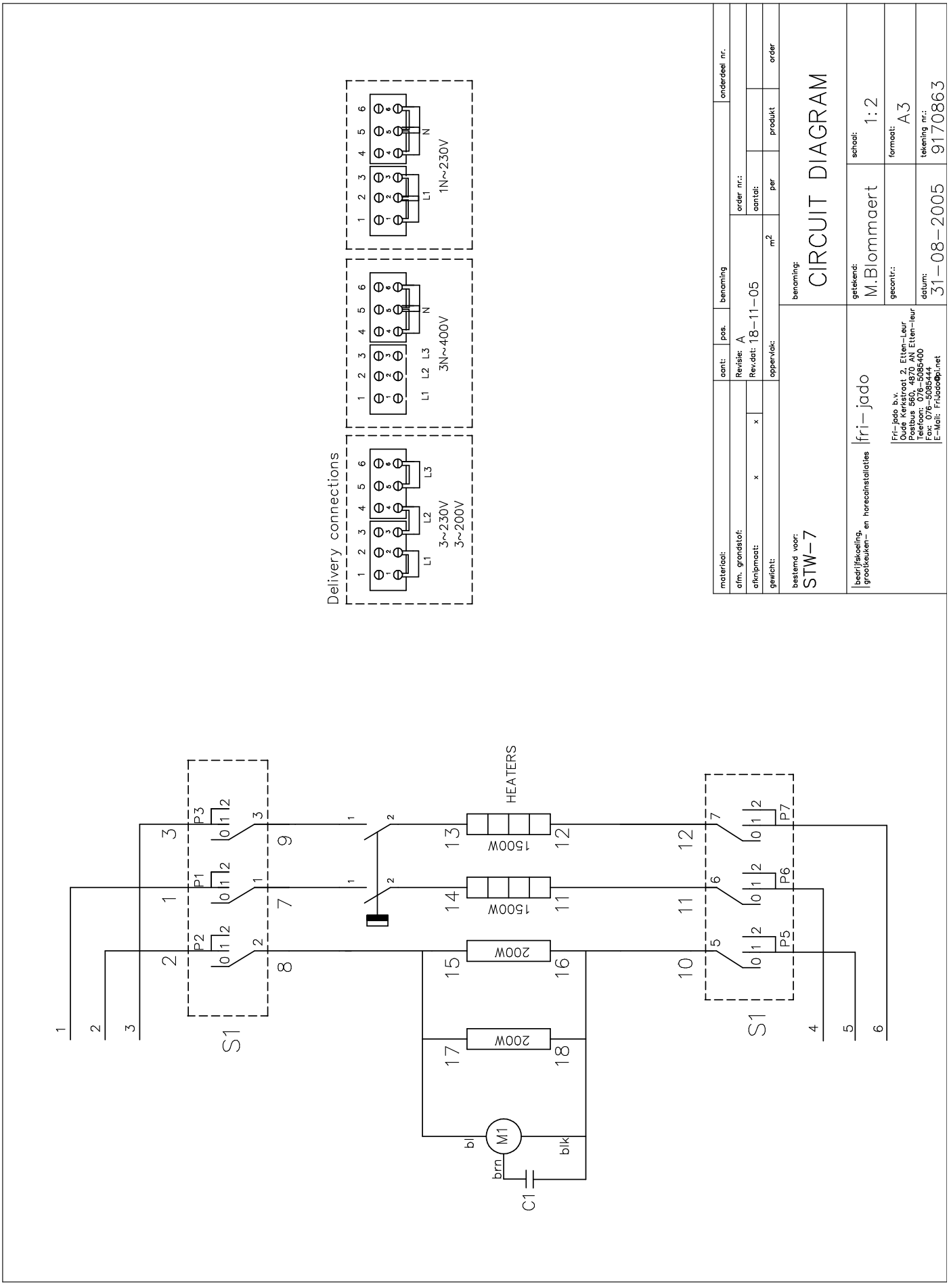
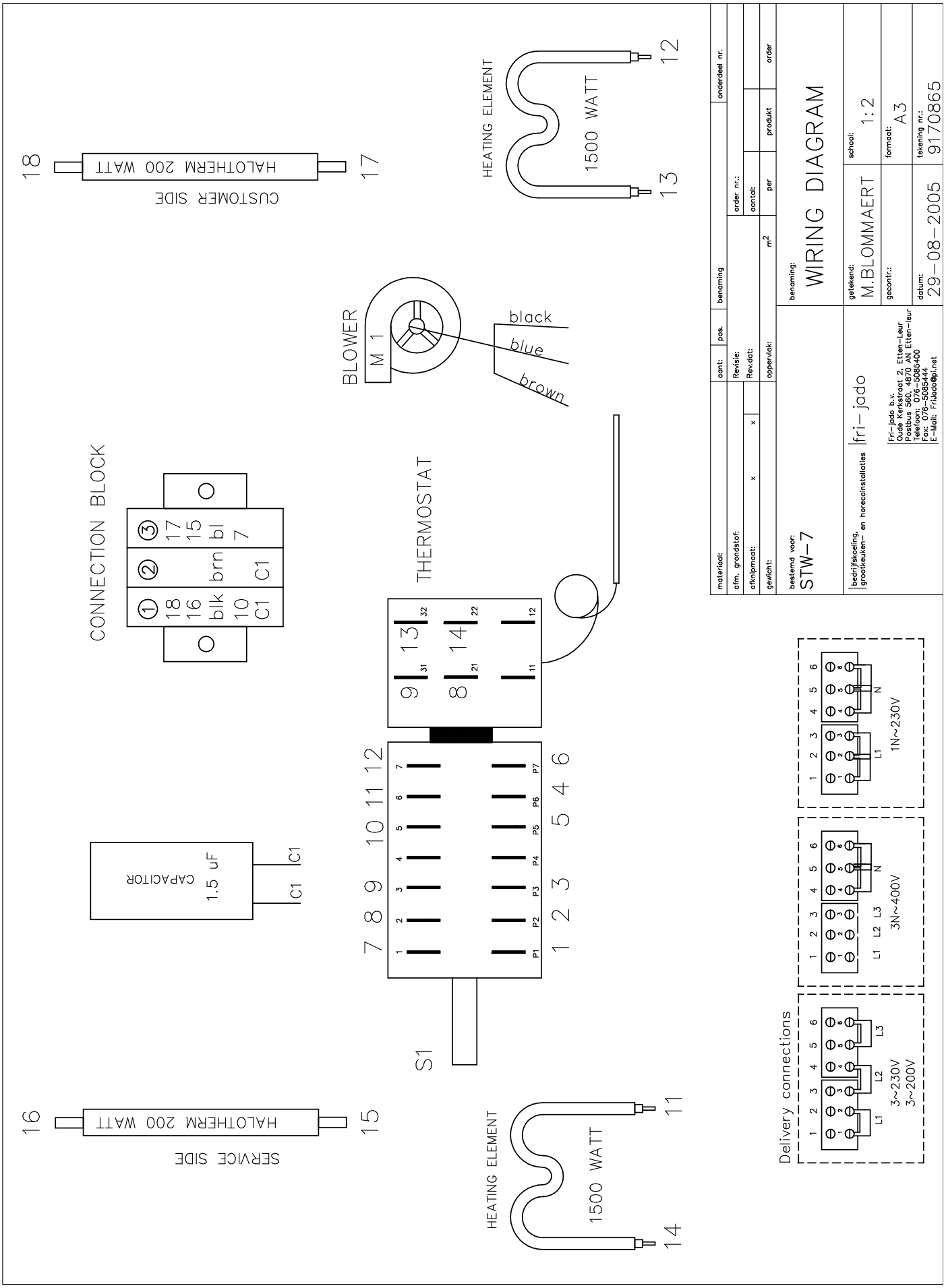


STW 7 I - WIRING DIAGRAM



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