

SERVICE MANUAL

TDR - ROTISSERIE OVEN MODELS TDW - WARMER MODELS

MODELS

TDR 5 M
TDR 7 M
TDW 5 M
TDW 7 M



Model TDR 5 M



Model TDR 7 M

- 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 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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USA

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Versions		
Version	Issue date dd/mm/yy	Remarks
03/2012	01/03/2012	First release.
07/2012	01/07/2012	Both doors with handles. Universal electric connections.
12/2012	01/12/2012	TDW 5 and 7 added. Small adjustments.
05/2013	01/05/2013	TDR 5 and TDW 5 deeper version added as standard. Small adjustments.
02/2014	01/02/2014	Small textual changes. Exploded views modified.
11/2014	01/11/2014	New bracket sensors and various updates.

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
GENERAL TECHNICAL DATA

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

- TDR 5 – Oven with 5 spits (15 to 20 chickens) or 5 baskets (15 chickens).
- TDR 7 - Oven with 8 spits (32 to 40 chickens) or 7 baskets (28 chickens).
- TDW 5 - Warming cabinet for 25 to 30 chickens.
- TDW 7 - Warming cabinet for 35 to 40 chickens.

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

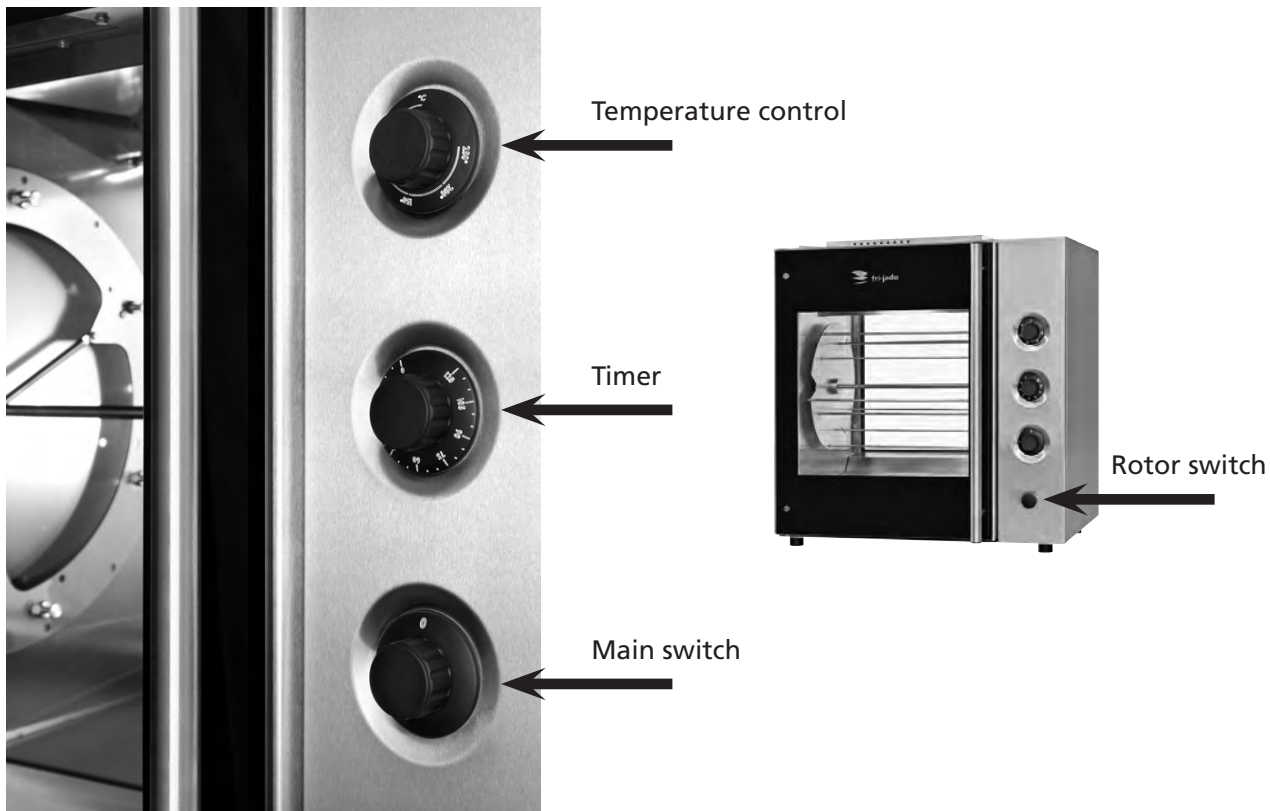
TECHNICAL DATA

Type	TDR 5	TDW 5	TDR 7	TDW 7
Power (W)	6600	2800	10500	3500
Fuses needed with power connection 208 V, 3 ~ 60 Hz (3 phases without zero)	3x 20 A	–	3x 40 A	3x 20A
Fuses needed with power connection 208 V, 1N ~ 60 Hz (1 phase with zero)	–	1x 15A	–	–
Standard plug from factory	NEMA 15-30P 	NEMA 6-15P 	NEMA 15-50P 	NEMA 15-20P 
Stacked cabinets: each cabinet comes with separate power cord!!				
Net weight (lbs)	287	220	408	331
Gross weight (lbs)	335	265	476	388
Height (inch)	35 3/4"	35 3/4"	41 3/4"	41 3/4"
Width (inch)	33"	33"	39 1/4"	39 1/4"
Depth (inch)	30 3/8"	30 3/8"	35"	35"

- 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 TDR 5 - 7 AND TDW 5 - 7

OPERATING PANEL



SETTING THE TDR



1. Set the thermostat to the desired temperature.



2. Set the timer to the desired time.



3. Set the main switch on 1.

LOADING WITH PRODUCTS

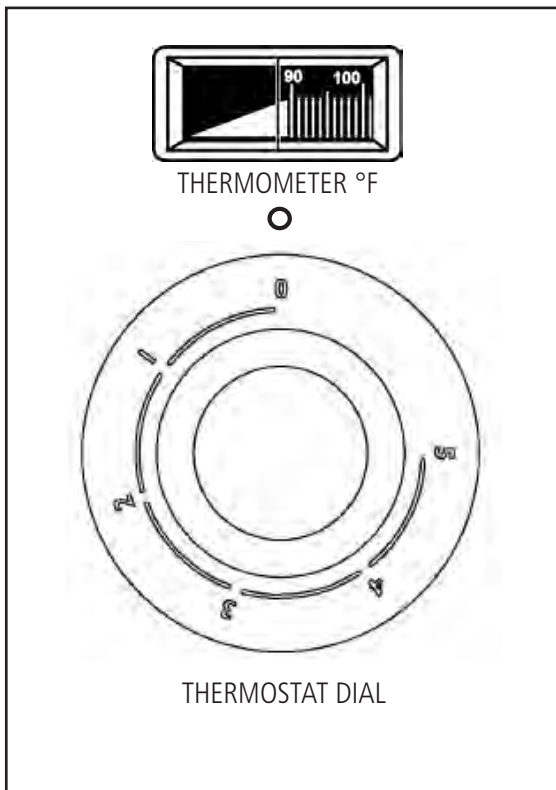


1. Set the main switch on 1.



2. Press the rotor switch. Now the rotor will turn as long as you press the rotor switch. Load the products inside and press the rotor switch again to turn the rotor.

SETTING THE TDW



- 0 = Off
- 1 = 25°C / 77°F
- 2 = 40°C / 104°F
- 3 = 60°C / 140°F
- 4 = 80°C / 176°F
- 5 = 95°C / 203°F

Turn thermostat dial to desired temperature.

REMOVAL AND REPLACEMENT OF PARTS FOR THE TDR 5 - 8

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 crosshead 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 right side and remove to the left).
4. Reverse the procedure to install.

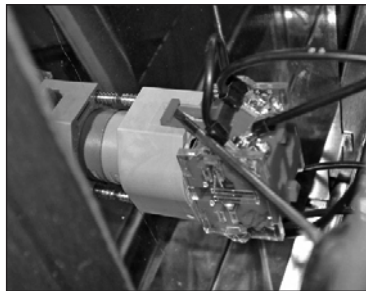
KNOB



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.

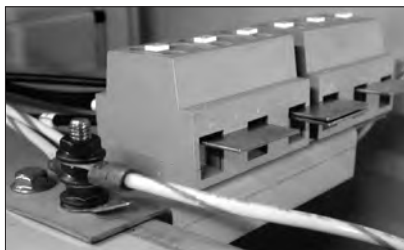
Note: check that the knob is in the right position and runs free from the panel. Especially for the timer knob, to avoid blocking of the clock!

OPERATING PANEL



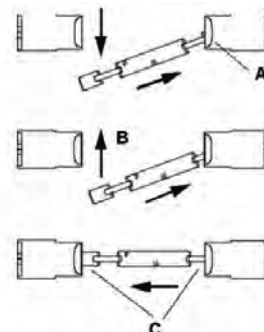
1. Remove the right side panel according prior procedure.
2. Remove the knobs according prior procedure.
3. Remove the screws that secure the panel.
4. Remove the bolt, nut and ring on the top side on the backside of the operating panel.
5. Pull the panel away from the top side.
6. Remove the backside of the rotor switch by lifting the fastening clip with a small screwdriver.
7. Remove the panel.
8. Reverse the procedure to install.

ELECTRIC PANEL

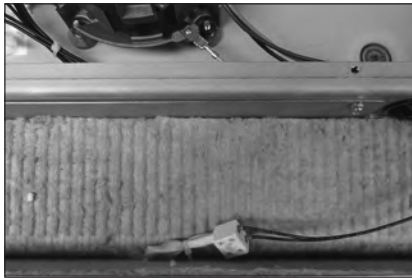
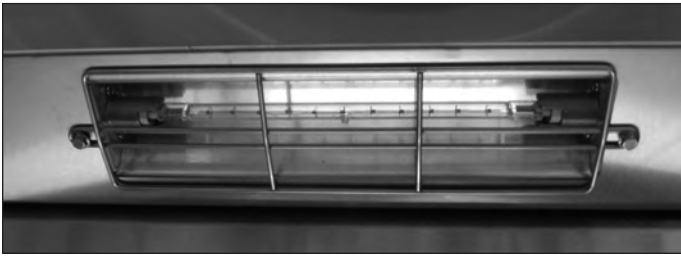


1. Remove the operating panel according prior procedure.
2. Remove on the front side the screws that secure the panel.
3. Remove on the inside bottom of the electric panel the bolt and nuts.
4. Disconnect the wiring.
5. Slide the electrical panel backwards.
6. Reverse the procedure to install.

REPLACING A LAMP



INFRA-RED HALOGEN LAMP HOLDER



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 bolts that secure the protection guard of the Halogen lamp and remove the guard.
2. Push the lamp to either side and pull it down to remove the lamp.
3. Remove the top cover according prior procedure.
4. Disconnect the wiring on the terminal block.
5. Remove the insulation above the light fixture.
6. Remove the bolts and nuts that secure the light fixture and remove the light fixture.
7. Remove the screws that secure the lamp holder and remove the holder.
8. Reverse the procedure to install.

Note 1: Be sure that the "drop" on the lamp is pointing downwards.

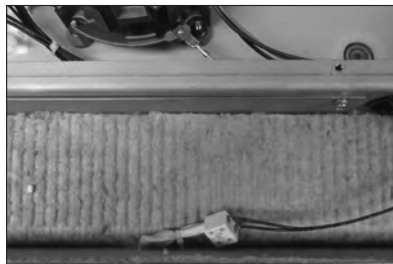
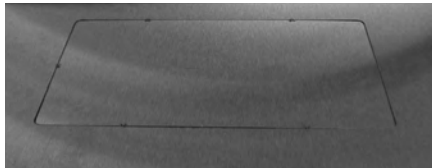
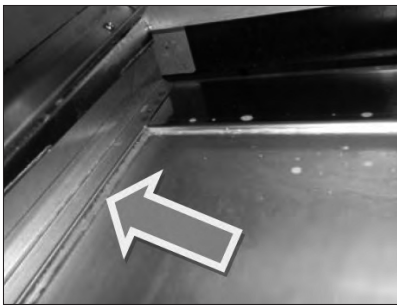
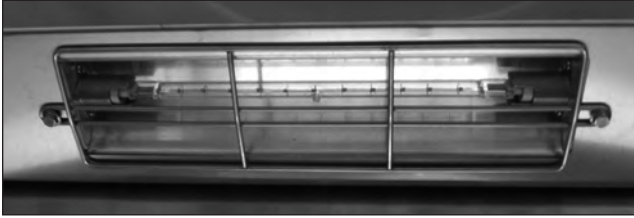
Note 2: Check the lamp reflecting shield and replace this if corroded.

MAIN SWITCH OR TIMER



1. Remove the right side panel and operating panel according prior procedures.
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.

INFRA-RED HALOGEN LAMP HOLDER BOTTOM ROTISSERIE (STACKED TDR)



Warning: When replacing the lamp holder for the TDR 5, the top rotisserie has to be removed.

Caution: Do not touch the glass with your hands. The moisture from your hands could affect the life 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.

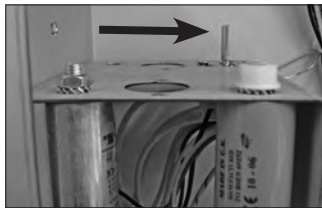
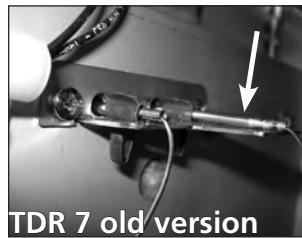
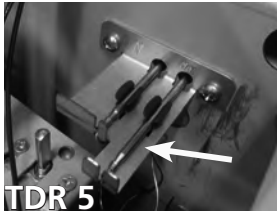
1. Remove the bolts that secure the protection guard of the Halogen lamp and remove the guard.
2. Push the lamp to either side and pull it down to remove the lamp.
3. Remove the fat drawer and the drip trays from the upper oven.
4. Remove the bolts that secure the intermediate plate and remove this plate.
5. Cut the sealant around the bottom plate and remove this plate (see arrow).
6. Knock out the access plate to the light fixture and remove this plate.
7. Disconnect the wiring on the terminal block.
8. Remove the insulation above the light fixture.
9. Remove the screws that secure the lamp holder and remove the holder from the inside.
10. Reverse the procedure to install.

Note 1: Be sure that the "drop" on the lamp is on the bottom side.

Note 2: Clean all surfaces that have to be sealed. Seal off the bottom plate with a grease resistant sealant.

Note 3: Check the lamp reflecting shield and replace this if corroded.

HIGH LIMIT THERMOSTAT



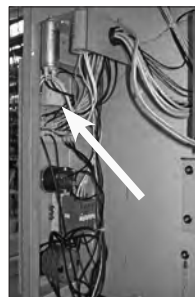
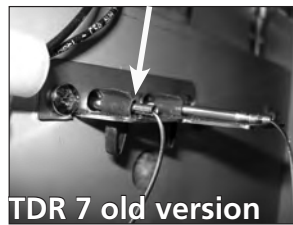
1. Remove the right side panel according prior procedure.
2. Remove the fan plate on the ceiling on the inside of the oven (this is only to check if the probe is on the right place).
3. Remove the thermostat probe from the clip and remove the probe.
4. Remove the screws on the electric panel that secure the thermostat.
6. Remove the thermostat and disconnect the wiring.
7. Reverse the procedure to install.

Note 1: The probe sticks out of the side wall till the end of the bracket.

Note 2: Set the new high limit thermostat to its maximum position.

Note 3: The versions until serial number 100067092 have different brackets. The latest bracket is the preferred one.

THERMOSTAT

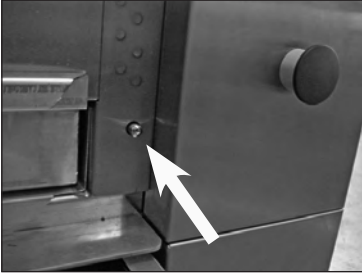


1. Remove the right side panel, operating panel and fan plate on the inside of the oven according prior procedures.
2. Remove the thermostat probe from the clip and remove the probe.
3. Loosen the 2 screws on the electric panel that secure the thermostat.
4. Remove the thermostat and remove the wiring.
5. Reverse the procedure to install.

Note 1: The probe sticks out of the side wall till the end of the bracket.

Note 2: The versions until serial number 100067092 have different brackets. The latest bracket is the preferred one.

DOOR SWITCH



1. Remove the right side panel according prior procedure.
2. Remove the 2 screws that secure the switch and remove the switch.
3. Disconnect the wiring of the switch.
4. Reverse the procedure to install.

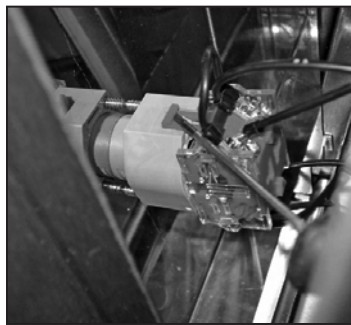
Note: The contact pin of the switch must run free through the chassis.

CONTACTOR

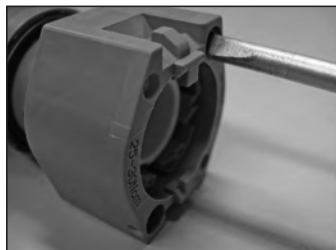


1. Remove the right side panel according prior procedure.
2. Disconnect the lead wires to the contactor.
3. Push the locking tab down with a screw driver and lift out to remove it from the mounting bracket.
4. Reverse the procedure to install.

ROTOR SWITCH

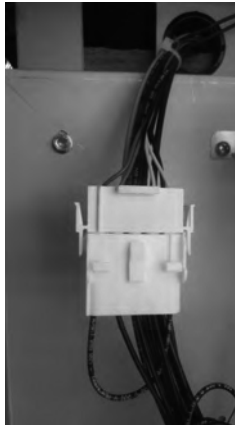
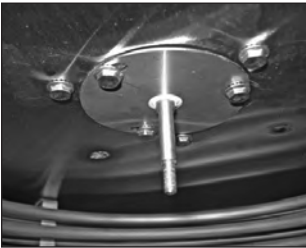
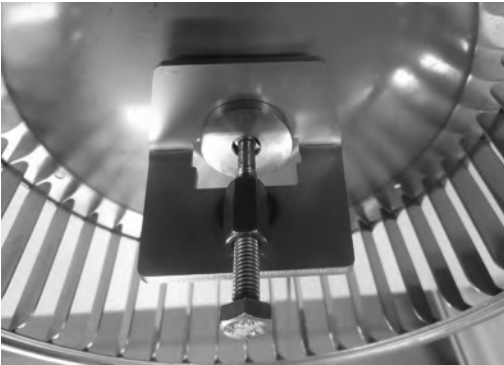


1. Remove the right side panel according to prior procedure.
2. Lift the locking tab with a screwdriver and remove the back part of the switch.
3. Loosen the 2 screws that secure the front part and remove this part by twisting it.
4. Disconnect the wiring.
5. Reverse the procedure to install.



Note: Make sure the back part is clicked-on on both sides.

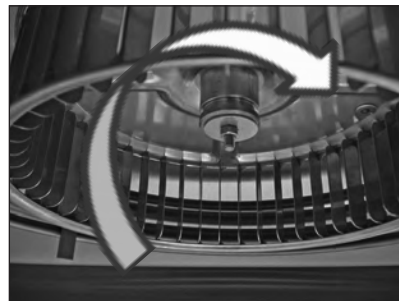
BLOWER MOTOR



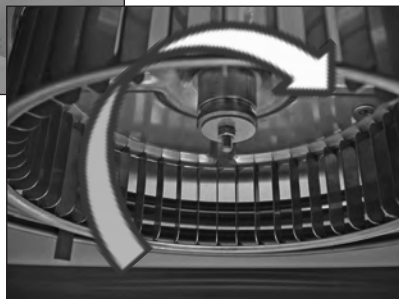
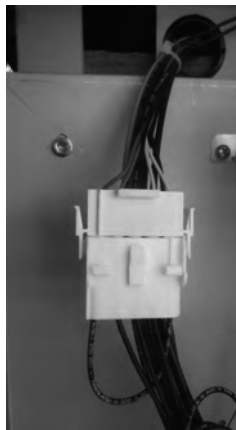
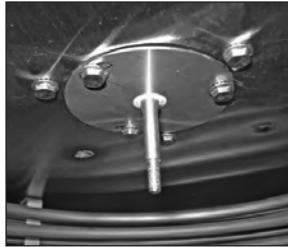
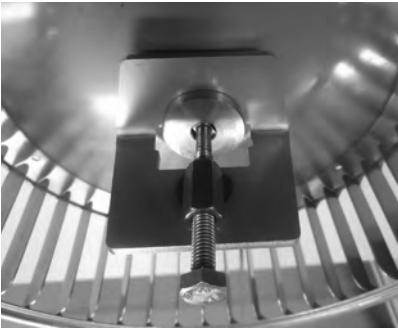
1. Remove the right side panel and the top cover according to prior procedures.
2. Remove the rotor discs and the fan plate on the ceiling inside the oven.
3. Remove the nut and washer on the fan blade and remove the fan blade with the help of the puller.
4. Remove the 3 screws that secure the shaft seal plate. Now replace the shaft seal and shaft seal plate.
5. Disconnect the connector of the motor wiring and also the ground wire.
6. Remove the nuts that secure the motor and remove the motor.
7. Remove the wiring of the capacitor and change the capacitor.
8. Reverse the procedure to install.

Note 1: The puller is delivered with each new blower.

Note 2: The blower is equipped with a capacitor of 6 uF. Check the direction of rotation of the motor (clockwise, see arrow).



BLOWER MOTOR BOTTOM ROTISSERIE (STACKED TDR)



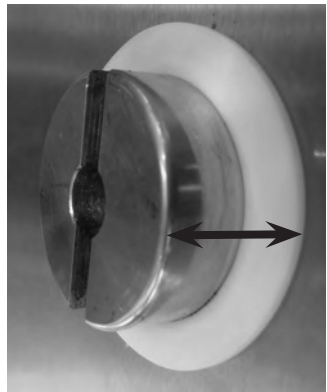
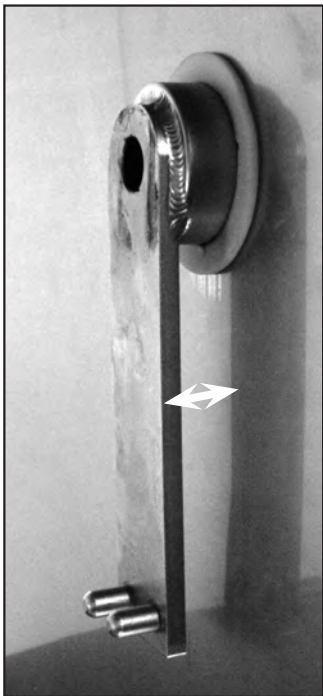
1. Remove the right side panel according prior procedures.
2. Remove the rotor discs and the fan plate on the ceiling inside the bottom oven.
3. Remove the nut and washer on the fan blade and remove the fan blade with the help of the puller.
4. Remove the 3 screws that secure the shaft seal plate. Now replace the shaft seal and shaft seal plate.
5. Remove the fat drawer and the drip trays from the upper oven.
6. Remove the bolts that secure the intermediate plate and remove this plate.
7. Cut the sealant around the bottom plate and remove this plate (see arrow).
8. Disconnect the connector of the motor wiring and also the ground wire.
9. Remove the nuts that secure the motor and remove the motor.
10. Remove the wiring of the capacitor and change the capacitor.
11. Reverse the procedure to install.

Note 1: The puller is delivered with each new blower.

Note 2: The blower is equipped with a capacitor of 6 uF. Check the direction of rotation of the motor (clockwise, see arrow).

Note 3: Clean all surfaces that have to be sealed. Seal the bottom plate with a grease resistant sealant.

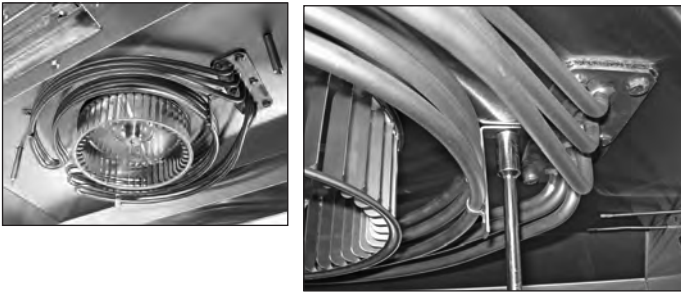
DRIVE MOTOR



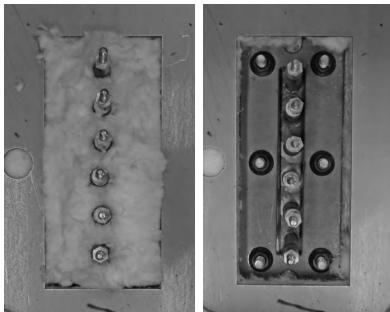
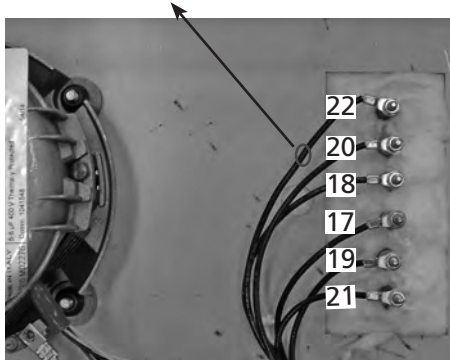
1. Remove the right side panel and rotor discs according prior procedure.
2. Disconnect the wiring of the motor. Check where the wire, marked A is connected.
3. Remove the screws that secure the fan cover and remove the cover.
4. Note down how far the drive arm or drive block sticks out from the inner 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. (TDR 7 only) 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.

HEATING ELEMENT

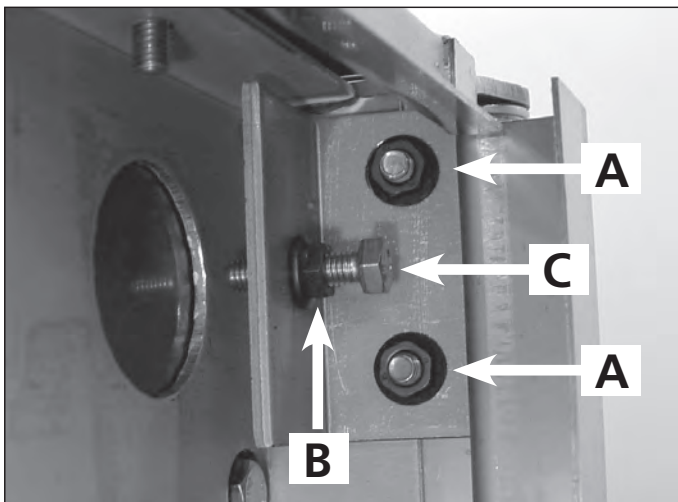


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1. Remove the right side panel, the top cover and the fan plate according prior procedures.
2. Remove the nut(s) on the inside top that fastens the element to the top side.
3. Disconnect the wiring from the element.
4. Cut the insulation on the top side around the fastening plate of the elements and remove the insulation.
5. Remove the nuts that secure the element and remove the element and the gasket. Gasket has to be replaced.
6. Reverse the procedure to install.

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 INSIDE



1. Separate the inside door from the outside door.
2. Lift the inside door upward out of the hinges.
3. Place the new door in the hinges.
4. Close the inside door on the outside door.

Note: Tightening of nuts max. 8 Nm. or 5.9 lbf.ft

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. 8 Nm. or 5.9 lbf.ft

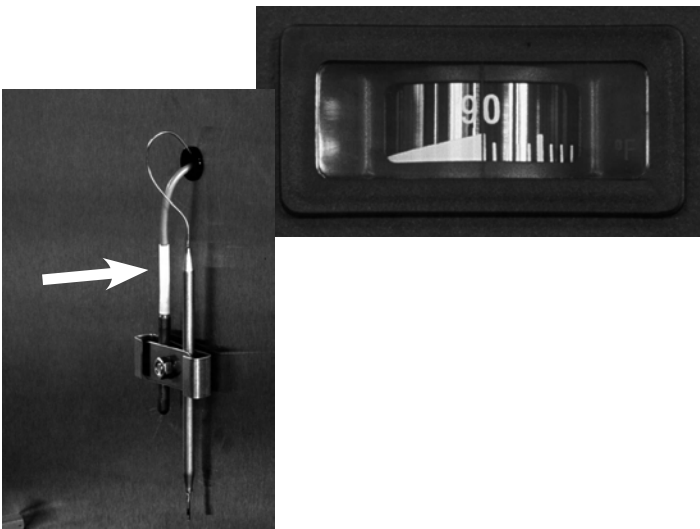
REMOVAL AND REPLACEMENT OF PARTS FOR THE TDW 5 AND TDW 7

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

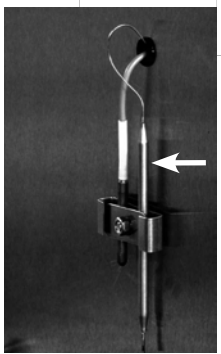
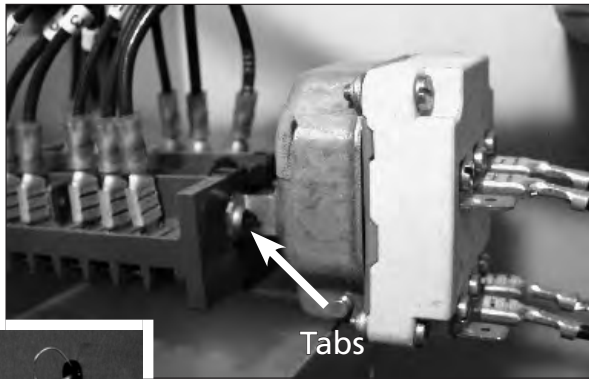

1. Remove the right side panel according prior procedure.
2. Remove the racks and bottom plate.
3. Remove the cap nuts that secure the fan plate and remove fan plate.
4. Remove the wing nut on the fan blade and remove fan blade. Left handed threads.
5. Disconnect wiring of the motor.
6. Remove the screws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


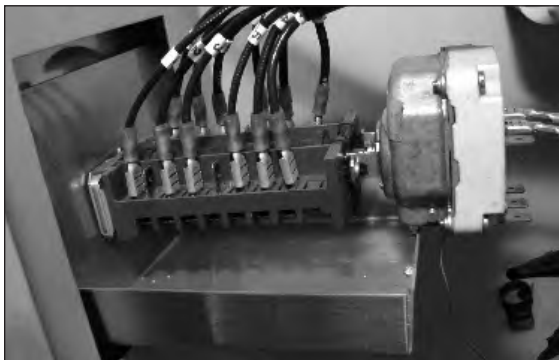
1. Remove the right side panel and the fan plate according prior procedures.
2. Remove the thermometer probe from the clamp inside the cavity (see arrow) and guide it outside through the opening.
3. Remove the thermometer by pushing the clamps "in" on both sides.
4. Reverse the procedure to install.

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 (see arrow) and pull the thermostat away.
5. Reverse the procedure to install.

MAIN SWITCH

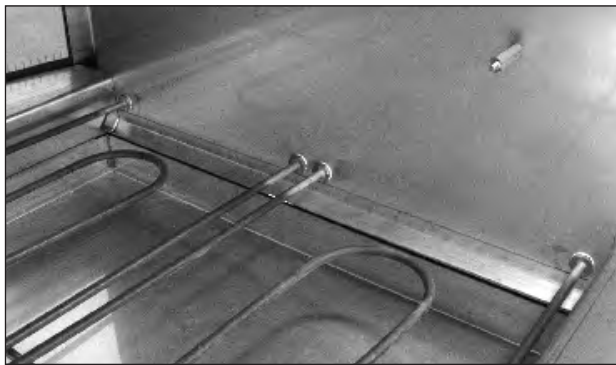


1. Remove the right side panel according prior procedure.
2. Remove the knob according prior procedure.
3. [TDW7 only] Remove the 2 bolts on the backside of the operation panel.
4. Remove the screw that secures the operation panel and remove this panel.
5. Remove the screws that secure the main switch 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.

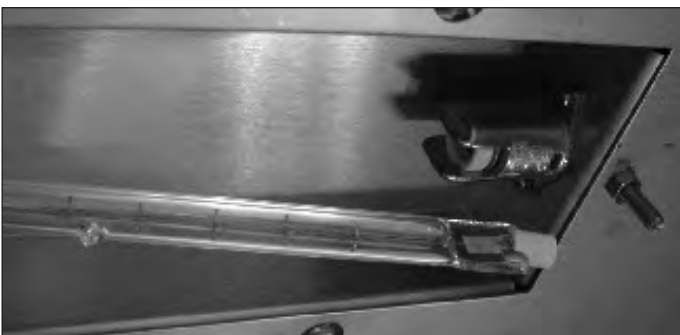


HALOTHERM LAMP



1. Remove the bolts of the protection guard.
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 protection guard.

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.

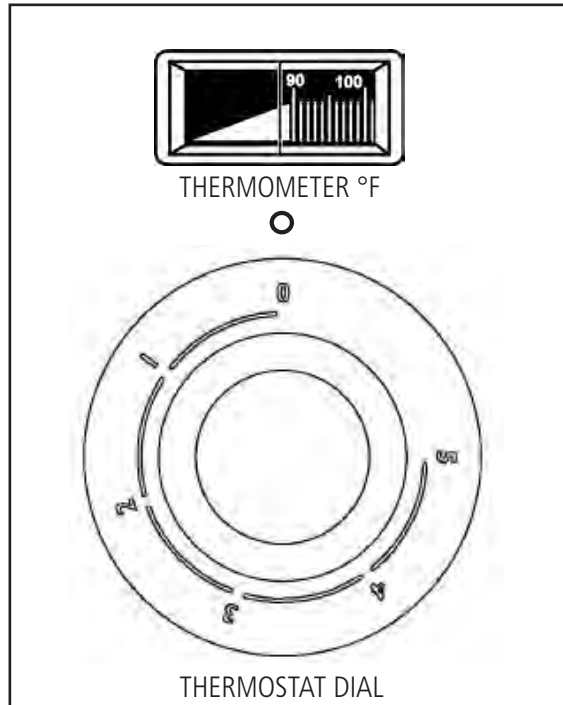
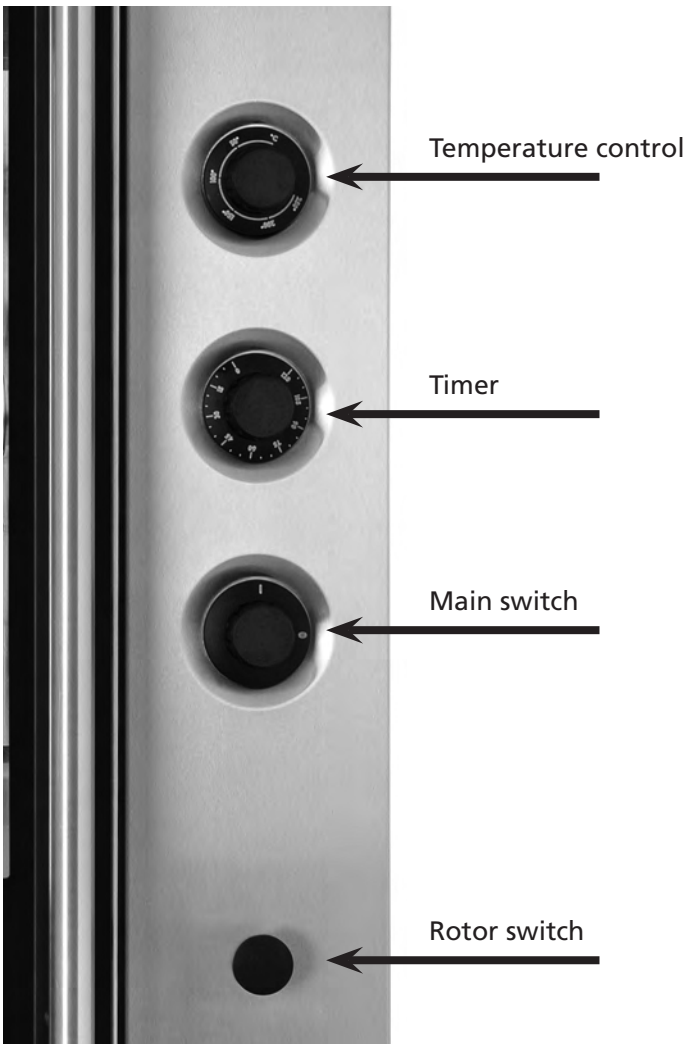
Type	Wattage/Voltage	Resistance Ω -0% + 10%	Current A
TDR 5	3x 1800 / 230 3x 1800 / 208	3x 29.3 3x 24.0	3x 7.8 3x 8.6
TDR 8	2x 3000 / 230 1x 3300 / 230 2x 3000 / 208 1x 3300 / 208	2x 17.6 16.0 2x 14.4 13.1	2x 13.0 14.3 2x 14.4 15.8
TDW 5	2500 / 230	21.0	9.8
TDW 8	1500 / 230	35.0	5.9

CONTACTOR, DRIVE MOTOR AND BLOWER TEST

Note: When testing the resistance remove the wiring.

Type	Description	Voltage	Resistance Ω
TDR 5 + 8	Contacteur	208	Resistance of coil (A1 - A2) ~ 525
TDR 5 + 8	Drive motor	208	Between white A and white wire ~ 235 Between white A and brown wire ~ 117 Between white and brown wire ~ 117
TDR 5 + 8	Blower rotisserie	208	Between black and red wire ~ 65 Between black and blue wire ~ 35 Between red and blue wire ~ 30
TDW 5 + 8	Blower warmer	208	Between blue and brown wire ~ 310 Between blue and black wire ~ 320 Between brown and black wire ~ 630

CONTROL LOCATION



Turn thermostat dial to desired temperature.

- 0 = Off
- 1 = 25°C / 77°F
- 2 = 40°C / 104°F
- 3 = 60°C / 140°F
- 4 = 80°C / 176°F
- 5 = 95°C / 203°F

GENERAL TROUBLESHOOTING LIST

TROUBLESHOOTING FOR THE TDR 5 AND 7 ROTISSERIES

Symptom	Possible causes
No power to oven controls.	<ol style="list-style-type: none"> 1. Main breaker open. 2. Fuse burned (F1 or F2). 3. Main switch malfunction. 4. Wiring loose.
Main fuse or breaker blows.	<ol style="list-style-type: none"> 1. Wiring incorrectly. 2. Heating element, drive motor, blower or contactor shorted. 3. Wiring shorted.
Drive motor does not run.	<ol style="list-style-type: none"> 1. Main fuse inoperative. 2. Capacitor malfunction. 3. Motor malfunction. 4. Main switch malfunction. 5. Rotor switch malfunction. 6. Door switch malfunction. 7. Timer malfunction. 8. Wiring loose.
Drive motor stops and runs again after a certain period.	<ol style="list-style-type: none"> 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.	<ol style="list-style-type: none"> 1. Capacitor malfunction. 2. Motor inoperative. 3. Wiring loose.
Blower motor stops and runs again after a certain period.	<ol style="list-style-type: none"> 1. Thermal protection activated (140°C / 285°F). This shuts off after the temperature is below 140°C / 285°F.
Oven temperature differs from temperature setting.	<ol style="list-style-type: none"> 1. Incorrect line voltage. 2. (Safety) thermostat malfunction. 3. Regular thermostat malfunction. 4. Blower motor inoperative (turning direction?) 5. Thermostat probe(s) not in the right place. 6. Blower motor inoperative (turning direction?) 7. Dirty fan guard or fan blade.
All heating elements out, both halogen lamps and blower operate while oven cavity is below set temperature.	<ol style="list-style-type: none"> 1. (Safety) thermostat malfunction. 2. Regular thermostat malfunction. 3. Thermostat probe(s) not in the right place. 4. Contactor inoperative. 5. Blower plate not in place. 6. Wiring loose.
Oven temperature does not reach desired temperature.	<ol style="list-style-type: none"> 1. (Safety) thermostat malfunction. 2. Regular thermostat malfunction. 3. Thermostat probe(s) not in the right place. 4. Contactor inoperative. 5. Heater(s) inoperative. 6. Incorrect line voltage.
Infrared Halogen lamp(s) do not work.	<ol style="list-style-type: none"> 1. Contactor inoperative. 2. Lamp(s) broken. 3. Lamp holder broken. 4. Wiring loose.

TROUBLESHOOTING FOR THE TDW 5 AND 7 WARMERS

Symptom	Possible causes
No power to warmer controls.	<ol style="list-style-type: none"> 1. Main breaker open. 2. Switch malfunction. 3. Wiring loose.
Main fuse or breaker blows.	<ol style="list-style-type: none"> 1. Wiring incorrectly. 2. Heating element or blower shorted. 3. Wiring shorted.
Blower motor does not run.	<ol style="list-style-type: none"> 1. Capacitor malfunction. 2. Wiring loose. 3. Motor inoperative.
Lamps do not operate.	<ol style="list-style-type: none"> 1. Lamp malfunction. 2. Switch malfunction. 3. Wiring loose.
Oven temperature does not reach desired temperature.	<ol style="list-style-type: none"> 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.	<ol style="list-style-type: none"> 1. No water in tray.

ANALYTIC TROUBLESHOOTING LIST

SERVICING AND REPAIRING THE TDR 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 7 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 PTFE ring between steel and glass.	Give instruction to operator. Tighten all fastenings. Mount new glass with PTFE rings between glass and steel.
Outside door	Broken glass. Door adjustment.	Slamming of door. Fastening bolts and nuts are loose. No PTFE 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 PTFE rings between glass and steel. Adjust door on hinge and tighten the hinge plate.
Heating element	Rotisserie doesn't reach adjusted temperature. Duration of grilling time is too long.	Wiring. Element malfunction. Wiring. Element malfunction.	Check the wiring. Check the power on the element. Check the current with AC current tester. See table on page 23. Check the wiring. Check the current with AC current tester. See table on page 23.
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.

Description of part	Symptoms	Possible causes	Solving: checking/action
Main switch	<p>No power to all, or some oven controls.</p> <p>Switch comes in, but one or more functions from the switch don't work.</p>	<p>Wiring.</p> <p>Malfunction of the cams on the switch.</p> <p>Contacts burned.</p>	<p>Check the wiring on the switch.</p> <p>Check the cams.</p> <p>Check the wiring.</p> <p>Check the power on all contacts.</p> <p>Check the contacts of the switch.</p>
Timer	<p>No functions of the oven are working.</p> <p>Grilling proces is working, but doesn't stop.</p>	<p>Wiring.</p> <p>Malfunction of the timer.</p> <p>Malfunction of the timer.</p>	<p>Check the wiring on the timer.</p> <p>Check the power on the timer.</p> <p>Check function after connecting a new timer.</p> <p>Check if the time is running down on the timer (does it tick)</p> <p>Check if the timer is switching off after reaching the zero position.</p>
Rotor switch	<p>Drive motor doesn't run.</p>	<p>Wiring.</p> <p>Back part of switch not clicked-on.</p> <p>Malfunction of the switch.</p>	<p>Check the wiring.</p> <p>Check the power on the switch.</p> <p>Check if back part is clicked-on on both sides.</p> <p>Check function after connecting a new switch.</p>
Contactor	<p>Contactor doesn't come in.</p> <p>Contactor comes in, but one or more functions don't come in.</p>	<p>Wiring.</p> <p>Coil malfunction.</p> <p>Contact burned.</p>	<p>Check the wiring.</p> <p>Check resistance of the coil. This should be 525Ω. See also table on page 23.</p> <p>Check the wiring.</p> <p>Check the power on al contacts.</p> <p>Check the contacts of the contactor.</p>
Capacitor	<p>Drive motor or blower don't work.</p>	<p>Wiring.</p> <p>Capacitor malfunction.</p>	<p>Check the wiring.</p> <p>Check function after connecting a new capacitor.</p> <p>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.</p>

Description of part	Symptoms	Possible causes	Solving: checking/action
Drive motor	<p>Motor doesn't run.</p> <p>Motor runs after starting it up by hand.</p> <p>Motor stops during process and comes in again after a period of time.</p> <p>Main fuse burned.</p>	<p>Wiring.</p> <p>Coil malfunction.</p> <p>Reduction gearbox.</p> <p>Capacitor malfunction.</p> <p>Coil overheated, thermostat switches off (105°C – 221°F).</p> <p>Short circuit in coil to earth.</p>	<p>Check the wiring.</p> <p>Check the power to the motor.</p> <p>Check resistance of the coils. See also table on page 23.</p> <p>Between whiteA and white wire 234Ω.</p> <p>Between whiteA and brown wire 117Ω.</p> <p>Between white and brown wire 117Ω.</p> <p>Check if reduction gearbox is blocked.</p> <p>Check capacitor (see capacitor) or connect new capacitor.</p> <p>Check position of fan blade. Air is sucked up over the motor.</p> <p>Check cooling circuit of motor.</p> <p>Check if rotisserie is close to another heat source.</p> <p>Measure temperature motor during process.</p> <p>Check insulation value of coil with Megger on 500V. Minimum value is 0.5 MΩ.</p>
<p>Blower</p> <p>Note: Until serial number 100062182 this blower is executed with a 8 uF capacitor due to the minimum RPM. The blower in the rotisserie after 100062182 have adapted coils and 6 uF capacitor. The RPM now are minimum 2500.</p>	<p>Blower doesn't run.</p> <p>Blower runs after starting it up by hand.</p> <p>Blower stops during process and comes in again after a period of time.</p> <p>Temperature indication on display runs up very fast (180°C - 355°F after 5 minutes).</p> <p>Main fuse burned.</p>	<p>Wiring.</p> <p>Coil malfunction.</p> <p>Capacitor malfunction.</p> <p>Coil overheated, thermostat switches off (140°C – 284°F).</p> <p>Blower doesn't turn and heat stays in top of cavity.</p> <p>Short circuit in coil to earth.</p>	<p>Check the wiring.</p> <p>Check the power on the blower.</p> <p>Check resistance of the coils. See also table on page 23.</p> <p>Between black and red wire 65Ω.</p> <p>Between black and blue wire 35Ω.</p> <p>Between red and blue wire 30Ω.</p> <p>Check capacitor (see capacitor) or connect new capacitor.</p> <p>Check cooling circuit of blower.</p> <p>Check if rotisserie is close to another heat source.</p> <p>Measure temperature blower during process.</p> <p>Check the wiring.</p> <p>Check the power on the blower.</p> <p>Check insulation value of coil with a Megger on 500V. Minimum value is 0.5 MΩ.</p>

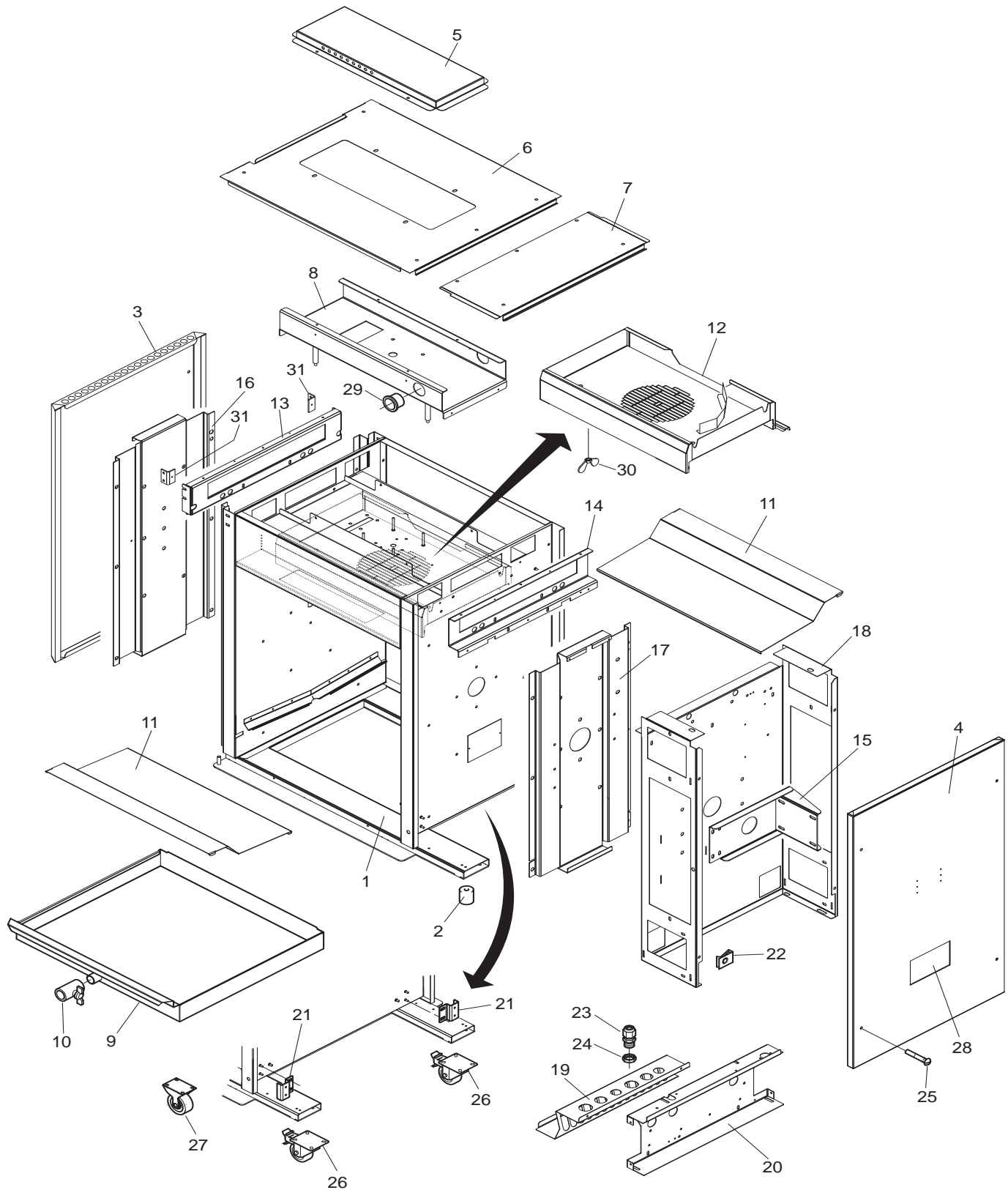
SERVICING AND REPAIRING THE TDW 5 AND 7 WARMERS

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 PTFE 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 PTFE 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 23.
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. Check the cams. Check the contacts on the switch.

Description of part	Symptoms	Possible causes	Solving: checking/action
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.
Blower	Blower doesn't run. Blower runs after starting it up by hand. Blower stops during process and comes in again after a period of time.	Wiring. Coil malfunction. Capacitor malfunction. Coil overheated, thermistor switches off (150°C – 302°F).	Check the wiring. Check the power on the blower. Check resistance of the coils. See also table on page 23. Between blue and brown wire= 310Ω Between blue and black wire= 320Ω Between brown and black wire= 630Ω 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.
	Fuse burned.	Short circuit in coil to earth.	Check insulation value of coil with a Megger on 500V. Minimum value is 0.5 MΩ.

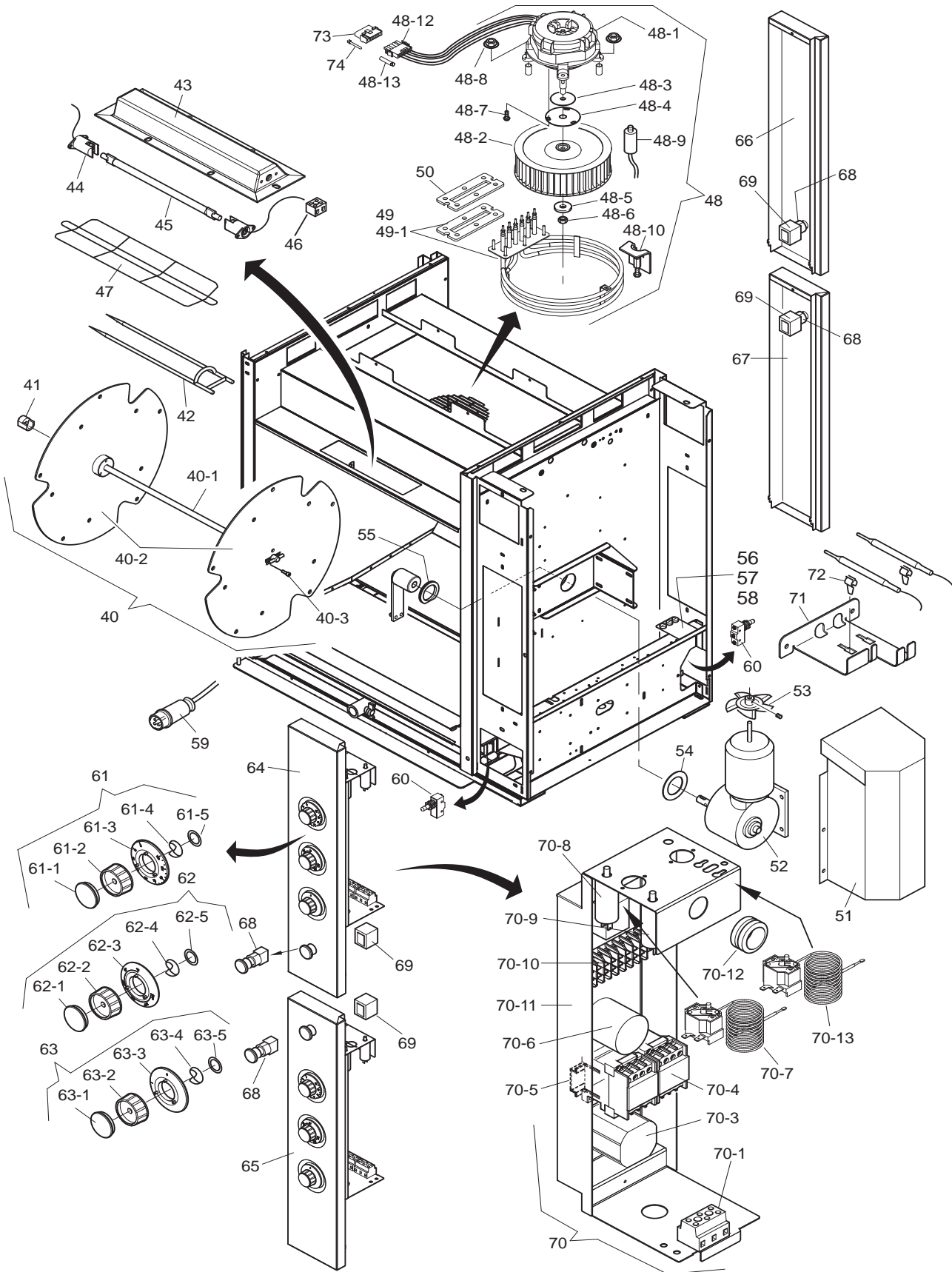
EXPLODED VIEWS & PART LISTS

TDR 5 M - SHEET METAL WORK



Item	Part number	Qty.	Description
1	.....	1	Frame, ass.
2	9171125	4	Leg, rubber 50 mm
3	9294353	1	Side panel, left
3A	9294126	1	Side panel, left (till serial nr. 100061480)
4	9294352	1	Side panel, right
4A	9294125	1	Side panel, right (till serial nr. 100061480)
5	9294160	1	Top cover
6	9294350	1	Top plate
6A	9294127	1	Top plate (till serial nr. 100061480)
7	9294351	1	Cover, removeable
7A	9294128	1	Cover, removeable (till serial nr. 100061480)
8	9290450	1	Mounting plate, blower
9	9290476	1	Drawer
9A	9290456	1	Drawer (till serial nr. 100061480)
10	9171008	1	Drain-tap with handle
11	9294354	2	Bottom plate, stainless steel
11A	9294116	2	Bottom plate, stainless steel (till serial nr. 100061480)
12	9290475S	1	Cover plate, blower. With extra knock out for thermostat sensor
13	9294356	1	Side plate, left
13A	9294110	1	Side plate, left (till serial nr. 100061480)
14	9294357	1	Side plate, right
14A	9294112	1	Side plate, right (till serial nr. 100061480)
15	9170444	1	Support, gear motor
16	9294109	1	Reinforcement, side plate, left
17	9294111	1	Reinforcement, side plate, right
18	9294360	1	Cover plate, machine components
18A	9294119	1	Cover plate, machine components (till serial nr. 100061480)
19	9294370	1	Spark catcher
19A	9294121	1	Spark catcher (till serial nr. 100061480)
20	9294361	1	Mounting plate
20A	9294120	1	Mounting plate (till serial nr. 100061480)
21	9294381	1	Bracket, door switch
21A	9294065	1	Bracket, door switch (till serial nr. 100061480)
22	9172053	8	Nut
23	9261022	1	Strain relief M25
24	9261023	1	Connector M25
25	4288322	8	Screw M5 x 10
26	9172066	2	Swivel castor with brake (only for stacked units)
27	9172065	2	Swivel castor without brake (only for stacked units)
28	9123492	1	Indication plate
29	9171015	2	Grommet, plastic
30	2800082	2	Wing nut M6
31	9174154	2	Adjusting bracket

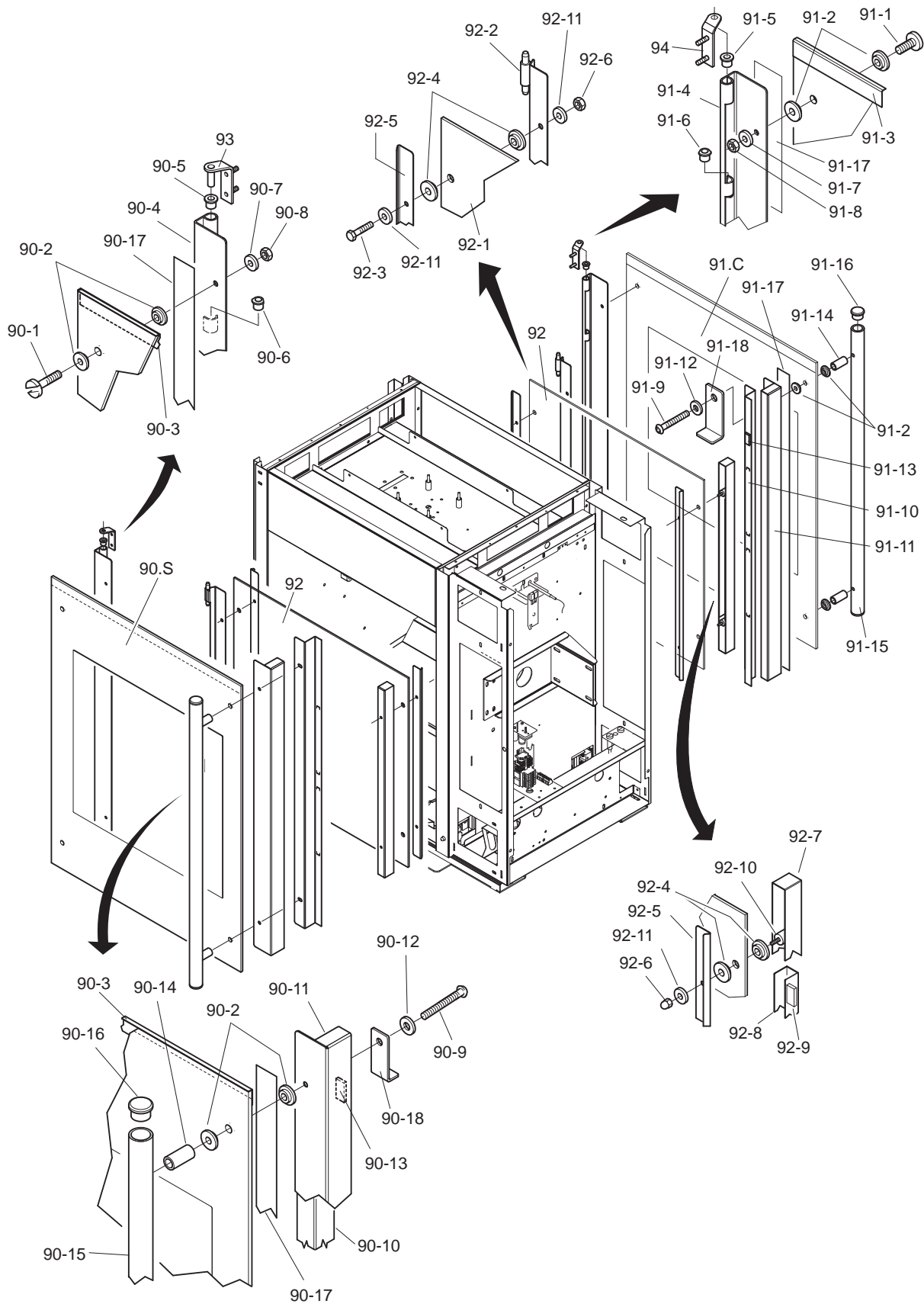
TDR 5 M - COMPONENTS



Item	Part number	Qty.	Description
40	9146951	1	Rotorset ass., stainless steel
40-1	9170571	1	Rotor shaft
40-2	9174369	2	Rotor disc 3 mm
40-3	0142975	6	Socket head screw M6 x 20 SS
41	9172062	1	Steel bearing 14 mm
42	9010549	5	Meatfork, stainless steel
43	9294463S	2	Light fixture + end plate L and R
44	9052826	4	Lamp holder
45	9291001	2	Infrared Halogen lamp 500W
44	9293020S	1	Blower motor with adapter cable
45	3701218	1	Turbine Ø 200 mm x 43
46	2300121	2	Terminal block, ceramic
47	9292061	2	Protection guard, infrared lamp
48	9298550S	1	Blower, ass.
48-1	9293020	1	Blower motor
48-2	3701218	1	Turbine Ø 200 mm x 43
48-3	3702325	1	Sealing, blower shaft, PSS
48-4	9294007	1	Washer plate
48-5	0142103	1	Washer M5
48-6	0142315	1	Nut M5
48-7	4288232	3	Srew M5x12
48-8	4285092	4	Nut M6
48-9	9192034	1	Capacitor 6 uF
48-10	9290487	1	Pully, for removing turbine
48-11	9293021	1	Conversion cable 3 to 5-pole
48-12	3701272	1	Plug, 5-pole M-N-L, universal
48-13	0601458	5	Socket, female M-N-L
49	9292029	1	Heating element 208 V, 5.4 KW
49-1	9194489	1	Gasket, heating element
50	9194501	1	Fastening plate
51	9294419	1	Protection support
52	9293001S	1	Gearmotor, complete with drive head
53	9172078	1	Fanblade Ø 150 mm, gearmotor
54	9110797	1	Sealring, drive head
55	9073131	1	Sealing ring, Teflon
56	...	1	Fuse holder plate
57	9044205	6	Fuse holder
58	9110250	6	Fuse SC10, 10A
59	9172404	1	Connecting cable with plug 15-30P
60	3701233S	2	Door switch
61	9298508	1	Temperature knob, ass.
61-1	9292002	1	Cover, black
61-2	9292001	1	Control knob, black
61-3	9292007	1	Back plate, thermostat
61-4	9172052	1	Locking ring
61-5	9110802	1	Seal ring

Item	Part number	Qty.	Description
62	9298506	1	Timer knob, ass.
62-1	9292002	1	Cover, black
62-2	9292001	1	Control knob, black
62-3	9292003	1	Back plate, timer
62-4	9172052	1	Locking ring
62-5	9110802	1	Seal ring
63	9298507	1	Main switch knob, ass.
63-1	9292002	1	Cover, black
63-2	9292001	1	Control knob, black
63-3	9292006	1	Back plate, main switch
63-4	9172052	1	Locking ring
63-5	9110802	1	Seal ring
64	9294129	1	Operation panel
65	9294131	1	Operation panel (bottom unit of stacked model)
66	9294130	1	Panel, customer side
67	9294132	1	Panel, customer side (bottom unit of stacked model)
68	9291002	2	Knob, rotor switch
69	9291003	2	Contact block, rotor switch
70	9290205	1	Electric panel, ass.
70-1	9044564	1	Connecting block, 1,2,3
70-2	9044572	1	Connecting block, 4,5,6
70-3	9171140	1	Main switch
70-4	3500069	2	Contactactor
70-5	9077088	2	Rail
70-6	9040463	1	Timer switch
70-7	9070531	1	Thermostat
70-8	9192034	1	Capacitor 6uF
70-8A	9291015	1	Capacitor 8 uF (till serial nr. 100062182)
70-8B	3701274	1	Capacitor 5 uF (till serial nr. 100060887)
70-9	9077101	1	Capacitor 2.5 uF
70-9A	9077102	1	Capacitor 3 uF (till serial nr. 100061450)
70-10	8033659	1	Connecting block
70-11	9294006	1	Electric panel
70-12	9070840	2	Grommet
70-13	9040970	1	Safety thermostat
71	9294064	1	Bracket temperature sensors
72	9110072	2	Clip
73	9291014	1	Cap, 5-pole M-N-L
74	0601466	5	Pin, male M-N-L

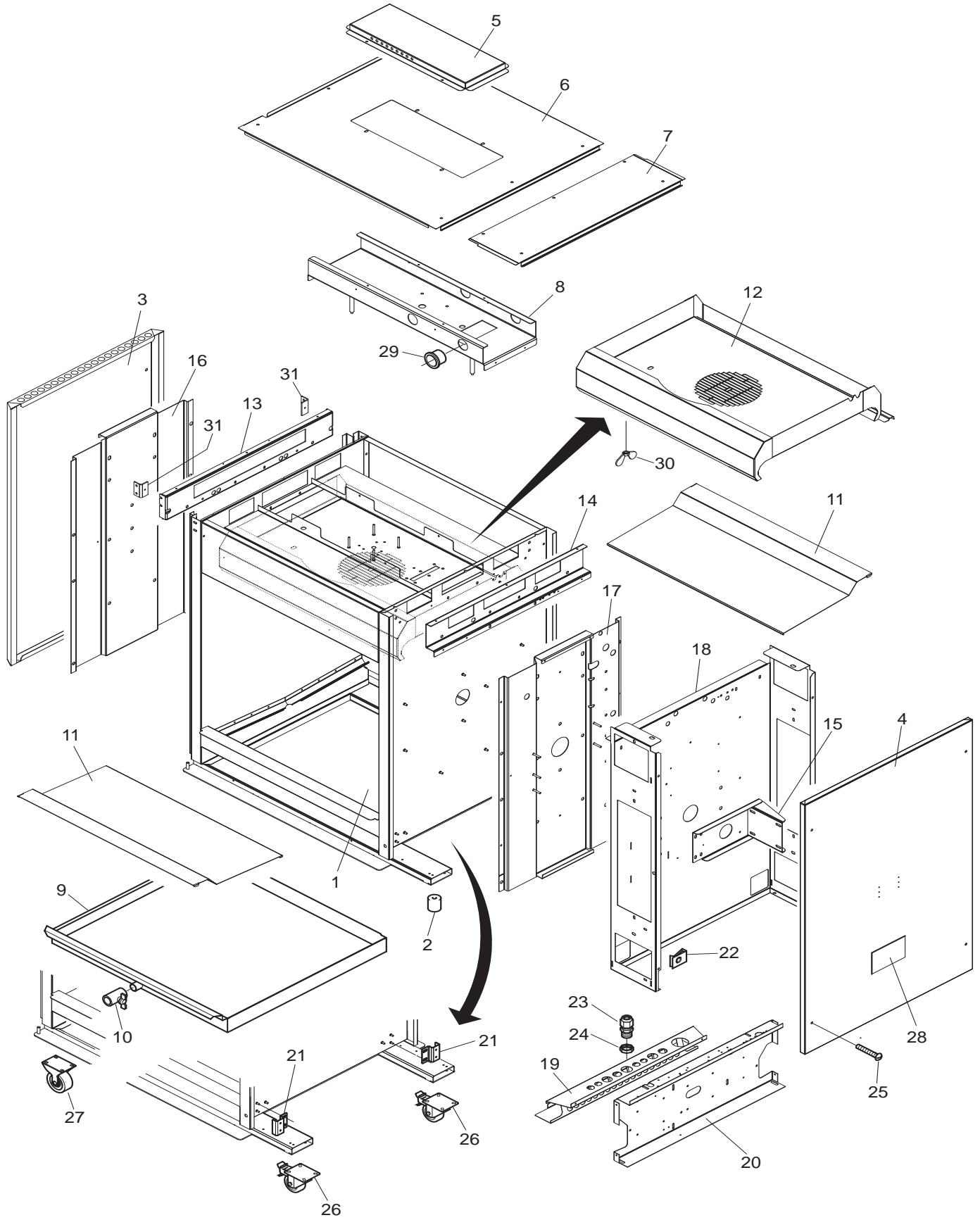
TDR 5 M - DOORS



Item	Part number	Qty.	Description
90.5	92985005	1	Door service side, ass.
90-1	4280558	2	Screw M5 x 16 SS
90-2	3702342	8	Flange bush, PTFE 3 mm
90-3	9294149	1	Protection profile
90-4	9294135	1	Hinge profile
90-5	9172054	2	Brass bearing 8 mm
90-6	9172122	2	Brass bearing 8 mm, adjusted
90-7	4311110	2	Washer M5
90-8	0144359	2	Nut M5, self locking
90-9	4288059	2	Bolt M5 x 50 SS
90-9A	4288320	2	Screw M5 x 50 SS (till serial number 100067732)
90-10	9294137	1	Fastening, door handle
90-11	9294136	1	Magnet holder profile
90-12	9174680	2	Washer
90-13	9070141	10	Magnet block
90-14	9293010	2	Spacing pin
90-15	9293009	1	Door handle
90-16	2103209	2	Plug, door handle
90-17	4302141	2	Tape 20 x 0.8
90-18	9294229	1	Blocking bracket
91.C	92985035	1	Door customer side, ass.
91-1	4280558	2	Screw M5 x 16 SS
91-2	3702342	8	Flange bush, PTFE 3 mm
91-3	9294149	1	Protection profile
91-4	9294135	1	Hinge profile
91-5	9172054	2	Brass bearing 8 mm
91-6	9172122	2	Brass bearing 8 mm, adjusted
91-7	4311110	2	Washer M5
91-8	0144359	2	Nut M5, self locking
91-9	4288059	2	Bolt M5 x 50 SS
91-9A	4288320	2	Screw M5 x 50 SS (till serial number 100068523)
91-10	9294137	1	Fastening, door handle
91-11	9294136	1	Magnet holder profile
91-12	9174680	2	Washer
91-13	9070141	12	Magnet block
91-14	9293010	2	Spacing pin
91-15	9293009	1	Door handle
91-16	2103209	2	Plug, door handle
91-17	4302141	2	Tape 20 x 0.8
91-18	9294229	1	Blocking bracket

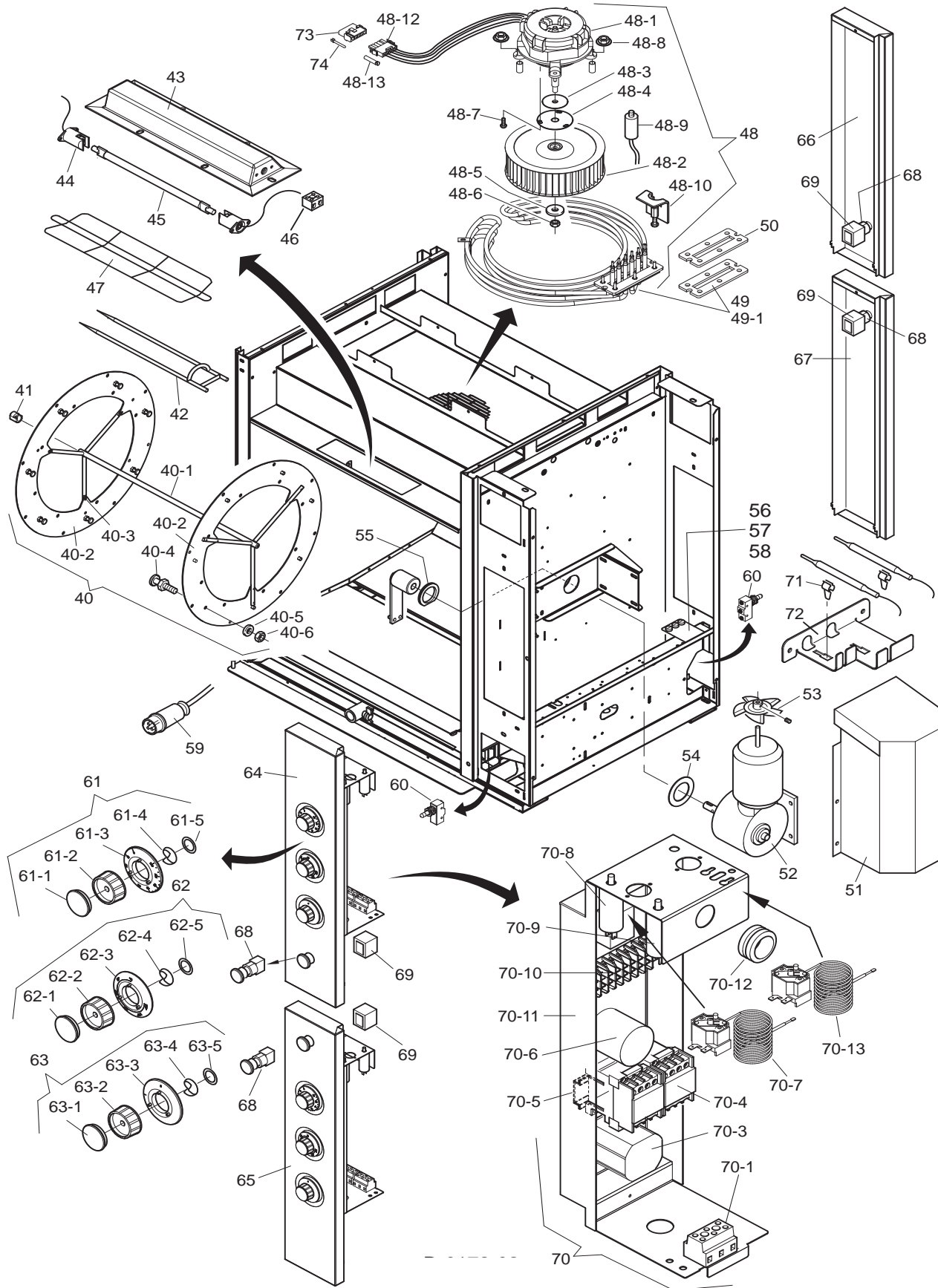
Item	Part number	Qty.	Description
92	92985025	2	Door inside, ass.
92-1	9292011	2	Glass, inside door
92-2	9290457	2	Hinge profile
92-3	9191050	4	Bolt M5 x 18 SS, hexagon head
92-4	3702341	16	Flange bush, PTFE 2 mm
92-5	9294139	4	Cover profile
92-6	0142315	8	Nut M5 SS
92-7	9294140	2	Holder, magnet
92-8	9294141	2	Profile
92-9	9070141	16	Magnet block
92-10	9172291	4	Spacing pin
92-11	9174680	12	Washer
93	9290409	1	Hinge, left
94	9290410	1	Hinge, right

TDR 7 M - SHEET METAL WORK



Item	Part number	Qty.	Description
1	.....	1	Frame, ass.
2	9171125	4	Leg, rubber 50 mm
3	9294031	1	Side panel, left
4	9294018	1	Side panel, right
5	9294009	1	Top cover
6	9294032	1	Top plate
7	9294045	1	Cover, removeable
8	9290401	1	Mounting plate, blower
9	9290405	1	Drawer
10	9171008	1	Drain-tap with handle
11	9294014	2	Bottom plate, stainless steel
12	9290411	1	Cover plate, blower
13	9294011	1	Side plate, left
14	9294030	1	Side plate, right
15	9170444	1	Support, gear motor
16	9294028	1	Reinforcement, side plate, left
17	9294029	1	Reinforcement, side plate, right
18	9294026	1	Cover plate, machine components
19	9294019	1	Spark catcher
20	9294025	1	Mounting plate
21	9294065	2	Bracket, door switch
22	9172053	8	Nut
23	9261022	1	Strain relief M25
24	9261023	1	Connector M25
25	4288322	8	Screw M5 x 10
26	9172066	2	Swivel castor with brake (only for stacked units)
27	9172065	2	Swivel castor without brake (only for stacked units)
28	9110810	1	Indication plate
29	9171015	2	Grommet, plastic
30	2800082	2	Wing nut M6
31	9174154	2	Adjusting bracket

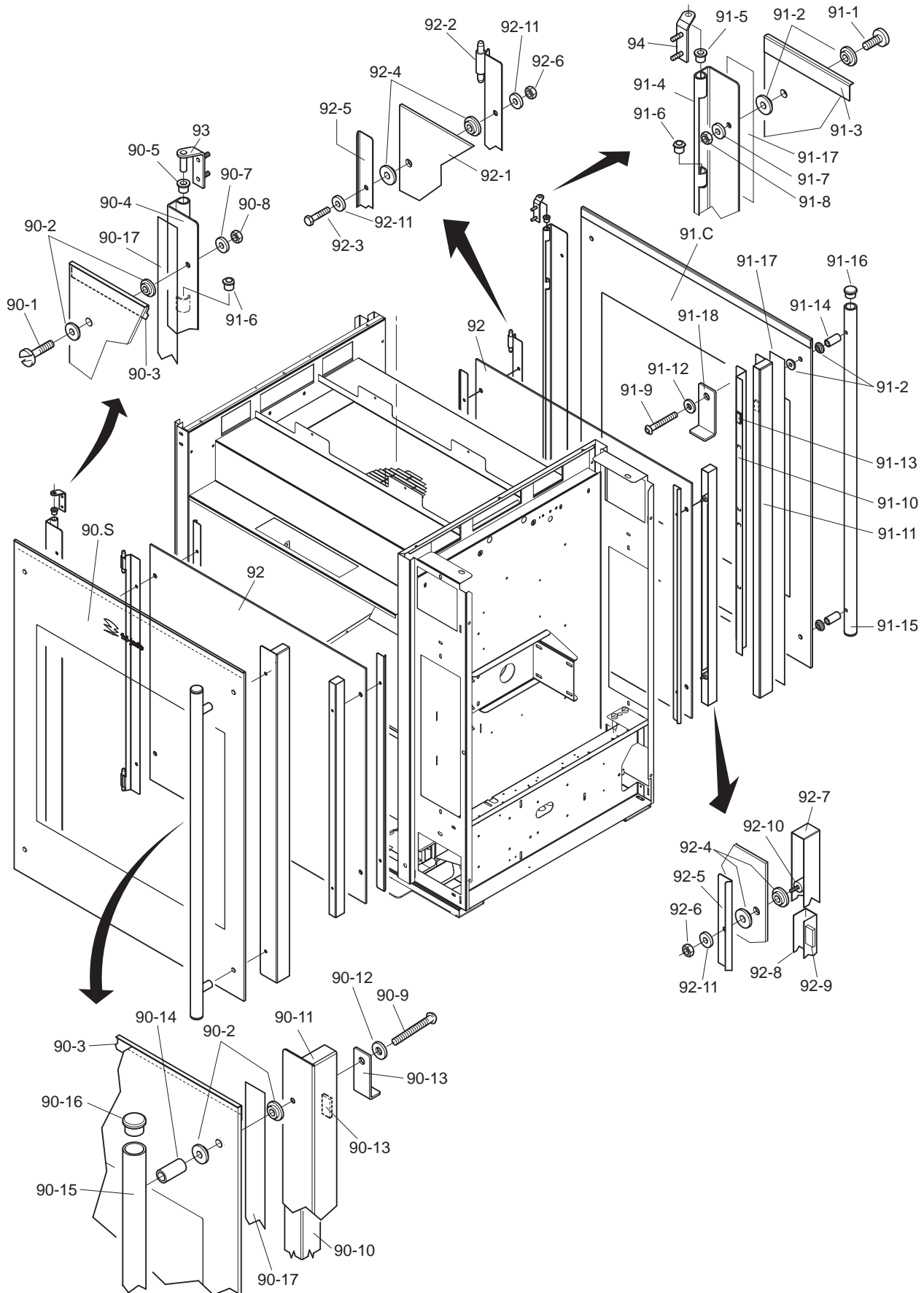
TDR 7 M - COMPONENTS



Item	Part number	Qty.	Description
40	9172274	1	Rotorset ass. 8 meat forks, stainless steel
40-1	9070272	1	Rotor shaft
40-2	9174623	2	Rotor disc 3 mm
40-3	4288231	12	Tensilock bolt M5 x 10
40-4	9172169	14	Support pin
40-5	0142056	14	Spring washer M8
40-6	0141547	14	Nut M8
41	9172063	1	Steel bearing 14 mm
42	9172153	8	Meatfork 8 mm SS
43	9294463S	2	Light fixture + end plate L and R
44	9052826	4	Lamp holder
45	9291001	2	Infrared Halogen lamp 500W
46	2300121	2	Terminal block, ceramic
47	9292061	2	Protection guard, infrared lamp
48	9298551S	1	Blower, ass.
48-1	9293020	1	Blower motor
48-2	3701273	1	Turbine Ø 200 mm x 61
48-3	3702325	1	Sealing, blower shaft, PSS
48-4	9294007	1	Washer plate
48-5	0142103	1	Washer M5
48-6	0142315	1	Nut M5
48-7	4288232	3	Srew M5x12
48-8	4285092	4	Nut M6
48-9	9192034	1	Capacitor 6 uF
48-10	9290487	1	Pully, for removing turbine
48-11	9293021	1	Conversion cable 3 to 5-pole
48-12	3701272	1	Plug, 5-pole M-N-L, universal
48-13	0601458	5	Socket, female M-N-L
49	9292028S	1	Heating element 208 V, 9.3 KW
49-1	9194489	1	Gasket, heating element
50	9194501	1	Fastening plate
51	9294421	1	Protection support
52	9293002	1	Gearmotor, complete with drive head
53	9172078	1	Fanblade Ø 150 mm, gearmotor
54	9110797	1	Sealring, drive head
55	9073131	1	Sealing ring, Teflon
56	...	1	Fuse holder plate
57	9044205	6	Fuse holder
58	9110250	6	Fuse SC10, 10A
59	9172426	1	Connecting cable with plug 15-50P
60	3701233S	2	Door switch
61	9298508	1	Temperature knob, ass.
61-1	9292002	1	Cover, black
61-2	9292001	1	Control knob, black
61-3	9292007	1	Back plate, thermostat
61-4	9172052	1	Locking ring
61-5	9110802	1	Seal ring

Item	Part number	Qty.	Description
62	9298506	1	Timer knob, ass.
62-1	9292002	1	Cover, black
62-2	9292001	1	Control knob, black
62-3	9292003	1	Back plate, timer
62-4	9172052	1	Locking ring
62-5	9110802	1	Seal ring
63	9298507	1	Main switch knob, ass.
63-1	9292002	1	Cover, black
63-2	9292001	1	Control knob, black
63-3	9292006	1	Back plate, main switch
63-4	9172052	1	Locking ring
63-5	9110802	1	Seal ring
64	9294053	1	Operation panel
65	9294054	1	Operation panel (bottom unit of stacked model)
66	9294055	1	Panel, customer side
67	9294056	1	Panel, customer side (bottom unit of stacked model)
68	9291002	2	Knob, rotor switch
69	9291003	2	Contact block, rotor switch
70	9290205	1	Electric panel, ass.
70-1	9044564	1	Connecting block, 1,2,3
70-2	9044572	1	Connecting block, 4,5,6
70-3	9171140	1	Main switch
70-4	3500069	2	Contacting
70-5	9077088	2	Rail
70-6	9040463	1	Timer switch
70-7	9070531	2	Thermostat
70-8	9192034	1	Capacitor 6uF
70-8A	9291015	1	Capacitor 8uF (till serial nr. 100062182)
70-8B	3701274		Capacitor 5uF (till serial nr. 100060887)
70-9	9077101	1	Capacitor 2.5 uF
70-9A	9077102	1	Capacitor 3 uF (till serial nr. 100061450)
70-10	8033659	1	Connecting block
70-11	9294006	1	Electric panel
70-12	9070840	2	Grommet
70-13	9040970	1	Safety thermostat
71	9294063	1	Bracket temperature sensors
72	9110072	2	Clip
73	9291014	1	Cap, 5-pole M-N-L
74	0601466	5	Pin, male M-N-L

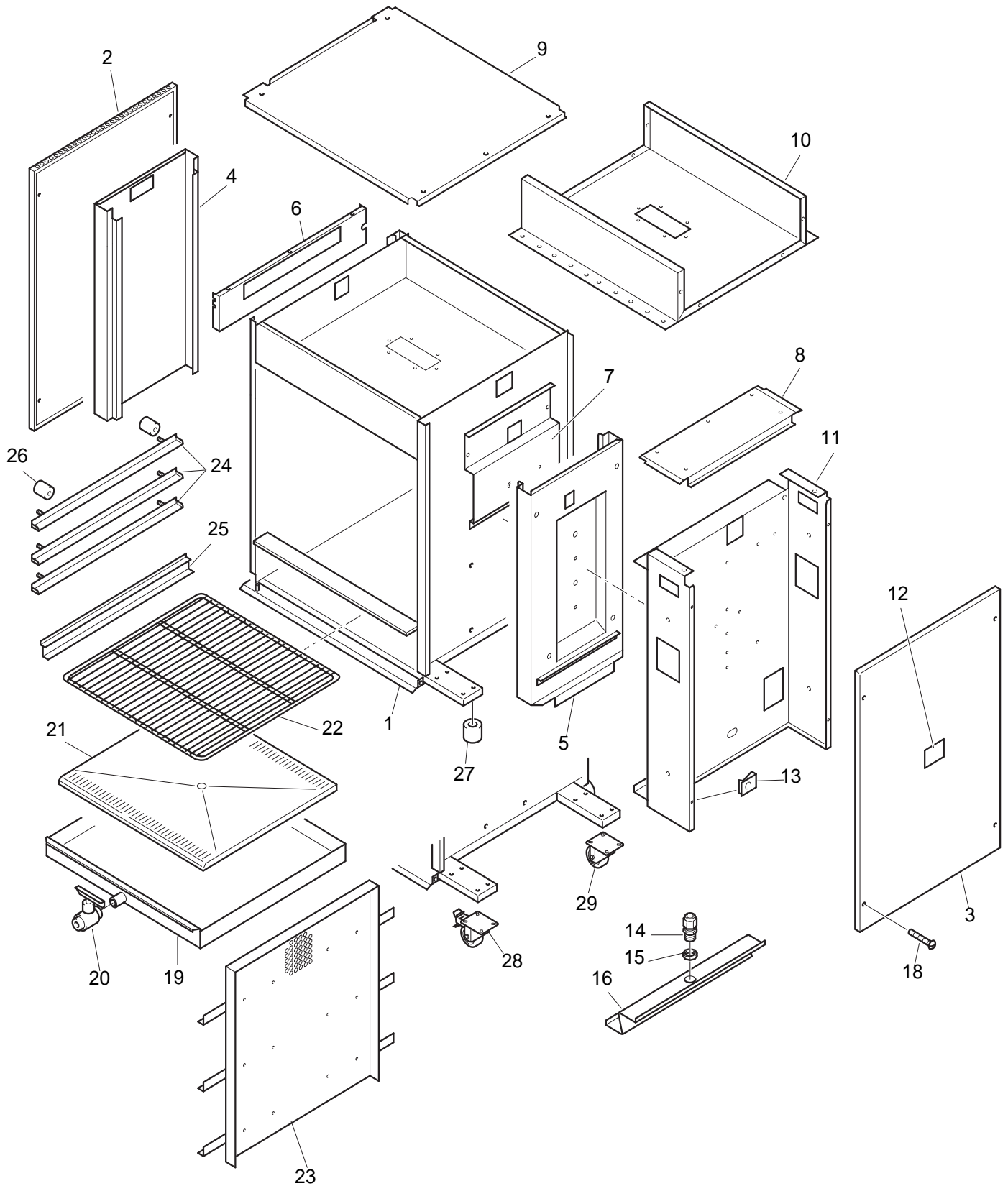
TDR 7 M - DOORS



Item	Part number	Qty.	Description
90.5	9298510S	1	Door service side, ass.
90-1	4280558	2	Screw M5 x 16 SS
90-2	3702342	8	Flange bush, PTFE 3 mm
90-3	9294049	1	Protection profile
90-4	9294048	1	Hinge profile
90-5	9172054	2	Brass bearing 8 mm
90-6	9172122	2	Brass bearing 8 mm, adjusted
90-7	4311110	2	Washer M5
90-8	0144359	2	Nut M5, self locking
90-9	4288059	2	Bolt M5 x 50 SS
90-9A	4288320	2	Screw M5 x 50 SS (till serial number 100067732)
90-10	9294035	1	Fastening, door handle
90-11	9294034	1	Magnet holder profile
90-12	9174680	2	Washer
90-13	9070141	12	Magnet block
90-14	9293010	2	Spacing pin
90-15	9293008	1	Door handle
90-16	2103209	2	Plug, door handle
90-17	4302141	2	Tape 20 x 0.8
90-18	9294229	1	Blocking bracket
91.C	9298513S	1	Door customer side, ass.
91-1	4280558	2	Screw M5 x 16 SS
91-2	3702342	8	Flange bush, PTFE 3 mm
91-3	9294049	1	Protection profile
91-4	9294048	1	Hinge profile
91-5	9172054	2	Brass bearing 8 mm
91-6	9172122	2	Brass bearing 8 mm, adjusted
91-7	4311110	2	Washer M5
91-8	0144359	2	Nut M5, self locking
91-9	4288059	2	Bolt M5 x 50 SS
91-9A	4288320	2	Screw M5 x 50 SS (till serial number 100068523)
91-10	9294035	1	Fastening, door handle
91-11	9294034	1	Magnet holder profile
91-12	9174680	2	Washer
91-13	9070141	12	Magnet block
91-14	9293010	2	Spacing pin
91-15	9293008	1	Door handle
91-16	2103209	2	Plug, door handle
91-17	4302141	2	Tape 20 x 0.8
91-18	9294229	1	Blocking bracket

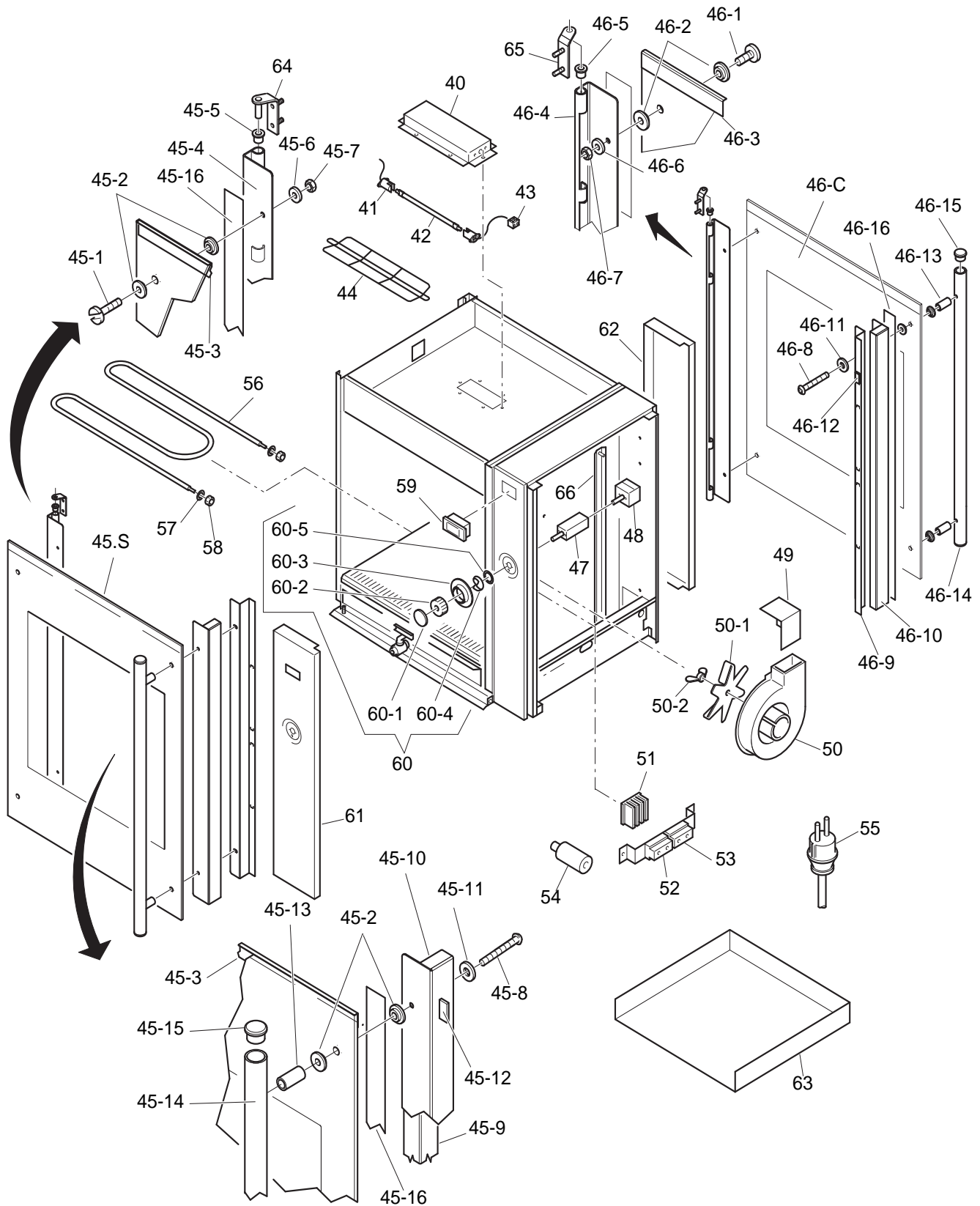
Item	Part number	Qty.	Description
92	9298512S	2	Door inside, ass.
92-1	9292013	2	Glass, inside door
92-2	9290406	2	Hinge profile
92-3	9191050	4	Bolt M5 x 18 SS
92-4	3702341	16	Flange bush, PTFE 2 mm
92-5	9294037	4	Cover profile
92-6	0142315	8	Nut M5 SS
92-7	9294038	2	Holder, magnet
92-8	9294039	2	Profile
92-9	9070141	20	Magnet block
92-10	9172291	4	Spacing pin
92-11	9174680	12	Washer
93	9290409	1	Hinge, left
94	9290410	1	Hinge, right

TDW 5 M - SHEET METAL WORK



Item	Part number	Qty.	Description
1	.....	1	Frame, ass.
2	9294353	1	Side panel, left
2A	9294126	1	Side panel, left (till serial nr. 100061480)
3	9294352	1	Side panel, right
3A	9294125	1	Side panel, right (till serial nr. 100061480)
4	9290492	1	Reinforcement plate, left
4A	9290510	1	Reinforcement plate, left (till serial nr. 100061480)
5	9290493	1	Reinforcement plate, right
5A	9290511	1	Reinforcement plate, right (till serial nr. 100061480)
6	9294359	1	Reinforcement, left top
6A	9294110	1	Reinforcement, left top (till serial nr. 100061480)
7	9294461	1	Reinforcement, right top
7A	9294280	1	Reinforcement, right top (till serial nr. 100061480)
8	9294351	1	Cover, removable
8A	9294128	1	Cover, removable (till serial nr. 100061480)
9	9294454	1	Top plate
9A	9294288	1	Top plate (till serial nr. 100061480)
10	9290494	1	Ceiling
10A	9290512	1	Ceiling (till serial nr. 100061480)
11	9294455	1	Cover plate, machine components
11A	9294287	1	Cover plate, machine components (till serial nr. 100061480)
12	9123492	1	Indication plate
13	9172053	8	Nut
14	9222076	1	Strain relief M20
15	9222077	1	Connector M20
16	9294459	1	Spark catcher
16A	9294291	1	Spark catcher (till serial nr. 100061480)
18	4288322	8	Screw M5 x 10
19	9290476	1	Drawer
19	9290456	1	Drawer (till serial nr. 100061480)
20	9171008	1	Drain-tap with handle
21	9294460	1	Bottom plate
21A	9294286	1	Bottom plate (till serial nr. 100061480)
22	9142192	1	Display rack
23	9290513	1	Ventilating plate
24	9294284	3	Runner
25	9294285	1	Runner for bottom plate
26	9171020	12	Spacing pin
27	9171125	4	Rubber leg 50 mm
28	9172066	2	Swivel castor with brake (only for stacked units)
29	9172065	2	swivel castor without brake (only for stacked units)

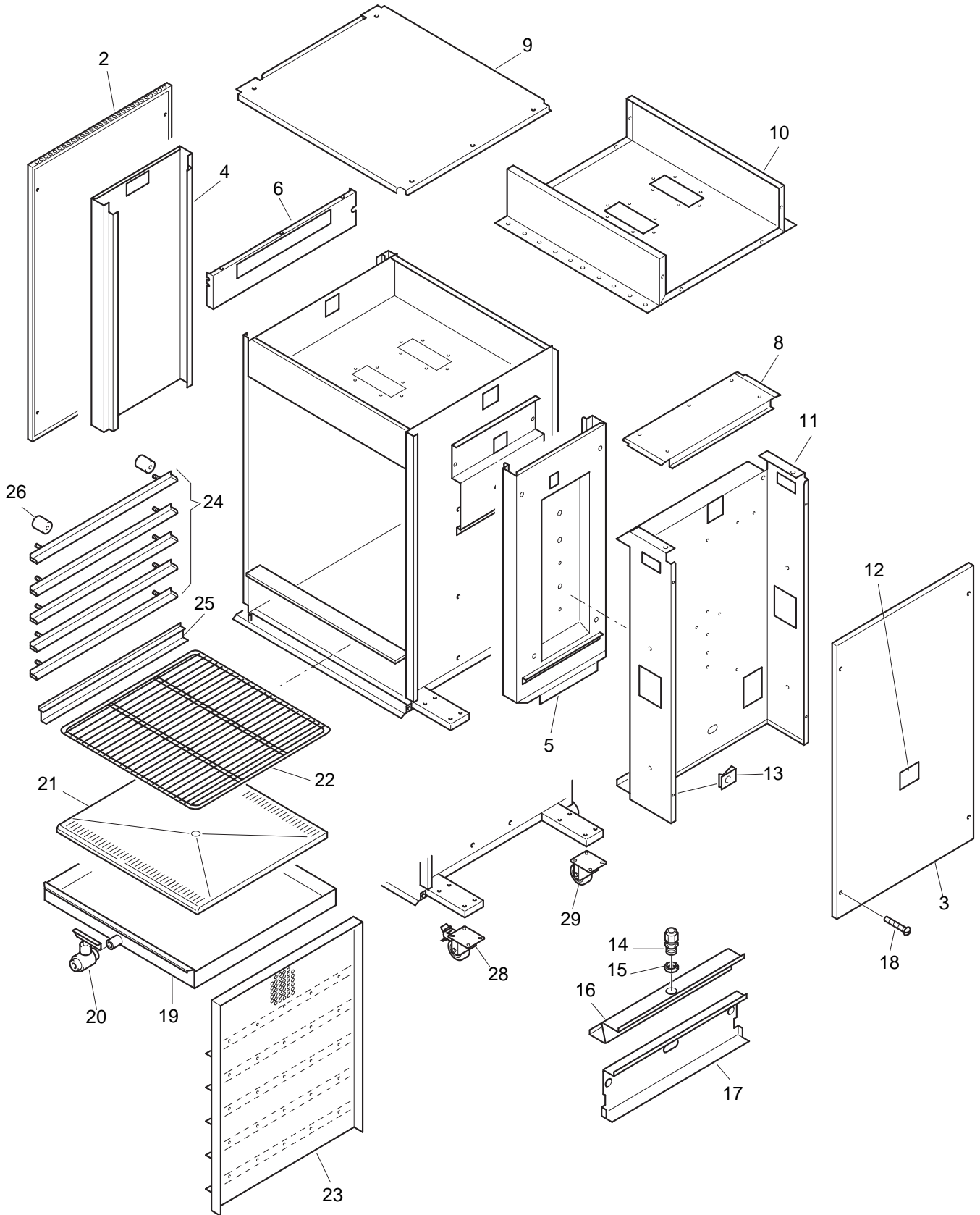
TDW 5 M - COMPONENTS



Item	Part number	Qty.	Description
40	9294271	1	Lamp shade
41	9052826	2	Lamp holder
42	9082774	1	Lamp. Halotherm 200 W
43	2300121	1	Terminal block, Ceramic
44	9292061	1	Protection guard, Halotherm lamp
45.S	9298500S	1	Door service side, ass.
45-1	4280558	2	Screw M5 x 16 SS
45-2	3702342	8	Flange bush, PTFE 3 mm
45-3	9294149	1	Protection profile
45-4	9294135	1	Hinge profile
45-5	9172054	2	Brass bearing 8 mm
45-6	4311110	2	Washer M5
45-7	0144359	2	Nut M5, self locking
45-8	4288320	2	Screw M5 x 50 SS
45-9	9294137	1	Fastening, door handle
45-10	9294136	1	Magnet holder profile
45-11	9174680	2	Washer
45-12	9070141	12	Magnet block
45-13	9293010	2	Spacing pin
45-14	9293009	1	Door handle
45-15	2103209	2	Plug, door handle
45-16	4302141	2	Tape 20 x 0.8
46.C	9298503S	1	Door customer side, ass.
46-1	4280558	2	Screw M5 x 16 SS
46-2	3702342	8	Flange bush, PTFE 3 mm
46-3	9294149	1	Protection profile
46-4	9294135	1	Hinge profile
46-5	9172054	2	Brass bearing 8 mm
46-6	4311110	2	Washer M5
46-7	0144359	2	Nut M5, self locking
46-8	4288320	2	Screw M5 x 50 SS
46-9	9294137	1	Fastening, door handle
46-10	9294136	1	Magnet holder profile
46-11	9174680	2	Washer
46-12	9070141	12	Magnet block
46-13	9293010	2	Spacing pin
46-14	9293009	1	Door handle
46-15	2103209	2	Plug, door handle
46-16	4302141	2	Tape 20 x 0.8

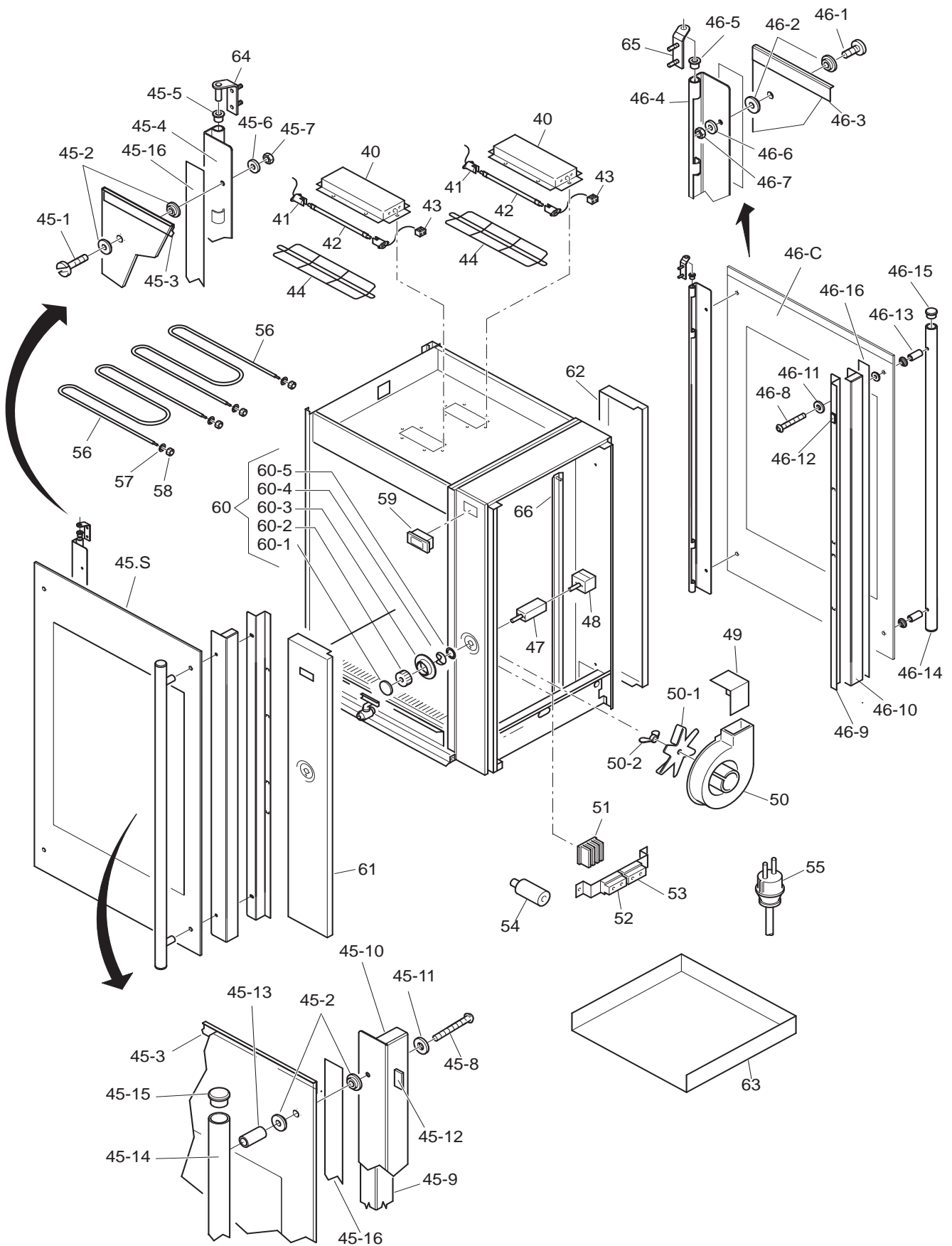
Item	Part number	Qty.	Description
47	9040714	1	Main switch, warmer
48	9082994	1	Thermostat 90 - 230°F
49	9174139	1	Spray mouth
50	9110048	1	Blower
50-1	9110153	1	Fan blade
50-2	9073150	1	Wing nut, left hand threaded
51	9040722	1	Connecting block
52	9044564	1	Connecting block, 1,2,3
53	9044572	1	Connecting block, 4,5,6
54	9110030	1	Capacitor 1,5 mF
55	9172400	1	Connecting cable with plug 6-15P
56	9160865	1	Heating element 230 V, 2,5 KW
57	0169197	2	Gasket, heating element
58	0169189	2	Nut, heating element
59	9082164	1	Thermometer, analogue °F
60	9298509	1	Main switch knob, assembly
60-1	9292002	1	Cover, black
60-2	9292001	1	Control knob, black
60-3	9292008	1	Back plate, 0-5
60-4	9172052	1	Locking ring
60-5	9110802	1	Seal ring
61	9294289	1	Operation panel
62	9294290	1	Panel, customer side
63	9294366	1	Protective pan under grease tray (for stacked units)
63A	9294118	1	Protective pan under grease tray (for stacked units) (till serial nr. 100061480)
64	9290409	1	Hinge, left
65	9290410	1	Hinge, right
66	9294157	1	Wiring duct

TDW 7 M - SHEET METAL WORK



Item	Part number	Qty.	Description
1	.....	1	Frame, ass.
2	9294031	1	Side panel, left
3	9294018	1	Side panel, right
4	9290500	1	Reinforcement plate, left
5	9290501	1	Reinforcement plate, right
6	9294110	1	Reinforcement, left top
7	9294258	1	Reinforcement, right top
8	9294045	1	Cover, removable
9	9294263	1	Top plate
10	9290502	1	Ceiling
11	9294262	1	Cover plate, machine components
12	9123492	1	Indication plate
13	9172053	8	Nut
14	9222076	1	Strain relief M20
15	9222077	1	Connector M20
16	9294019	1	Spark catcher
17	9294025	1	Mounting plate
18	4288322	8	Screw M5 x 10
19	9290405	1	Drawer
20	9171008	1	Drain-tap with handle
21	9294267	1	Bottom plate
22	9040748	1	Display rack
23	9290504	1	Ventilating plate
24	9294261	5	Runner
25	9294268	1	Runner for bottom plate
26	9171020	12	Spacing pin
27	9171125	4	Rubber leg 50 mm
28	9172066	2	Swivel castor with brake (only for stacked units)
29	9172065	2	Swivil castor without brake (only for stacked units)

TDW 7 M - COMPONENTS

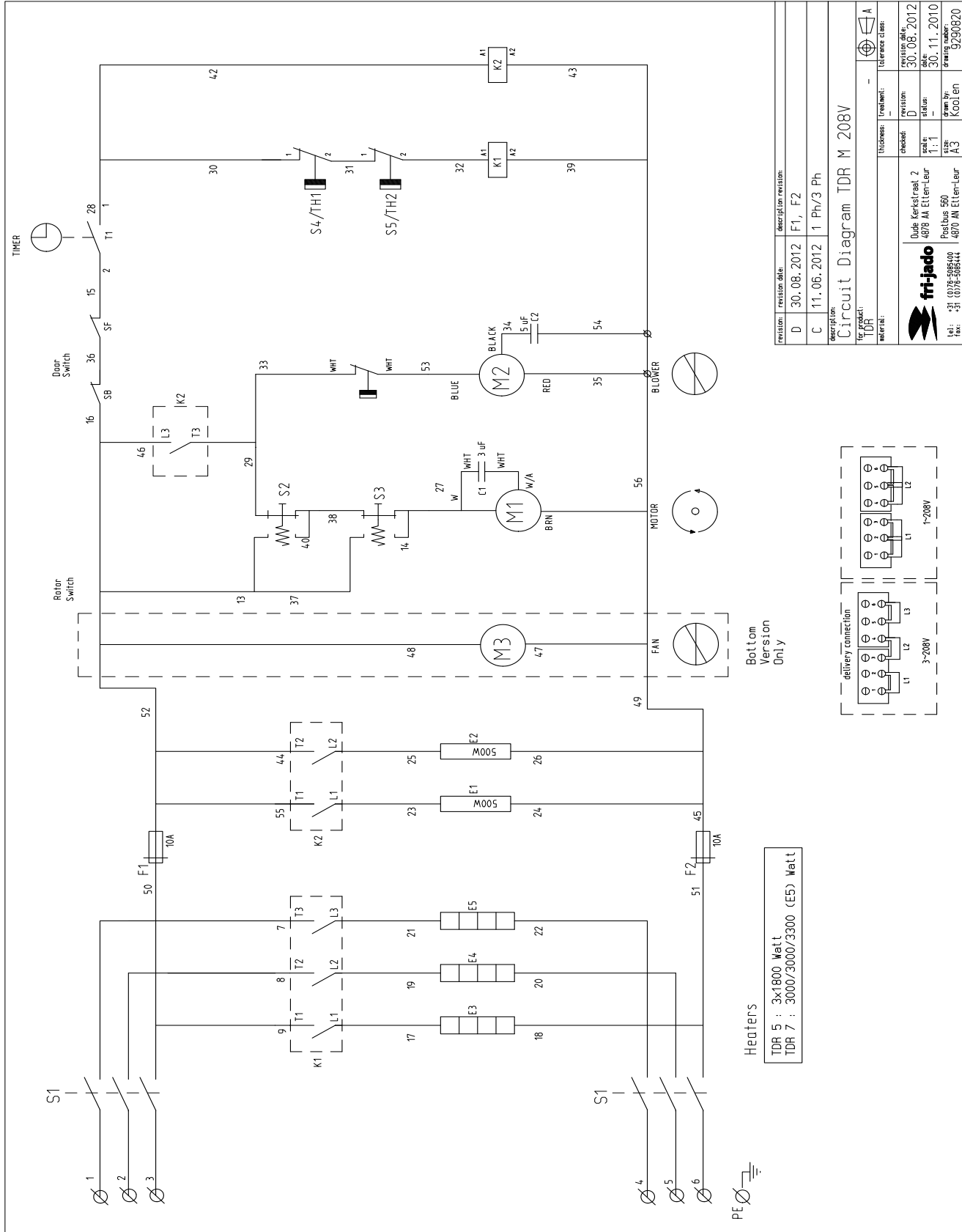


Item	Part number	Qty.	Description
40	9294271	2	Lamp shade
41	9052826	4	Lamp holder
42	9082774	2	Lamp. Halotherm 200 W
43	2300121	2	Terminal block, Ceramic
44	9292061	2	Protection guard, Halotherm lamp
45.5	9298510S	1	Door service side, ass.
45-1	4280558	2	Screw M5 x 16 SS
45-2	3702342	8	Flange bush, PTFE 3 mm
45-3	9294049	1	Protection profile
45-4	9294048	1	Hinge profile
45-5	9172054	2	Brass bearing 8 mm
45-6	4311110	2	Washer M5
45-7	0144359	2	Nut M5, self locking
45-8	4288320	2	Screw M5 x 50 SS
45-9	9294035	1	Fastening, door handle
45-10	9294034	1	Magnet holder profile
45-11	9174680	2	Washer
45-12	9070141	12	Magnet block
45-13	9293010	2	Spacing pin
45-14	9293008	1	Door handle
45-15	2103209	2	Plug, door handle
45-16	4302141	2	Tape 20 x 0.8
46.C	9298513S	1	Door service side, ass.
46-1	4280558	2	Screw M5 x 16 SS
46-2	3702342	8	Flange bush, PTFE 3 mm
46-3	9294049	1	Protection profile
46-4	9294048	1	Hinge profile
46-5	9172054	2	Brass bearing 8 mm
46-6	4311110	2	Washer M5
46-7	0144359	2	Nut M5, self locking
46-8	4288320	2	Screw M5 x 50 SS
46-9	9294035	1	Fastening, door handle
46-10	9294034	1	Magnet holder profile
46-11	9174680	2	Washer
46-12	9070141	12	Magnet block
46-13	9293010	2	Spacing pin
46-14	9293008	1	Door handle
46-15	2103209	2	Plug, door handle
46-16	4302141	2	Tape 20 x 0.8

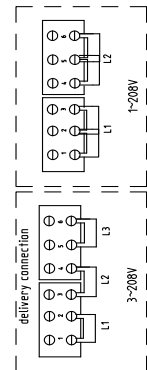
Item	Part number	Qty.	Description
47	9040714	1	Main switch, warmer
48	9082994	1	Thermostat 90 - 230°F
49	9174139	1	Spray mouth
50	9110048	1	Blower
50-1	9110153	1	Fan blade
50-2	9073150	1	Wing nut, left hand threaded
51	9040722	1	Connecting block
52	9044564	1	Connecting block, 1,2,3
53	9044572	1	Connecting block, 4,5,6
54	9110030	1	Capacitor 1,5 mF
55	9172403	1	Connecting cable with plug 15-20P
56	9005251	2	Heating element 230 V, 1,5 KW
57	0169197	2	Gasket, heating element
58	0169189	2	Nut, heating element
59	9082164	1	Thermometer, analogue °F
60	9298509	1	Main switch knob, assembly
60-1	9292002	1	Cover, black
60-2	9292001	1	Control knob, black
60-3	9292008	1	Back plate, 0-5
60-4	9172052	1	Locking ring
60-5	9110802	1	Seal ring
61	9294264	1	Operation panel
62	9294265	1	Panel, customer side
63	9294041	1	Protective pan under grease tray (for stacked units)
64	9290409	1	Hinge, left
65	9290410	1	Hinge, right
66	9294157	1	Wiring duct

ELECTRICAL DIAGRAMS

CIRCUIT DIAGRAM TDR 5 AND 7 M, SINGLE AND STACKED UNIT



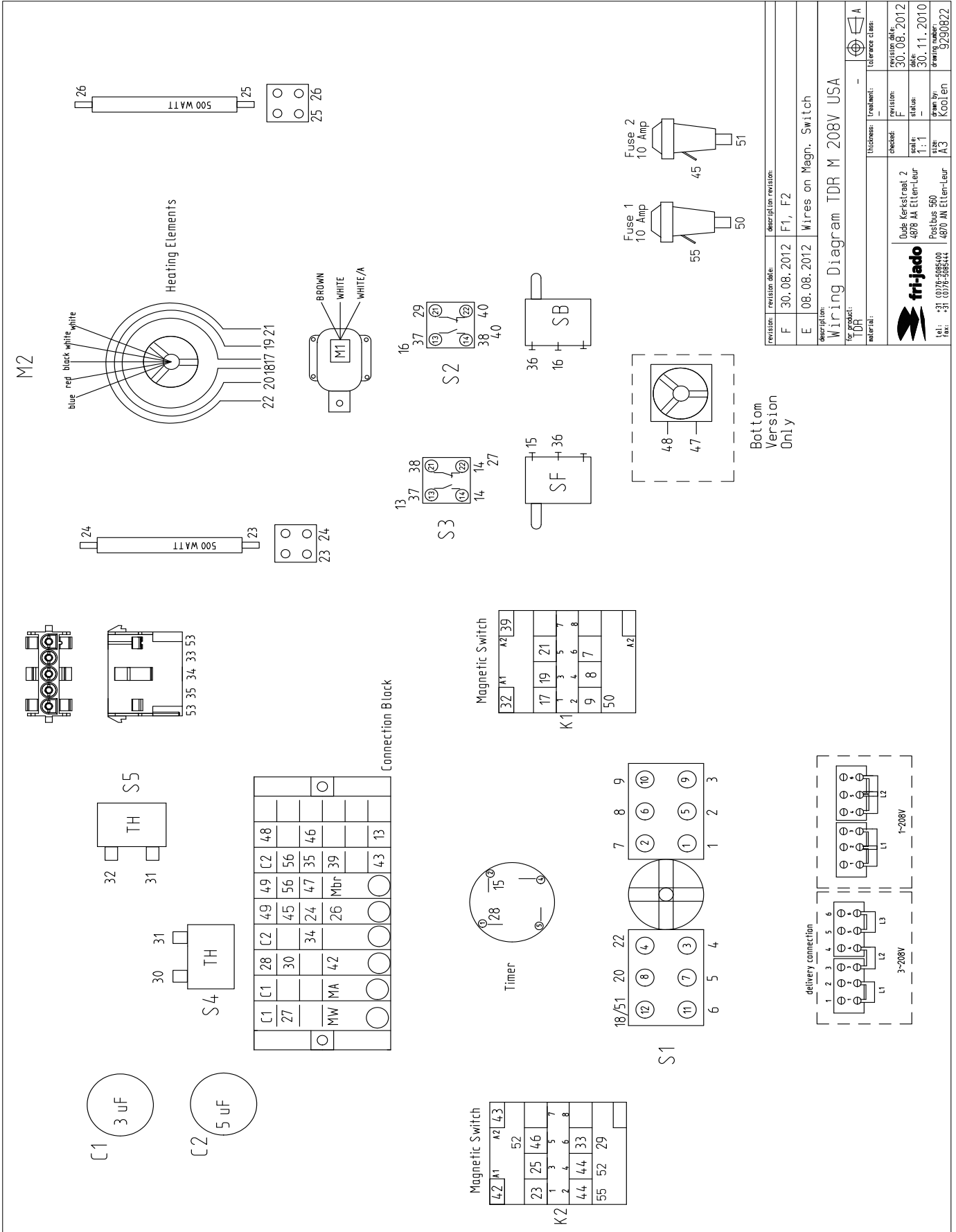
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3	3	11.2010
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36	36	09.2010
37	37	09.2010
38	38	09.2010
39	39	09.2010
40	40	09.2010
41	41	09.2010
42	42	09.2010
43	43	09.2010
44	44	09.2010
45	45	09.2010
46	46	09.2010
47	47	09.2010
48	48	09.2010
49	49	09.2010
50	50	09.2010
51	51	09.2010
52	52	09.2010
53	53	09.2010
54	54	09.2010
55	55	09.2010
56	56	09.2010



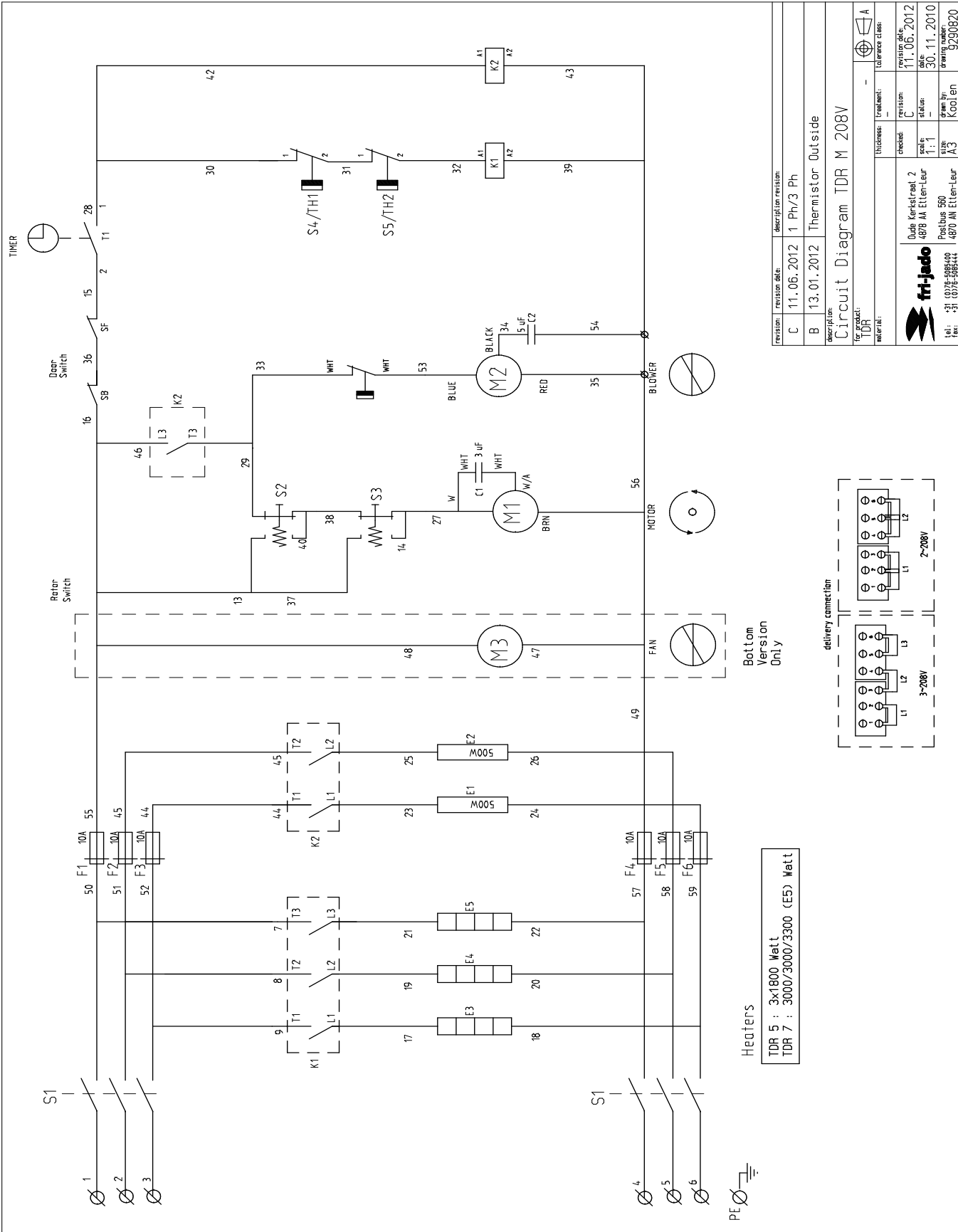
Heaters
 TDR 5 : 3x1800 Watt
 TDR 7 : 3000/3000/3300 (E5) Watt

Bottom Version Only

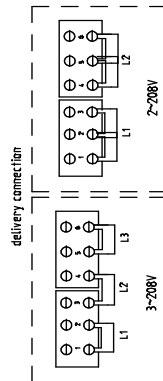
WIRING DIAGRAM TDR 5 AND 7 M, SINGLE AND STACKED UNIT



CIRCUIT DIAGRAM TDR 5 AND 7 M, SINGLE AND STACKED UNIT (UNTILL SERIAL NUMBER 100059841)

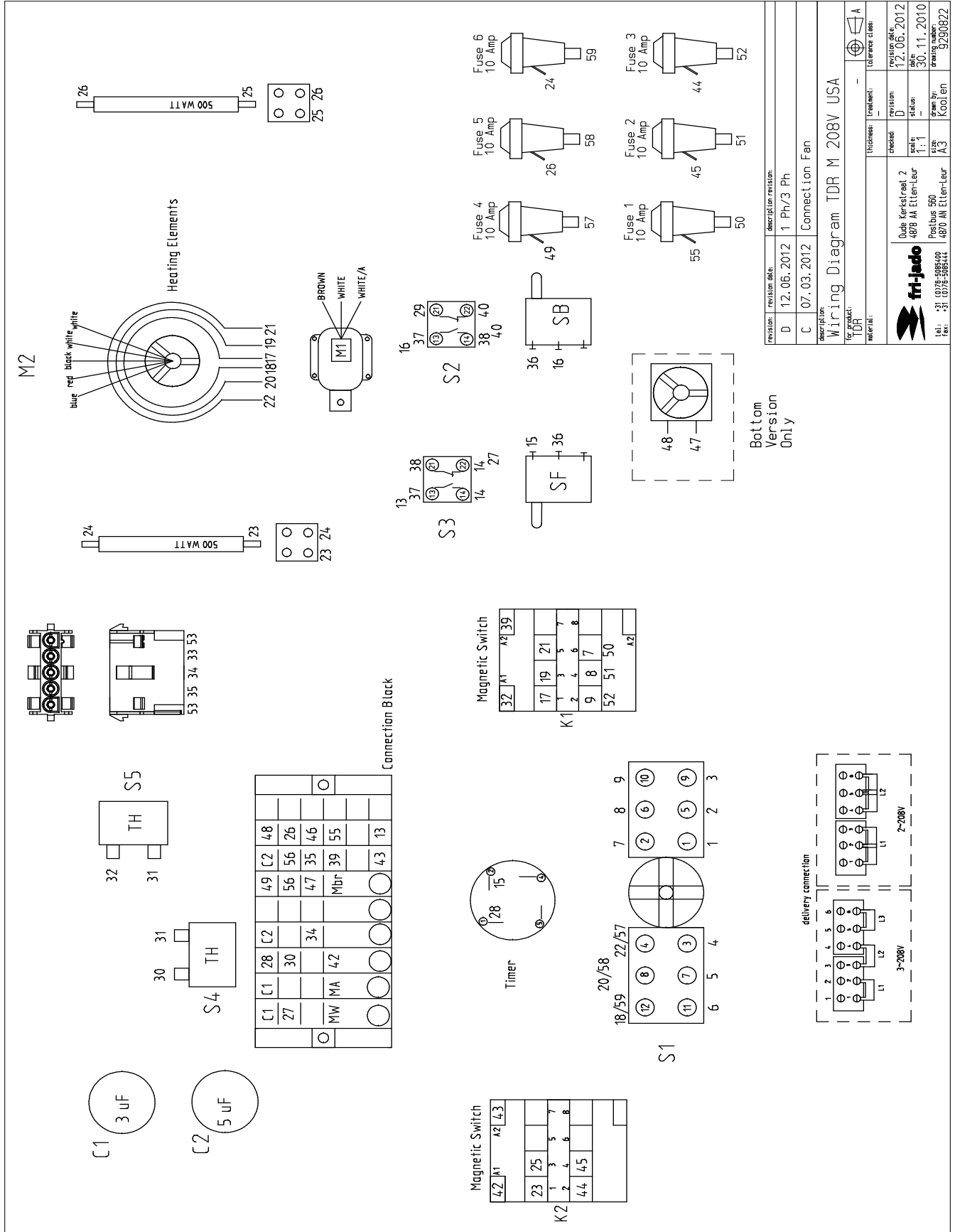


revision	revision date	description/revision
C	11.06.2012	1 Ph/3 Ph
B	13.01.2012	Thermistor Outside
description: Circuit Diagram TDR M 208V		
for project:	TDR1	
material:		
thickness:		tolerance class:
checked:	C	revision:
		11.06.2012
scale:	1:1	date:
		30.11.2010
size:	A3	drawn by:
		Koolen
drawing number:	9290820	

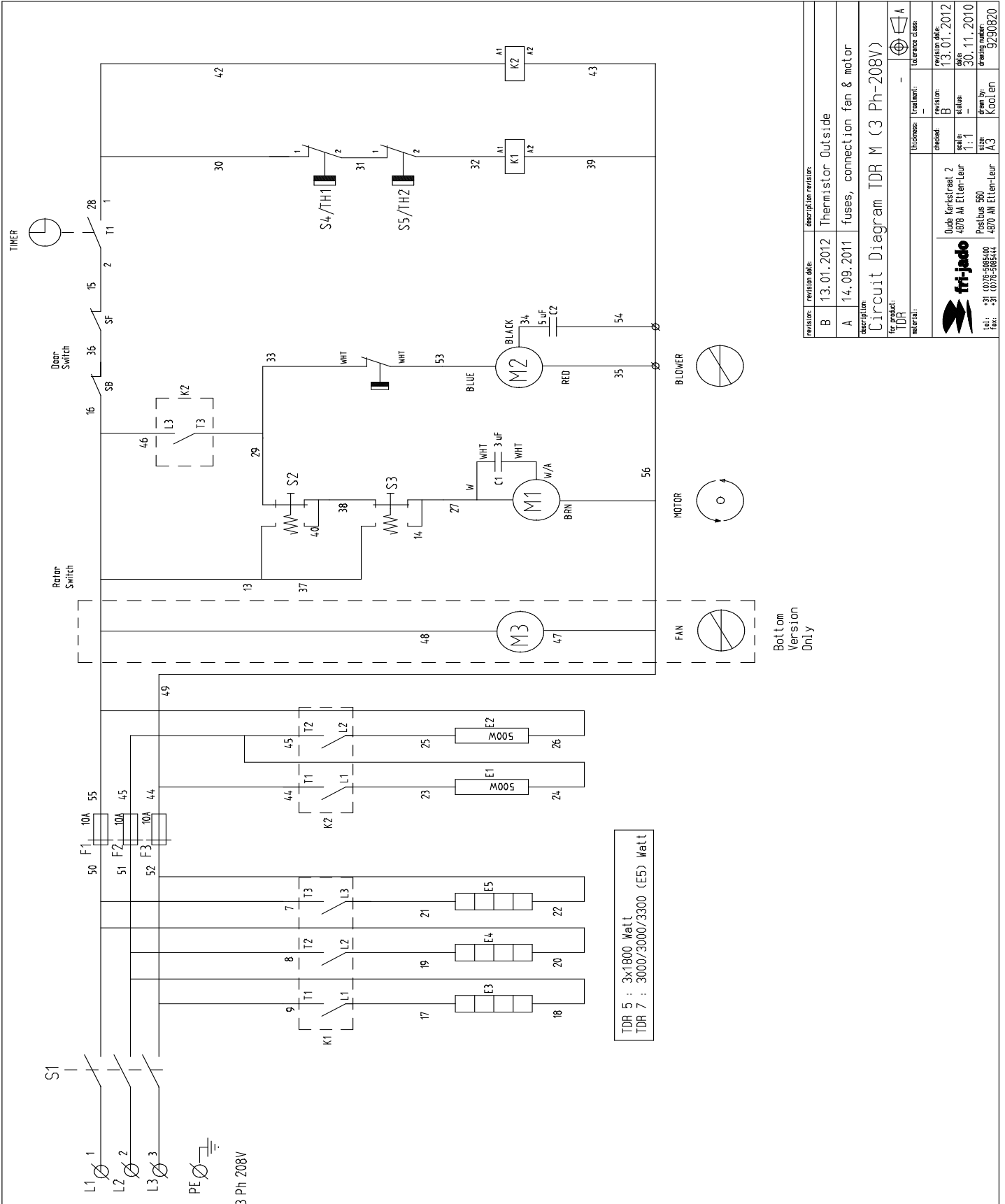


Bottom Version Only

WIRING DIAGRAM TDR 5 AND 7 M, SINGLE AND STACKED UNIT (UNTILL SERIAL NUMBER 100059841)



CIRCUIT DIAGRAM TDR 5 AND 7 M, SINGLE AND STACKED UNIT (UNTILL SERIAL NUMBER 100058736)

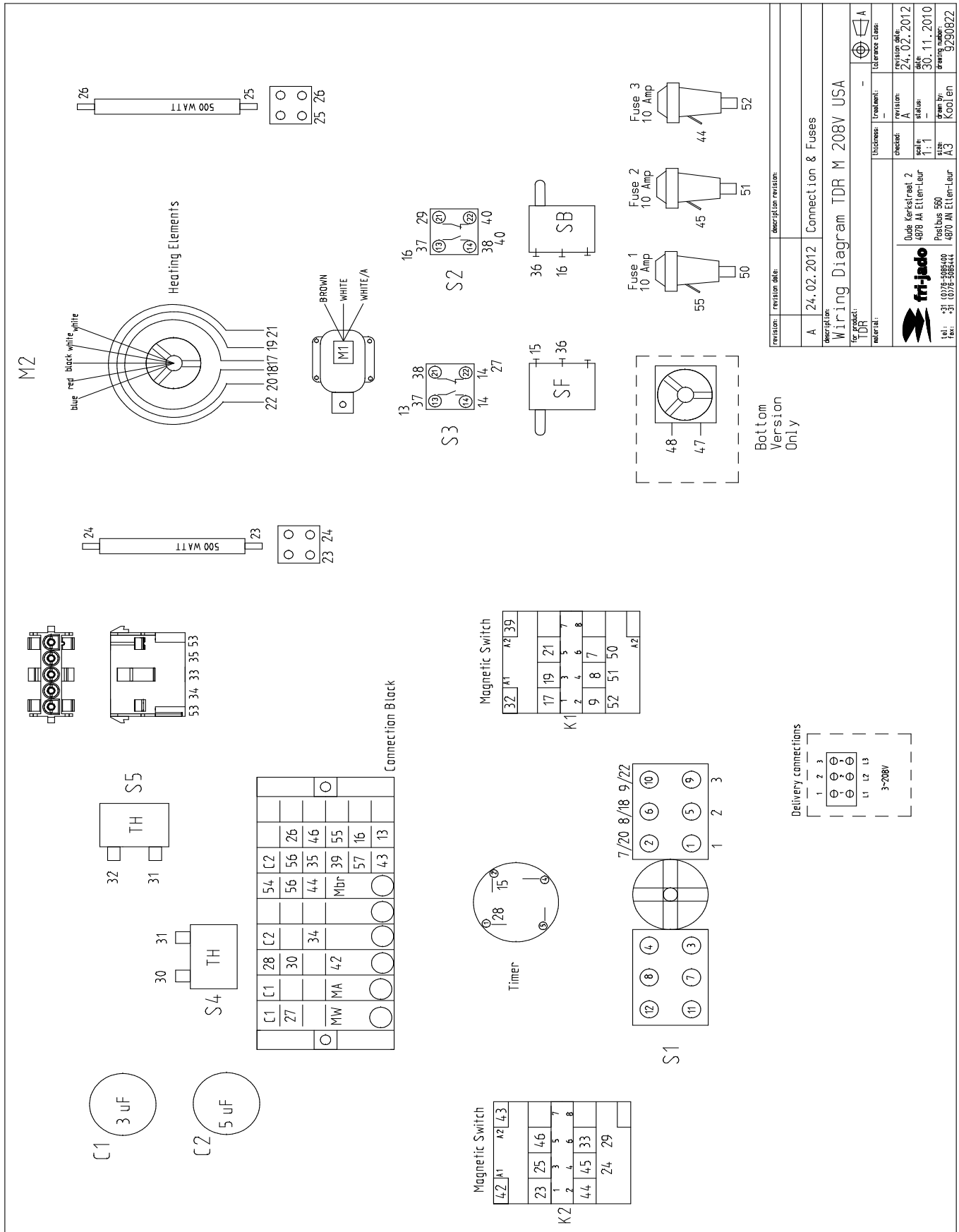


revision	revision date	description/revision
B	13.01.2012	Thermistor Outside
A	14.09.2011	fuses, connection fan & motor

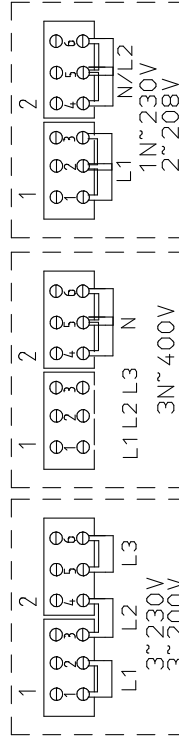
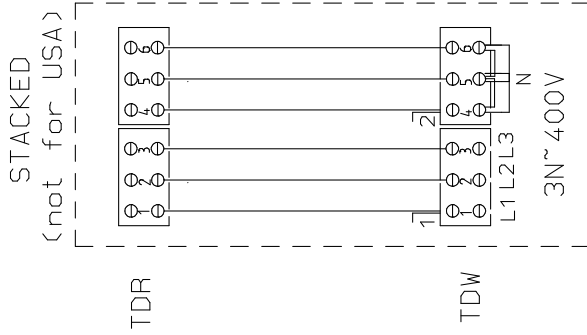
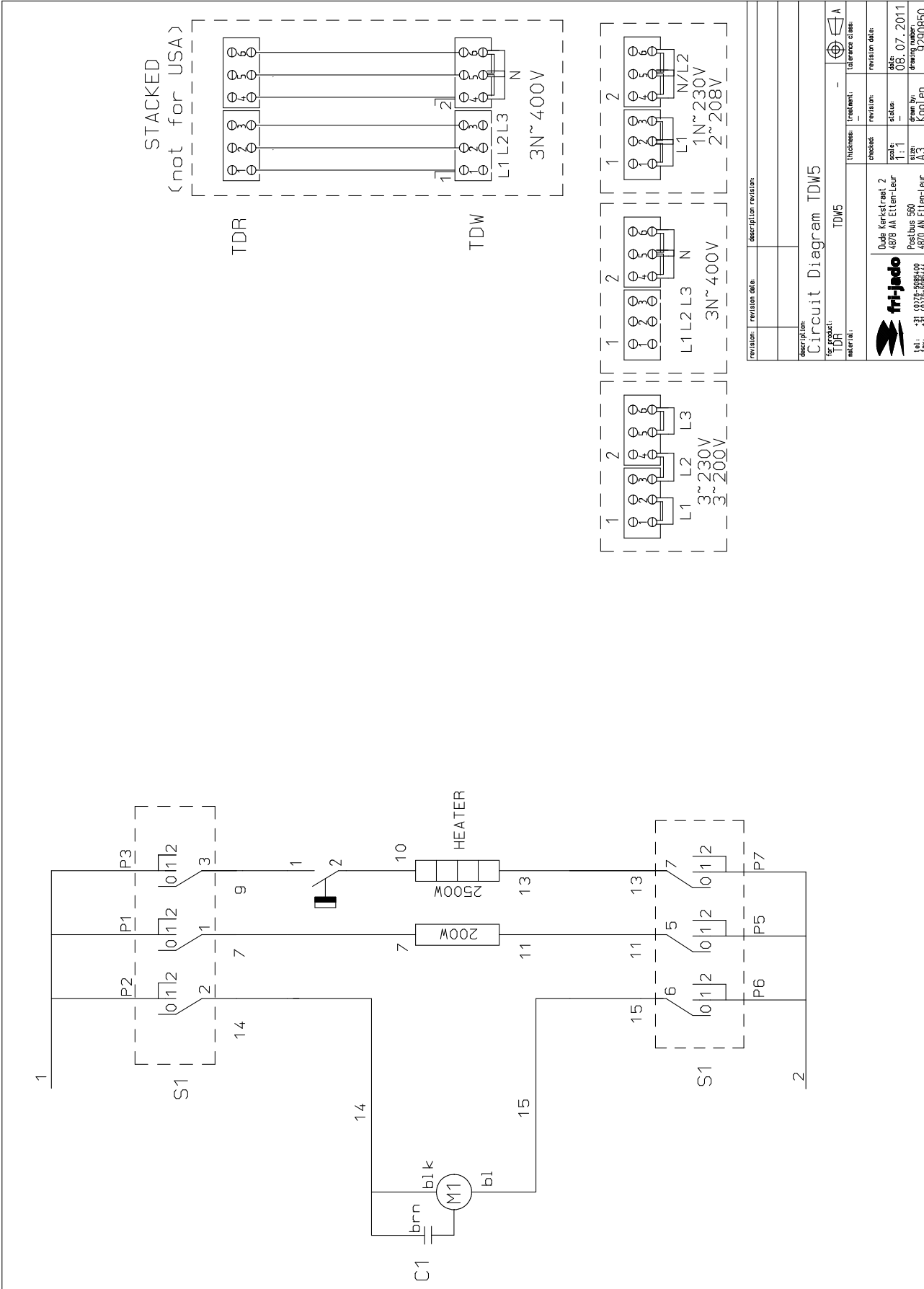
Description		thickness	material
Circuit Diagram TDR M (3 Ph-208V)		-	-
for product: TDR		-	-
material: A		-	-

checked:	revision:	revision date:	scale:	date:
Oude Kerksraal 2	B	13.01.2012	1:1	30.11.2010
4878 Al Etten-Leur				
Postbus 560				
tel: +31 (0)76-5985400				
fax: +31 (0)76-5985444				
			drawn by:	drawn number:
			Koolen	9290820

WIRING DIAGRAM TDR 5 AND 7 M, SINGLE AND STACKED UNIT (UNTILL SERIAL NUMBER 100058736)



CIRCUIT DIAGRAM TDW 5 M, SINGLE AND STACKED UNIT



revision	revision date	description	revision

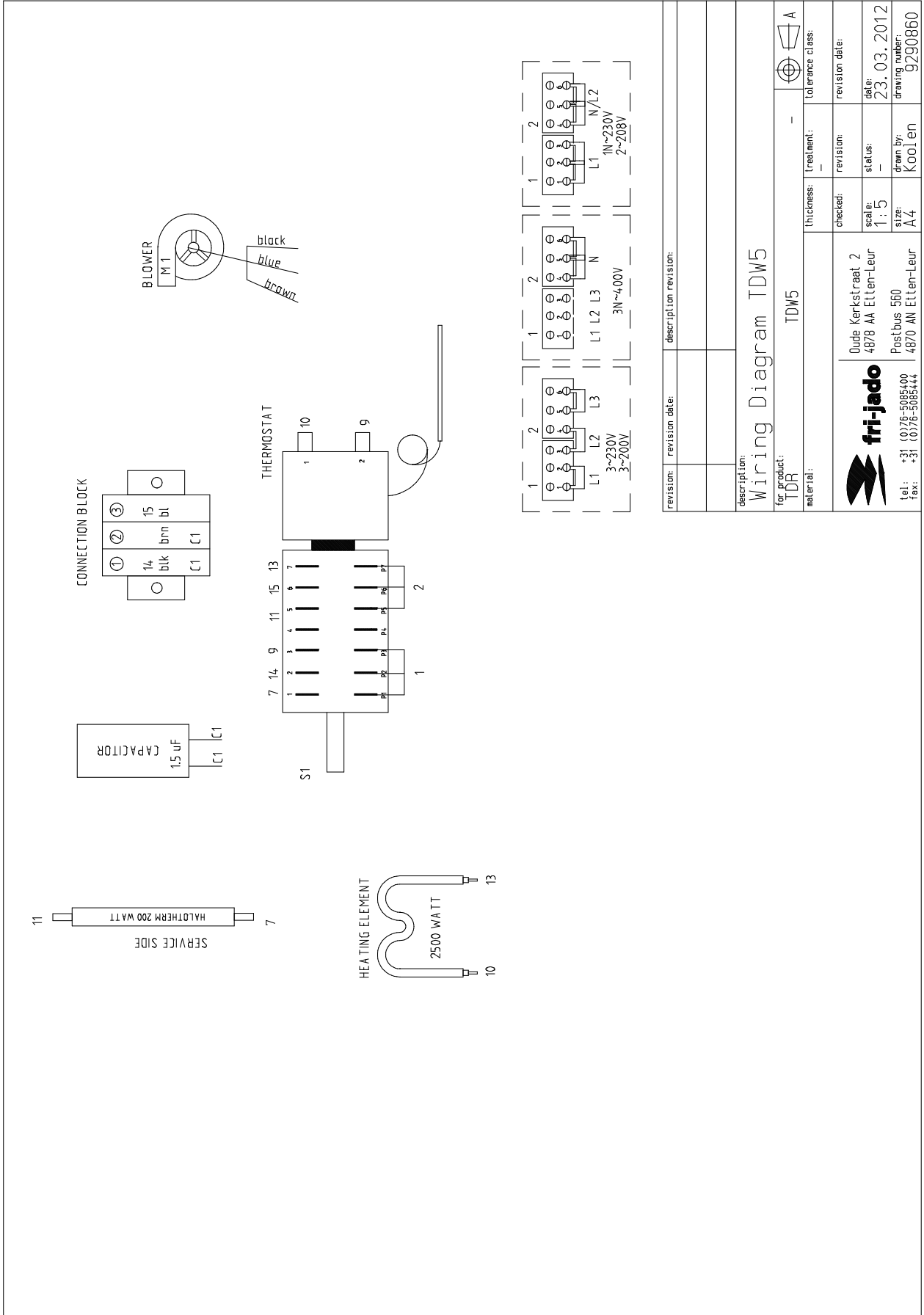
description:	thickness:	checked:	revision:	revision date:
Circuit Diagram TDW5	TDW5			
for product:				
material:				

checked:	revision:	revision date:

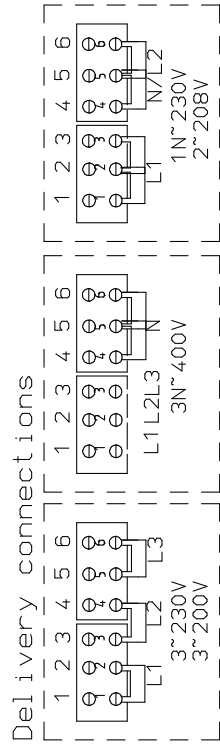
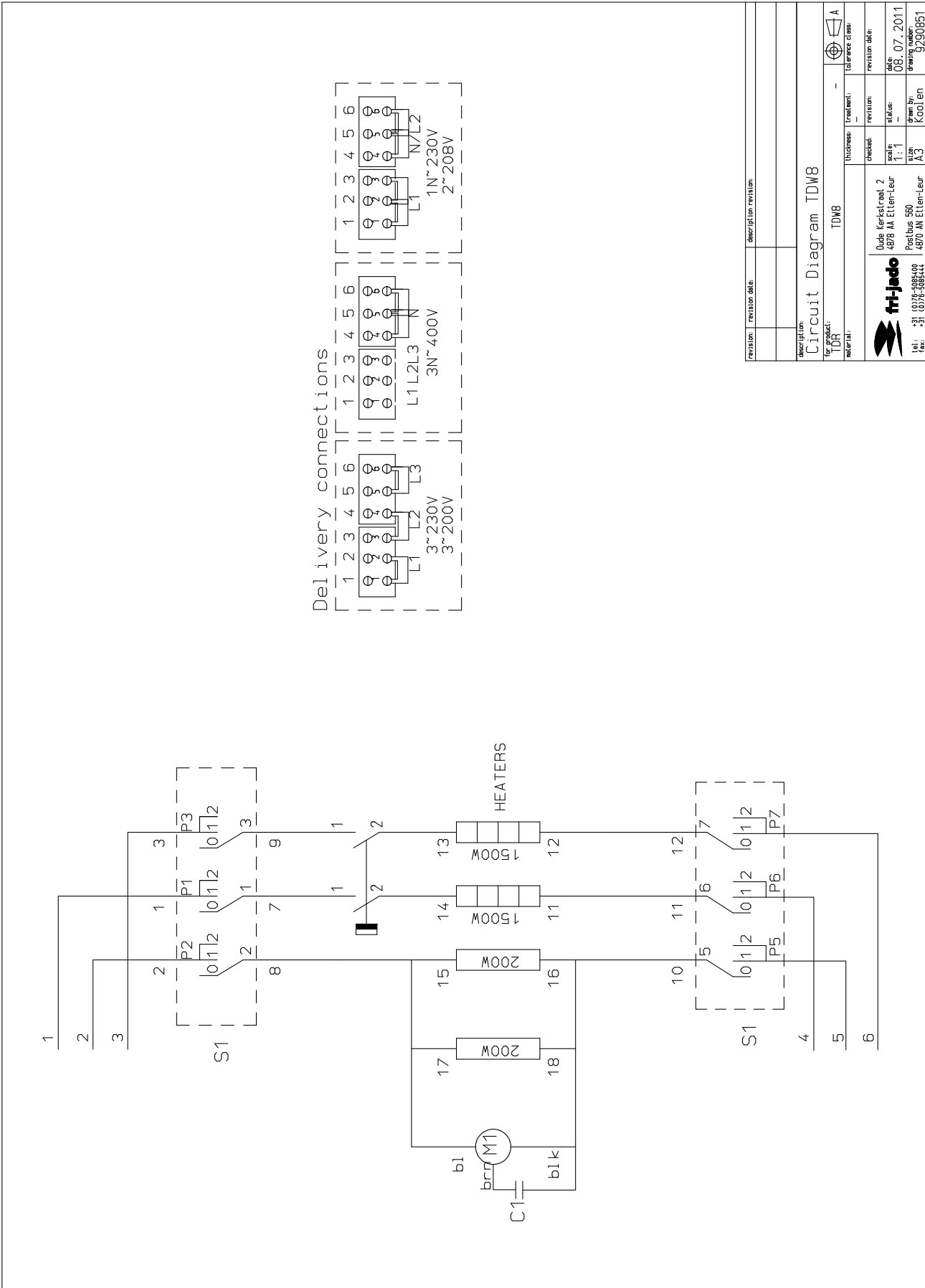
date:	drawn by:	checked by:	revision:
06.07.2011	Koolen		
06.07.2011	Koolen		
06.07.2011	Koolen		

tel.:	fax:	address:	postal code:	city:
+31 (0)78-5085100	+31 (0)78-5085111	Dudekerkstraat 2	4878 AA	Etten-Leur
		Postbus 580	4870 AN	Etten-Leur

WIRING DIAGRAM TDW 5 M, SINGLE AND STACKED UNIT



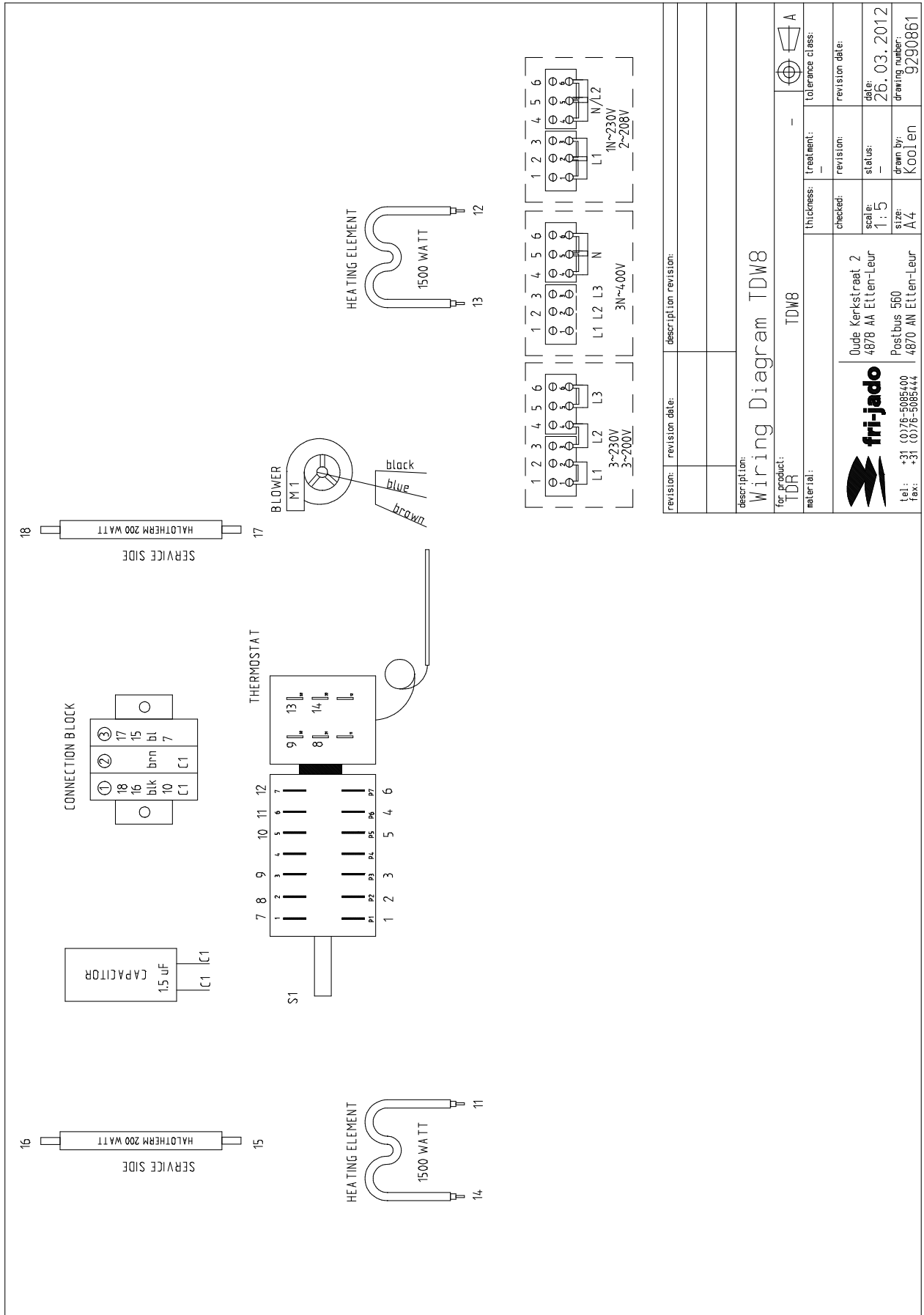
CIRCUIT DIAGRAM TDW 7 M, SINGLE AND STACKED UNIT



revision	revision date	description revision	thickness	treatment	reference class
description: Circuit Diagram TDW8					
for project: TDR					
material: TDW8					
checked: 			checked: 		
scale: 1: 1			scale: 1: 1		
date: 08.07.2011			date: 08.07.2011		
drawing number: 9290851			drawing number: 9290851		
drawn by: KOOL EN			drawn by: KOOL EN		


 (tel. +31 (0)76-5085400
 fax: +31 (0)76-5085444)

WIRING DIAGRAM TDW 7 M, SINGLE AND STACKED UNIT



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For technical support call: 877 374-5236
For parts call: 877 392-7851

