

SERVICE MANUAL

TDR 7 P GAS FIRED ROTISSERIE OVEN

MODELS

TDR 7 p gas
TDR 7+7 p gas

Gas types:
Natural Gas G20/25
Propane G31
(Butane G30)



Model TDR 7 P Gas



Model TDR 7+7 P Gas

- 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 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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Versions		
Version	Issue date dd/mm/yy	Remarks
10/2013	01/10/2013	First release.
01/2014	01/01/2014	Added reset and small textual changes. Exploded views and electric diagrams changed.
03/2014	01/03/2014	Working of rotisserie changed. Error 55 explanation. Small other changes.
11/2014	01/11/2014	New errors, various updates.
01/2015	01/01/2015	Working adjusted. Gas block part numbers adjusted. Small other changes.
01 2022	21/01/2022	Extended exploded views with new Power & I/O board and electrical diagrams.

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This manual covers the TDR 7 P gas fired rotisserie ovens suitable for Natural gas G 20/25 and Propane G 31.

- TDR 7 – Oven with 8 spits (32 to 40 chickens) or 7 baskets (28 chickens).
- TDR 7+7 – Oven with 16 spits (364 to 80 chickens) or 14 baskets (56 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			
Model	TDR P Gas	TDR P Gas stacked	
Dimensions approx.			
- Width	995 mm / 39 ½”	1135 mm / 44 ½”	
- Depth	830 mm / 32 ½”	830 mm / 32 ½”	
- Height	1085 mm / 42 ½”	2095 mm / 82 ½”	
Weight			
- Gross	236 kg / 537 lbs	482 kg / 1080 lbs	
- Net	198 kg / 459 lbs	412 kg / 926 lbs	
Capacity	48 kg / 106 lbs	96 kg / 212 lbs	
Maximum ambient temperature	95 °F		
Sound pressure	< 70 dB(A)		
Electrical installation			
- Voltage	1~ 115 V		
- Frequency	50/60 Hz		
- Required power	345 W	690 W	
- Max. nom. current	3 A	6 A	
Plug	nema 5-15P		
Breaker	1x 15 A	1x 15 A	
Power cable approx.	75 inch		
Gas system	Refer to the data plate		
Gas power rating (max.)	55.000 BTU	110.000 BTU	
Gas connection	½ inch NPT		

GAS Specification	Consumption	Gas pressure	
		Minimal	Maximal
Natural Gas	1.40 m3/hr	7 inch w.c (17 mbar)	14 inch w.c. (35 mbar)
Propane / LP Gas	0.50 m3/hr	6 inch w.c (15 mbar)	14 inch w.c (35 mbar)

w.c. = water column

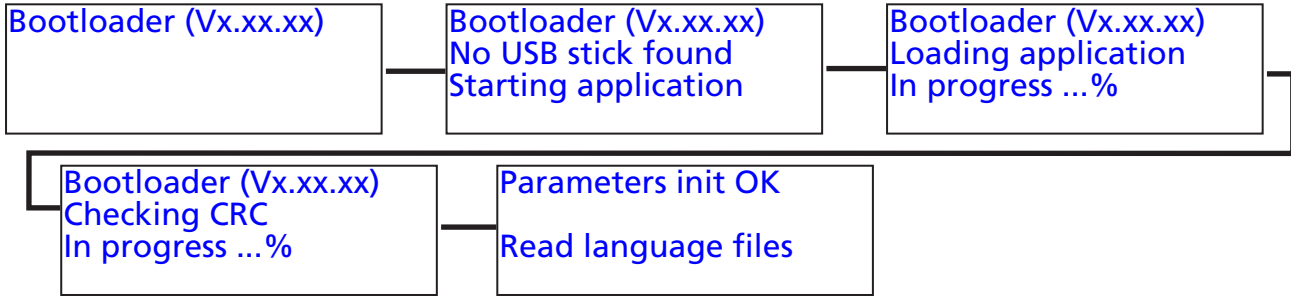
Consumption is mentioned per unit at sea level, 1013 mbar, 20°C

Tools

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

CONNECTING MAINS POWER

Messages on screen when connecting mains power.
Note the bootloader version.



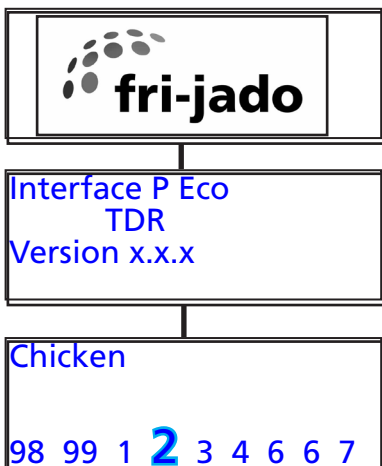
OVERVIEW OF CONTROL PANEL

Functional keys are lit. In this case only the On / Off key. (mains is connected)

Key	Function
ON / OFF	Switching the unit on / off (3 sec)
UNDO	Go back to previous menu
LIST	Recipe / Programming modus
FORWARD	One step ahead in choice / setting
OK	Acknowledge a function or change
BACK	One step back in choice / setting
ROTOR	Switching the rotor ON

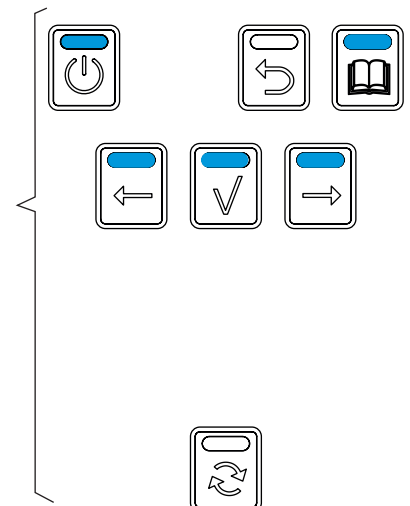
SWITCHING ON

Push to switch on. (push 3 seconds to switch off)
The following messages appear.
Note the software version (firmware)



Rotisserie in "ON" position.

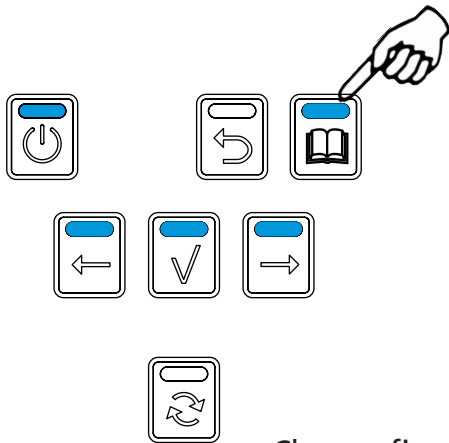
The keys are only illuminated when more than 2 programs are stored.



ENTERING THE MANAGER OR SERVICE MENU

Entering the manager menu

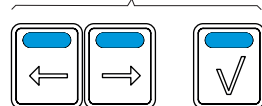
Chicken
98 99 1 **2** 3 4 6 6 7



default 1 1 1 1

Choose figure and confirm (4x)

Pin 0 . . .
Enter your user code



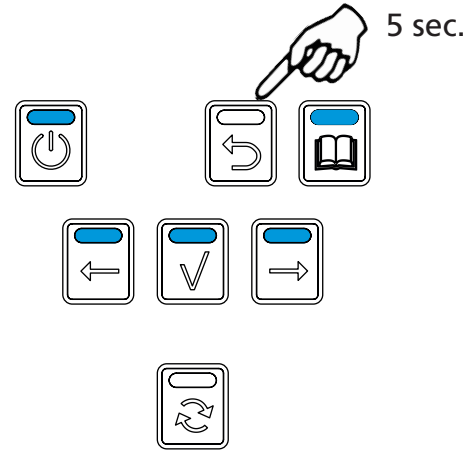
The following options appear on the bottom line.

Usb - Programming- Parameters- Change pin- Clock- Transfer- Version.

Select an option with and confirm with

Entering the service menu

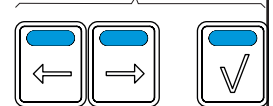
Chicken
98 99 1 **2** 3 4 6 6 7



4 8 7 8

Choose figure and confirm (4x)

Pin 0 . . .
Enter your service code



The following options appear on the bottom line.

Usb - Function- Parameters- Clock- Counter- Operation- User pin- Fault- Test Prog- Set Demo On.

Select an option with and confirm with

Options in the manager menu

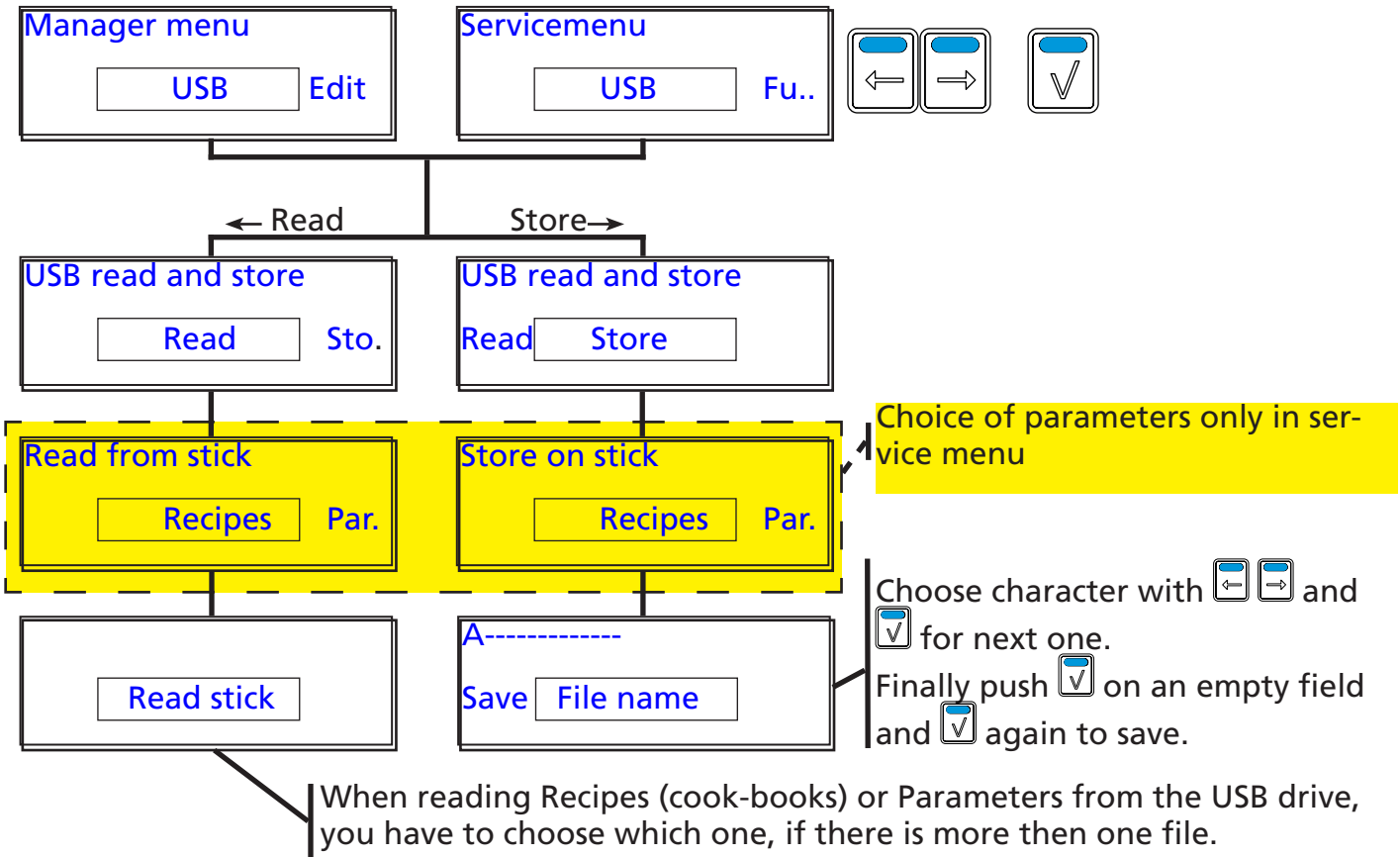
Option	Description
USB	Store cook-books to USB, or Read cook-books from USB
Programming	Make, edit or delete cooking programs
Parameters	Edit manager parameters. (service parameters include these as well) See manager parameters below.
Change pin	Pin 0000 gives free access. Default Pin code is 1111. Only active if in the service menu, the <user Pin in use> parameter is set to <Y>
Clock	Set time / date and format time / date (12 / 24 clock)
Transfer	Stores error log and parameter settings on 2 separate files on USB
Version	Shows the software version

Options in the service menu

Option	Description
USB	Store cook-books and / or parameters to USB. Read cook-books and / or parameters from USB.
Function	Function test of inputs and outputs, including the keypad
Parameters	Edit manager parameters.
Clock	Set time / date and format time / date (12 / 24 clock)
Counter	In this menu you can view the total working hours of the fan, gearbox and heaters. After replacing one of these parts you have to set the counter on zero again.
Operation	In this menu you can view the total hours of operation of the rotisserie. This value is not resettable.
User pin	In this menu you can view the current set pincode. This code can only be viewed and not changed.
Fault	In this menu you can view all occurred errors and, if applied, in what cooking program.
Test prog	In this menu you can start a test program. This fixed program has one cooking step of 250°C for 20 minutes and a holding program of 85°C and 10 minutes.
Set demo on	In this menu you can set the machine into a demonstration mode. In demonstration mode the machine will not turn the heating elements on and will simulate the machine heating.

THE USB OPTION READ AND STORE (COOK BOOKS OR PARAMETERS)

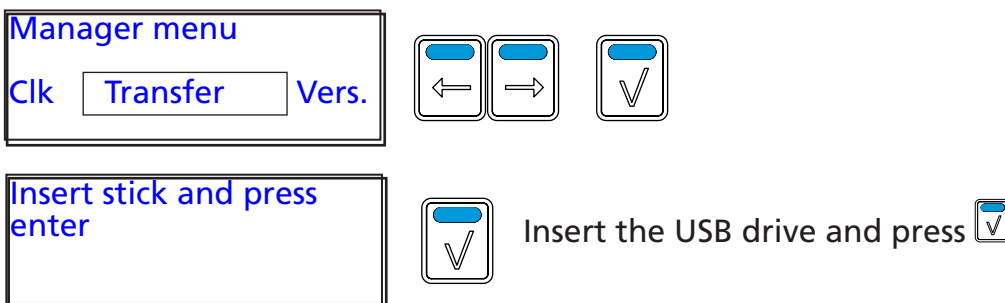
Enter the manager or service menu as described before.
 Also see chapter "Files on USB drive"



Cook-books are stored or red from the folder "PROGRAMS" .
 Parameters are stored or red from the folder "PARAMETERS".
 The files are .csv files

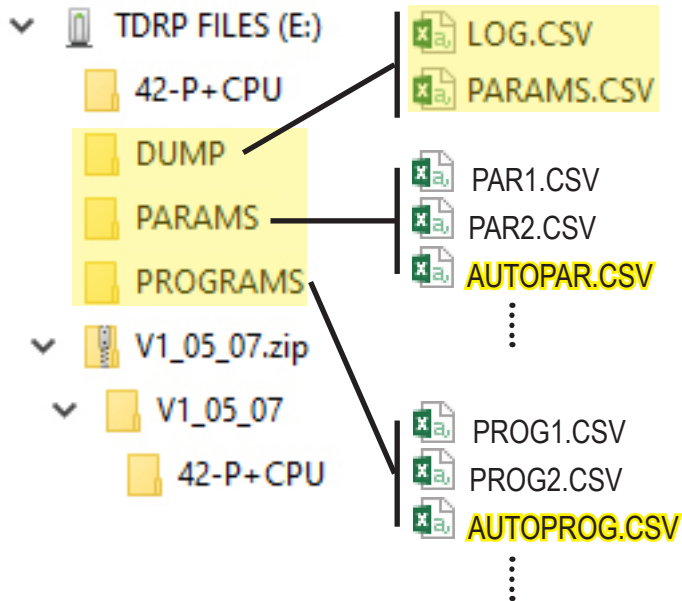
THE USB OPTION TRANSFER (ERROR LOG AND PARAMETER SETTINGS)

Enter the manager menu as described before.
 Also see chapter "Files on USB drive"



2 files are being stored in the folder "DUMP".
 These are "log.csv" and "params.csv"

FILES ON THE USB DRIVE (STRICT RULES)



These files can be found on the USB drive regarding the TDRp.

The highlighted folders and files are fixed and made by the TDRp controller. The other files can be named by yourself, but there are strict rules.

Note that all files are .csv files and can be read or modified with applications like excell.

The parameter files in "DUMP" and "PARAMS" contain the complete parameter list, including the service parameters.

The files in "PROGRAMS" contain a list of recipes.

Automatic uploading of parameters and programs.

Be sure that the parameters and programs are copied in files with the names "autopar" or "autoprog" on a USB drive.

Put the USB drive in the socket and switch ON the rotisserie. Wait for the message to take out the USB drive.

Strict rules for folders and files on the USB drive.

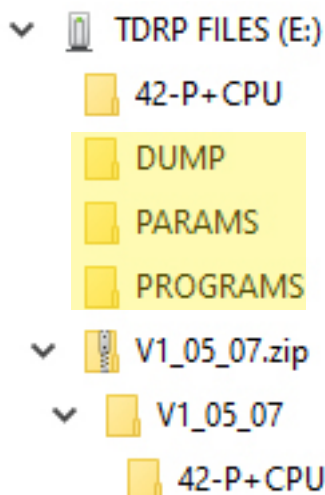
- Own made programs have to be put in the folder "PROGRAMS".
- Customized parameter lists have to be put in the folder "PARAMS".
- The name of a file may not exist of more than 8 characters and can't have a space between the characters.
- It is not allowed to have an open line in the "excell" recipe list.
- All file names must have the extension ".csv".

When the message "files not found" is indicated on the display, one of the above might not be in order.

Also malfunction of the USBdrive can occur.

A software update might help too.

UPDATING SOFTWARE TDRP



Updating the software can be done:

- When certain features come available
- When a bug is fixed.
- When the controller is acting strange or crashed

The zip file with the latest software can be found on the Fri-Jado website.

At the moment of writing, this is version V1_05_07.

It is not necessary to place this zip file on the USB drive.

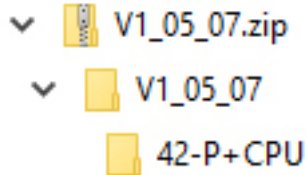
The folder 42-P+CPU however must be copied or moved directly on the USB stick. Not in a folder deeper!

See update procedure on next page

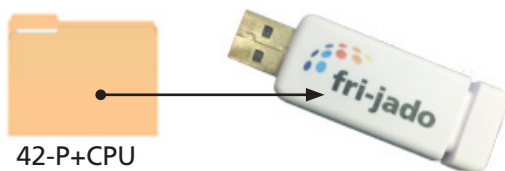
Preparing the software (firmware)

The software comes in a .zip file. The name corresponds with the version of the software. For example: *V1_05_07.zip*.

1. Extract the zip file

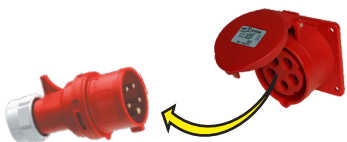


2. Copy or move the folder "42-P+CPU" to the USB drive.



Updating the software (firmware)

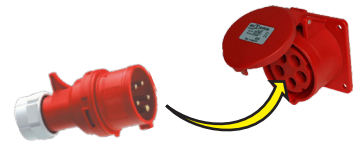
1. Disconnect the mains supply



2. Connect the USB drive.



3. Connect the mains supply



4. The following messages appear

Bootloader version V1.01.02

-USB stick found
starting upgrade

-Checking CRC
In progress

-Copying file
-Loading application

-Checking CRC

-Please remove USB stick
to start application

5. Disconnect the USB drive.



MANAGER AND SERVICE PARAMETERS

Entering the manager parameters

Chicken
98 99 1 2 3 4 6 6 7

default 1 1 1 1

Pin 0 . . .
Enter your user code

Manager menu
Edit Parameters Pin

Choose figure and confirm (4x)

Entering the service parameters

Chicken
98 99 1 2 3 4 6 6 7

5 sec.

4 8 7 8

Pin 0 . . .
Enter your service code

Servicemenu
Fu.. Parameters Ci..

Choose figure and confirm (4x)

Preheat allowed: NO
Cha. Next Par. Prev

- Use and <Next Par.> to scroll through the parameter list.
- Push for the <Change> option and confirm .
- Use and to change and jump back to <Next Par.>
- Use to scroll to <Save>, confirm with and confirm again with .
- Use to step back (undo) if applicable.

Note that the manager menu only shows the green fields from the list below.

DESCRIPTION OF PARAMETERS

In the manager menu, only the green parameters are visible

Parameter	Description
Preheat allowed	Enables or disables a preheat step prior to the cooking program (steps) Yes > Preheat is allowed. In the cooking program you can still choose whether or not to preheat. No > Preheat is disabled.
Preheat temp	This is the default preheat temperature setting. Can be changed in the cooking program.
Holding allowed	Enables or disables a warm hold step at the end of the cooking program. If "no" is selected holding is not possible, even if there is a program with a holding temp.
Holding temp	This is the default holding temperature setting. Can be changed in the cooking program.
*Cook correction Cook corr. option	Enables or disables the cook correction function. See description below.
Cook cor. fact.	
* Eco function Ecocook option	Enables or disables the Eco mode. The heating is being switch of a few minutes before and the accumulated heat of the cooking cavity will be used to finish the product. The cooking time will be a few minutes longer.
Ecocook var.	This parameter allows to set the variable of the ecocook. Var. adjustable from 1 to 9. This is the percentage of the total cooking time.
Language	Choose of available language.
Big digits	Choice for big digits on the display during preheat, cooking and hold cycle.
Sound preheat T1	Choice of sound at the end of the preheat step. You can choose 3 different sounds (T1-T2-T3) and the level of the sound (up to 4 white blocks) or no sound (no white block).
Sound step T2	Choice of sound at the end of the first grilling step. You can choose 3 different sounds (T1-T2-T3) and the level of the sound (up to 4 white blocks) or no sound (no white block).
Sound done T2	Choice of sound at the end of the grilling step(s). You can choose 3 different sounds (T1-T2-T3) and the level of the sound (up to 4 white blocks) or no sound (no white block).
Temp. unit:	Choice of Celcius (°C) or Fahrenheit (°F).
Boost allowed	Possibility to add extra cooking time in minutes at the end of the cooking cycle.
User PIN in use	N → No pin code will be asked for the manager menu Y → Unless changed, the default pincode 1111 will be asked. 0000 will still be free access

1 Only visible when "Cook Corr. option" in Service Menu is set on "yes"

2 Only visible when "Ecocook option" in Service Menu is set on "yes"

Parameter	Description
Lights out	Choice of lighting during opening of the door in standby position. Y → The lights will go on for 20 seconds.
key beep	choice for beep or no beep, with key operation.
Temp. offset	Temperature offset of PT1000 sensor. Example: at a set point of 180°C (355°F) and an offset of -20°C (-35°F) , the oven cavity will be controlled on 200°C (390°F)
Key sens	Adjustment of the sensitivity of the keys. Sensitivity is highest on value 1 and lowest on 9.
Temp. grad.	This parameter allows the setting of the minimal temperature rise, in °C / 2minutes, of the PT sensor during the preheat, cooking or hold step. This parameter is used for the error 55 test. In this test the measuring only starts 5 minutes after beginning of a heating step. Duration of the test is 5 periods of 2 minutes. Measuring stops at 150°C/302°F or when temp. in the cabinet is < 30°C than the set temperature. When the temperature rise is lower than 0.5°C per 2 minutes during 5 consecutive periods, an "error 55" will be indicated and the machine switches off.
Second display	Setting of the display on customer side. 0 = Second display has only the rotor function. 1 = Second display has only limited functions like viewing during cooking proces. 2 = As 1 + possibility of selection of programs and starting. 3 = Not in use.
Thermistor	Enables or disables the detection of the thermistor in the blower . See error 66.
Hood check	Enables detection of feedback signals from the hood, if applicable. Not in EUR versions. See error 91 and 92

THE AUTOMATIC COOK CORRECTION

The automatic cook correction facility will automatically add or deduct time to the programmed cooking time in order to have constant cooking quality.

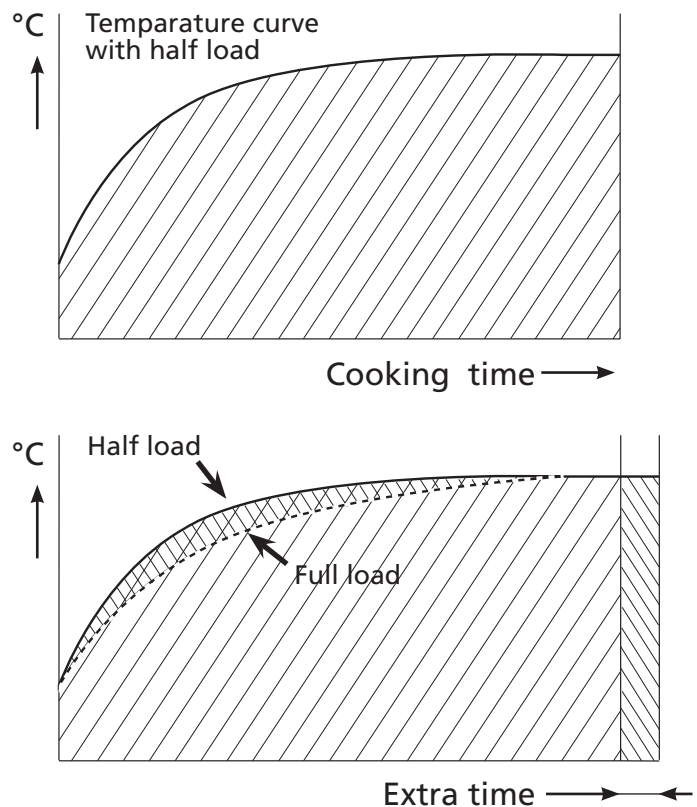
After programming a new program, the first cooking process will be the "learning" process. It is recommended to do the first cook with a half load.

The program calculates the surface from the diagram below the curved line. (temperature * time). The result is the so called heat number. This heat number is stored into the cooking program.

All further cooking programs will try to get the same heat number.

The second diagram shows an example with full load. It takes more time for the unit to reach the programmed cooking temperature. See dashed line. The surface above the dashed line represents the missing part of the heat number. The cook correction will put this missing part behind the normal cooking time. Therefore extra time is added in order to reach the desired heat number.

It is also possible that time is deducted in case a smaller load has been put into the oven.



Time will be added in case of:

- A bigger load.
- A colder load. (straight from the freezer)
- A lower mains voltage.
- Somebody opened the door.

Time will be deducted in case of:

- A smaller load.
- A warmer load. (defrosted)
- Higher mains voltage.

Note that:

In case the time or temperature will be changed in the cooking program, the heat number will be adapted with this amount.

The heat number is stored in the cooking program. In case such a program is copied with FIPS (see additional software), the heat number goes with it.

It is possible that in case the program has changed a lot, the cook correction is not able to perform well anymore. In that case the program has to be deleted and reprogrammed with the good parameters.

It is possible to disable this auto cook correction feature in the service parameters. See "parameter listings" -> "auto correct."

DEFAULT PARAMETERS USA

Level 1	Level 2	Default	Possibilities
Information		1.05.2007	software version
Manager		1111	
	Preheat allowed	yes	yes - no
	Preheat temp	425	50 - 250
	Holding allowed	no	yes - no
	Holding temp	160	50 - 250
	Cook Correction 1	yes	yes - no
	Eco function 2	no	yes - no
	Language	English	"English - Nederlands - Deutsch - Francais -Espanol - Russian"
	Big Digits	yes	yes - no
	Sound preheat	T1, ■■■■	T1 - T2 - T3
	Sound step	T2, ■■■	T1 - T2 - T3
	Sound done	T3, ■■■■	T1 - T2 - T3
Service		4878	
	Preheat allowed	yes	yes - no
	Preheat temp	425	50 - 250
	Holding allowed	no	yes - no
	Holding temp	160	50 - 250
	Cook corr. Option ¹	yes	yes - no
	Cook corr. factor ²	3	1 - 6
	Ecocook option	no	yes - no
	Ecocook var	6	1 - 9
	Language	English	"English - Nederlands - Deutsch - Francais - Espanol - Russian"
	Big Digits	yes	yes - no
	Sound preheat	T1, ■■■■	T1 - T2 - T3
	Sound step	T2, ■■■	T1 - T2 - T3
	Sound done	T3, ■■■■	T1 - T2 - T3
	Temp unit	°F	°C - °F
	Boost allowed	yes	yes - no
	User pin in use	yes	yes - no
	Lights out	yes	yes - no
	Key beep	yes	yes - no
	Temp offset	0	-50 - +50°C or -100+100°F
	Key sense	7	1 - 11
	Temp grad	3	"0 - 19 0 = disable error 55"
	Second Display	0	0-1-2-3
	Thermistor ³	no	yes - no TDR gas = NO
	Hood Check	no	yes - no

1 Only visible when "Cook Corr. option" in Service Menu is set on "yes"

2 Only visible when "Ecocook option" in Service Menu is set on "yes"

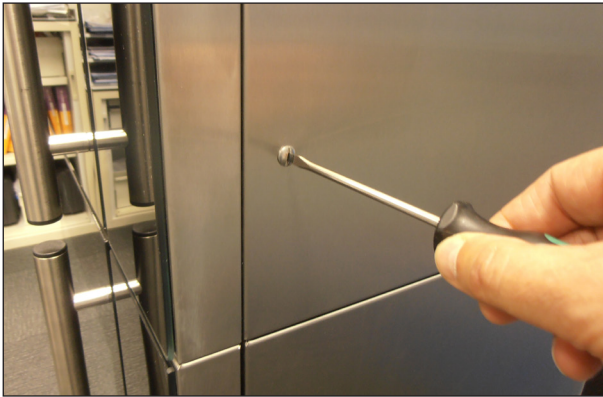
3 May be put on yes in case serial number higher than 100067526. **NOT in case of TDR gas!**

EMPTY PAGE

REMOVAL AND REPLACEMENT OF PARTS FOR THE TDR 7

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

RIGHT OR LEFT SIDE PANEL



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

TOP COVER



1. Remove the right 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.

OPERATING PANEL (GENERAL)



1. Remove the right side panel according prior procedures
2. Remove the bolt, nut and ring on the top side on the backside of the operating panel.
3. Pull the panel away from the top side.
4. Remove the flatcables and earth cable from the CPU board on the backside.
5. Remove the panel.
6. Reverse the procedure to install.

TUMBLE SWITCH RESET



1. Remove the right side panel and operating panel according to prior procedures.
2. Remove the wiring.
3. Remove the switch by pushing the clamps, on the inside, with a screw driver.
4. Reverse the procedure to install.

ELECTRIC PANEL



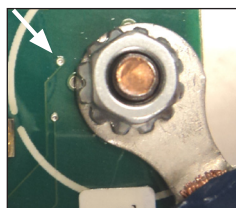
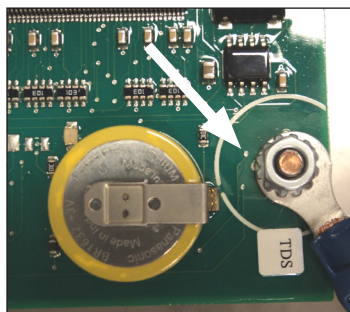
1. Remove the right side panel and operating panel according to prior procedures.
2. Disconnect the wiring.
3. Remove on the front side the 2 screws and on the inside the nut that secures the panel.
4. Remove on the inside bottom of the electric panel the bolt and nuts.
5. Slide the electric panel backwards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

OPERATING PANEL, GLASS + BACKPLATE + KEYPAD



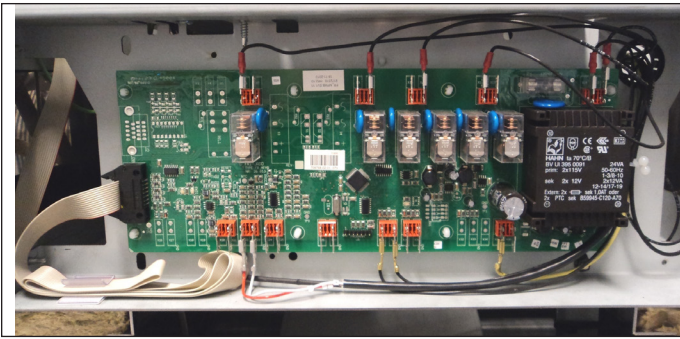
1. Remove the right hand panel according to prior procedure.
2. Remove the operating panel according to prior procedure.
3. Remove the USB connection, the reset switch and the red indication light.
4. Remove the 4 nuts and rings on the CPU board and remove the board.
5. Reverse the procedure to install.

Note 1: For connection flat cable of the keypads see CPU board on page 28.



Note 2: For older units with earth wire in right hand bottom corner. Take care that the ring terminal doesn't make contact with the solder point (see arrow). Otherwise the illumination of the display and keys can be out.

POWER AND I/O BOARD



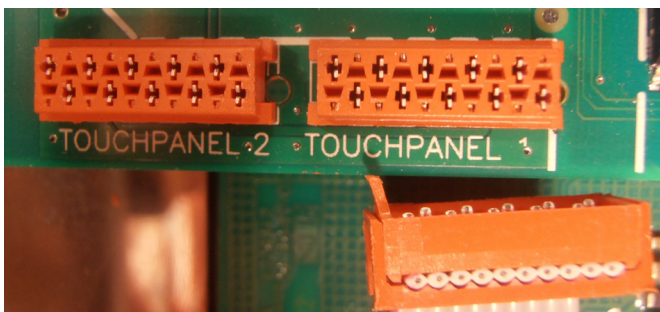
1. Remove the right side panel according prior procedure.
2. Disconnect the wiring and flatcable on the board.
3. Remove the board from the clips by pinching the clips.
4. Reverse the procedure to install.

CPU BOARD



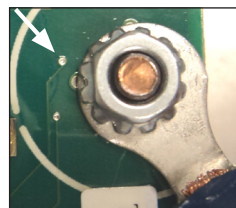
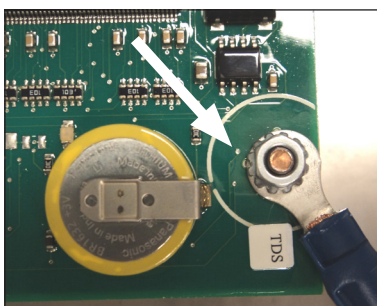
Before changing the CPU board and display be sure to download (with a USB stick) or write down the grilling programs and the parameters.

1. Remove the right side panel according prior procedure.
2. Remove the operating panel according prior procedure.
3. Remove the 4 nuts and rings on the CPU board and remove the board.
4. Reverse the procedure to install.
5. Read the grilling programs and parameters from the USB stick to the CPU board.



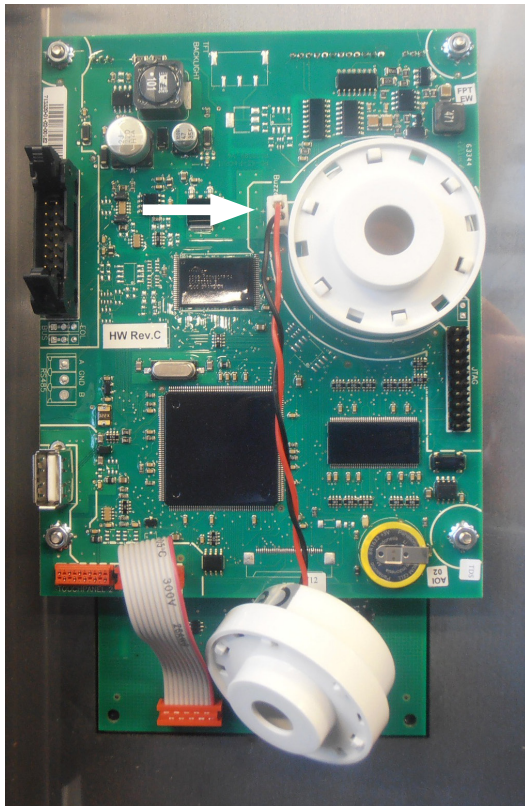
Note 1: Flatcable keypad must be connected to connector "Touchpanel 1" on CPU board.

Note 2: "Touchpanel 2" is flatcable connection for the rotor switch keypad on customer side.



Note 3: For older units with earth wire in right hand bottom corner. Take care that the ring terminal doesn't make contact with with the solder point (see arrow). Otherwise the illumination of the display and keys can be out.

REPLACING OF BROKEN BUZZER



1. Remove the right side panel according prior procedure.
2. Remove the operating panel according prior procedure.
3. Stick connector of new buzzer in plug next to the existing broken buzzer (see white arrow).
4. Reverse the procedure to install.

Note: *buzzer can dangle loosely without any problem.*

KEYPAD

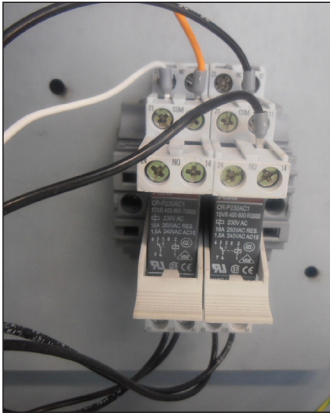


1. Remove the right side panel, the operating panel and the CPU board according prior procedures.
2. Remove the keypad and degrease the surface of the glass.
3. Glue the new keypad on its place with the red connectors on the bottom side.
4. Reverse the procedure to install.

Note 1: *For connection flatcable of the key pads see CPU board on page 28.*

Note 2: *When the keypad is on the panel on customer side you need a long extended flatcable for connection to the CPU board.*

RELAY



1. Remove the right side panel according prior procedure.
2. Loosen the clamp handle.
3. Gently remove the relay.
4. Reverse the procedure to install.

Note: When placing a relay be sure the connecting pins are in place.

DOOR SWITCH



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

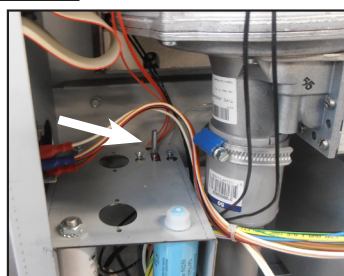
Note: The contact pin of the switch must run free through the chassis.

SAFETY THERMOSTAT

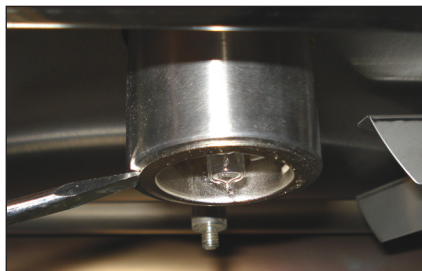
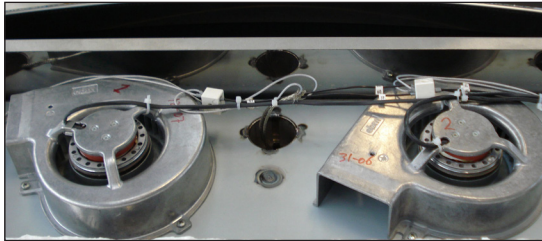


1. Remove the rotor and the right side panel according prior procedure.
2. Remove the bolts that secure the air guide plate and remove this plate. Lower the plate in vertical position and lift it out of the hinge pins.
3. Remove the thermostat-probe from the clip in the oven and guide it outside through the opening in the side wall.
4. Disconnect the wiring on the thermostat.
5. Remove the screws on the electric panel that secure the thermostat and remove the thermostat.
6. Reverse the procedure to install.

Note: Set the new thermostat to its maximum position by turning it clockwise (320°C/608°F).

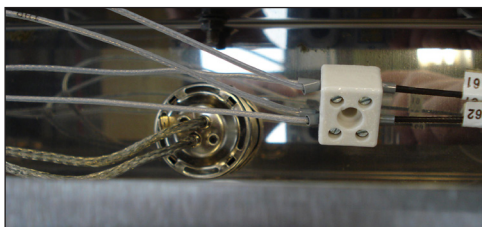


HALOGEN LAMP HOLDER (CUSTOMER SIDE)



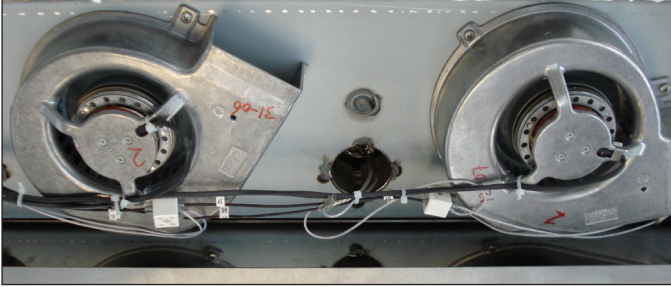
1. Remove the top cover according to prior procedure.
2. Remove the wiring of the lamp on the connector.
3. Remove the cap nuts that secure the air suction plate and remove this plate.
4. Remove the glass and lamp from the lamp holder. Turning direction of glass in counter clockwise.
5. Remove the holder. You have to deform the holder to take it out.
6. Insert a new holder and click this in.
7. Reverse the procedure to install.

HALOGEN LAMP HOLDER (OPERATOR SIDE)

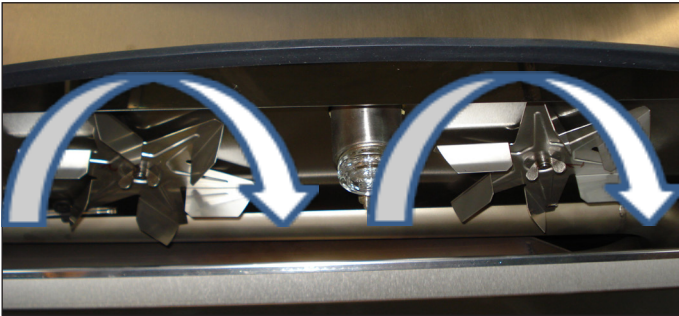
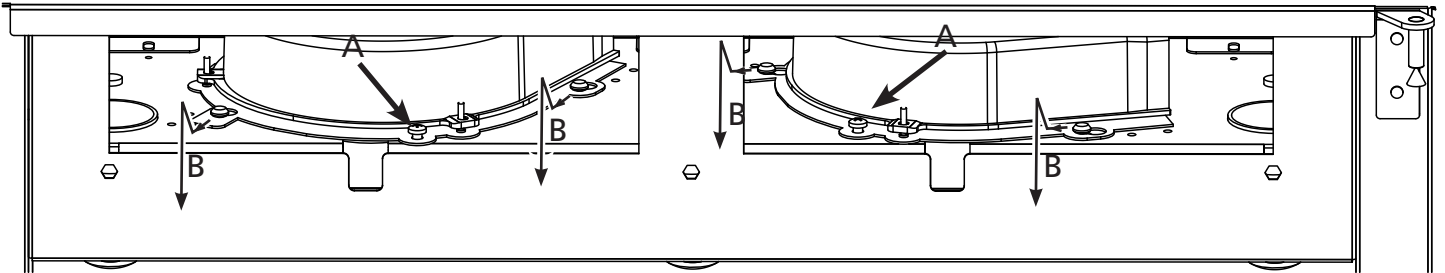


1. Remove the top cover according to prior procedure.
2. Remove the wiring of the lamp on the connector.
3. Remove the glass and lamp from the lamp holder. Turning direction of glass is counter clockwise.
4. Remove the holder. You have to deform the holder to take it out.
5. Insert a new holder and click this in.
6. Reverse the procedure to install.

BLOWER MOTOR



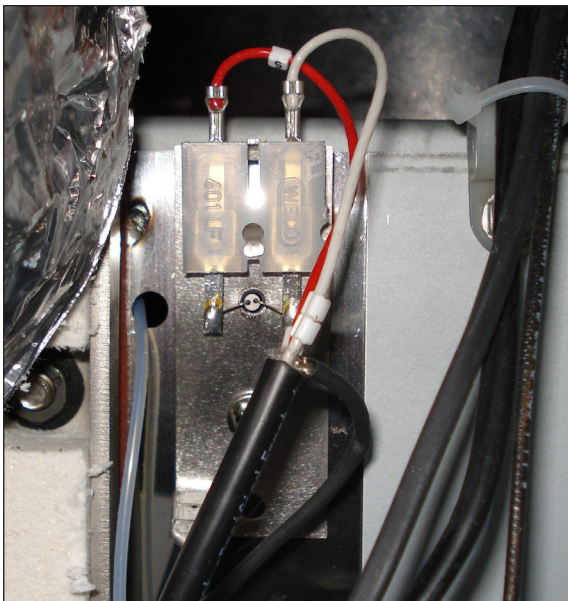
1. Remove the right side panel, the top cover and the air suction plate according prior procedures.
2. Remove the wing nut on the fan blade and remove fan blade. (Left handed threads).
3. Disconnect wiring of the motor.
4. Remove the locking screws at "A".



5. Slide forward, lift and take out the assembly. See "B"
6. Remove the screws that secure the motor to the mounting plate and remove the motor.
7. Reverse the procedure to install.

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

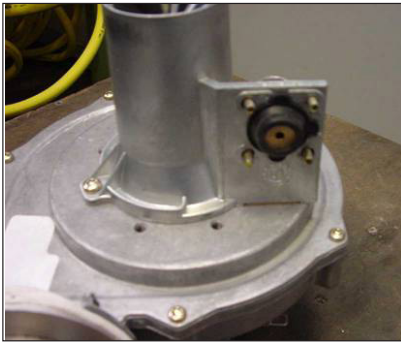
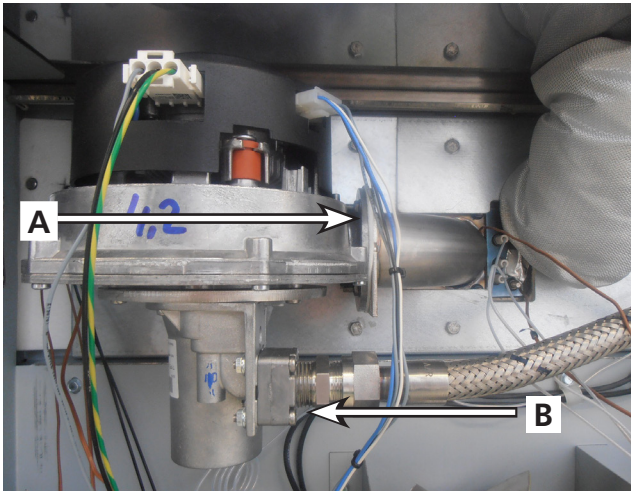
PT 1000 SENSOR



1. Remove the right side panel according 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.

GAS MIXTURE BLOWER

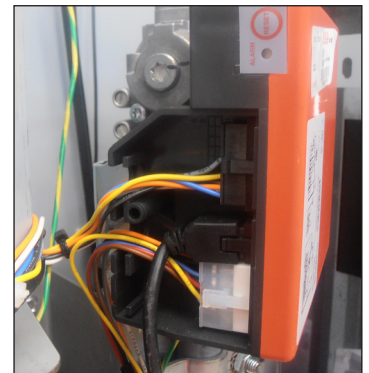
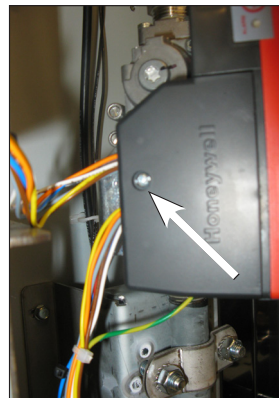


1. Remove the right side panel and small top cover plate according to prior procedures.
2. Remove the wiring from the top of the gas mixture blower.
3. Remove the silencer.
4. Remove the 4 nuts from the air inlet (A) and the 4 bolts with nuts from the gas inlet (B) and remove the gas mixture blower.
5. Remove the screws that secure the venturi to the blower and remove the blower.
6. Reverse the procedure to install.

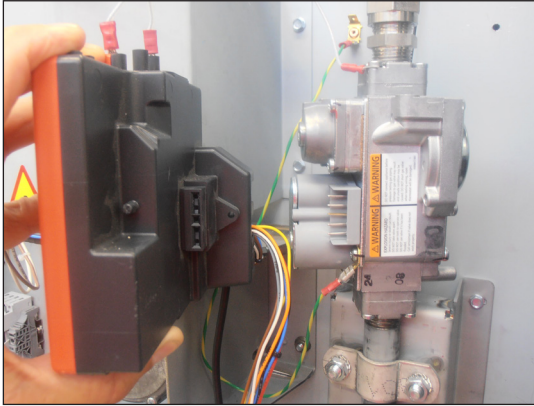
GAS BURNER SAFETY CONTROL



1. Remove the right side panel according to prior procedure.
2. Remove the screw that secures the burner control on the gas block and remove the burner control by sliding it to the left.
3. Remove the screw that secures the plastic cover (see arrow) and remove this cover.
4. Remove the wiring from the burner control.
5. Reverse the procedure to install.

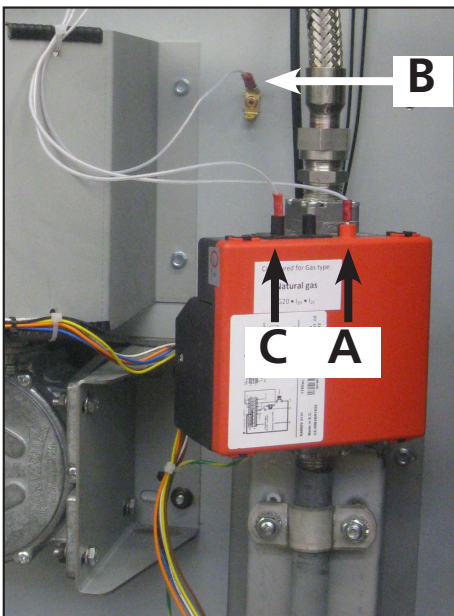
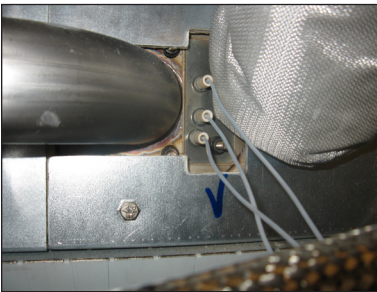


GAS CONTROL BLOCK

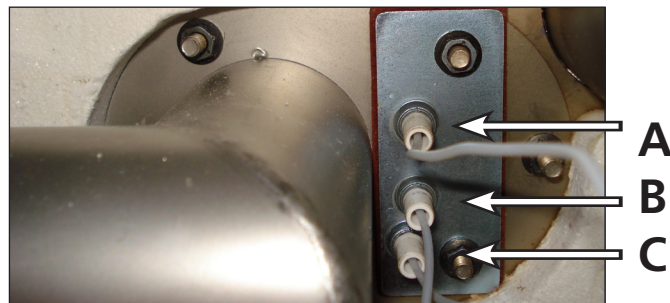


1. Remove the right side panel and the gas burner safety control according prior procedures.
2. Remove the nuts from the pipe clamp to create some clearance.
3. Remove the 4 screws on the top and bottom flange from the gas control block.
4. Remove the wiring.
5. Reverse the procedure to install.

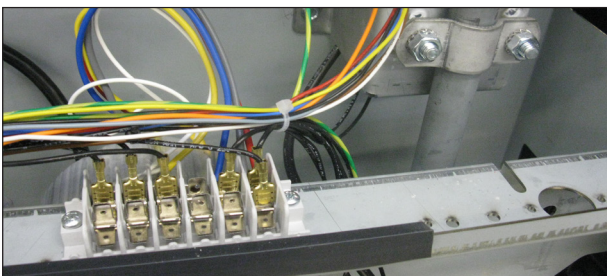
IGNITION/IONIZATION SET



1. Remove the right side panel and small top cover plate according prior procedures.
2. Remove the insulation around the exhaust pipe.
3. Remove the wiring from the set on the gas burner safety control C and A and from the earthing B.
4. Remove the nut that secure the set and remove the set. Replace the gasket.
5. Reverse the procedure to install.
6. Connect A to A, B to B and C to C. The faston for A is 4.8 mm or 3/16". The faston for C is 2.8 mm or 7/64".

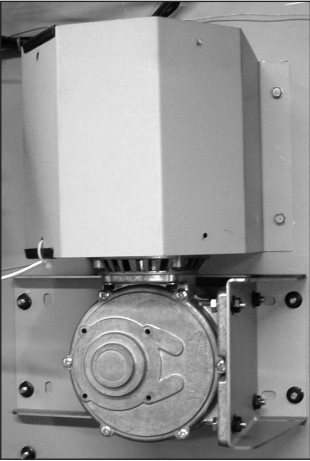


RING CORE TRANSFORMER



1. Remove the right side panel according prior procedure.
2. Remove the wiring from the transformer.
3. Remove the screw and nut that secure the transformer and remove the transformer.
4. Reverse the procedure to install.

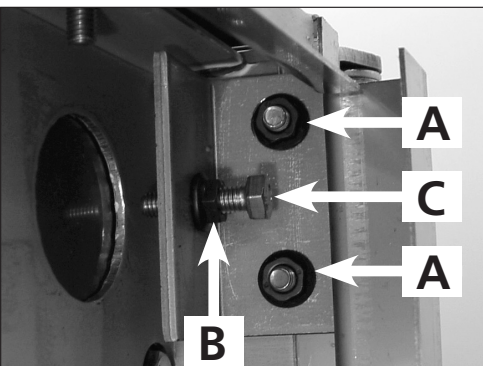
DRIVE MOTOR



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

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

DOOR ADJUSTMENT (LEFT SIDE)



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

DOOR GLASS INSIDE



1. 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.

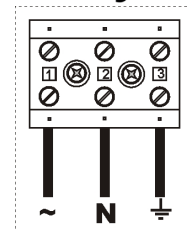
Also remove the top hinge.

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*

WORKING OF THE GAS FIRED ROTISSERIE

After plugging the unit in always first check the proper polarity for good ignition. After starting the rotisserie up with the on/off key the reset will light up. First press this switch for 2 seconds till the light is out. Also the gas mixture blower will turn in very low speed regulated by the burner control. The continuous power on the gas mixture blower is activated by contact X13 on the Power and I/O board which activates relay K2.



After selection of a program and pressing the OK key the PT 1000 temperature sensor measures a temperature below the set temperature and this will activate relay K1 by contact X9 on the Power and I/O board. Relay K1 activates the burner control sequence. This sequence is as follows:

- Activating of low speed of the gas mixture blower to create a rich gas/air mixture for easy and fast ignition.
- Activating of spark plug (max. 5 seconds).
- Activating/opening of the gas valve.
- Activating of the ionisation (measuring of a low Amperage (~35mA) between ionisation pin and burner bed).
- Activating the high speed of the gas mixture blower when the gas is burning and the ionisation measuring is OK.

Note: *If the speed of the gas mixture blower is not within 5% of the adjusted speed in the burner control there will be no ignition and the red indication light on the reset switch will light up. In this case the blower has to be replaced.*

The PT 1000 temperature sensor now takes care of the temperature regulation of the oven, by switching the burner control on and off.

If there is no ignition/burning of the gas/air mixture after 5 seconds of ignition there will be a pause of 5 seconds and after this the ignition sequence will start up for maximum 2 times. If there is still no burning of the gas the burner control will close the gas valve and activates the red indication lamp on the reset switch. By pressing the rest switch for 2 seconds the sequence will start up again.

After ending of a grilling process the gas mixture blower will keep on turning for 9 minutes on an adjusted speed, regulated by the burner control to ensure that there is no gas left in the heat exchanger and is clean. After this 9 minutes the gas mixture blower will turn continuous in very low speed.

After intermediate stopping (door open) of the program or when the program is stopped the gas mixture blower will run also for 9 minutes.

Note: *Gas supply pressure should be between 15 and 50 mbar, depending on the gas type. See table on next page.*

Pressure over 60 mbar will damage the gas block. You can check the pressure on the gas block, see page 42. Valves on the gas block can be checked by holding your hand on it, or by holding a steel object on the coil. This will be magnetic after switching in.

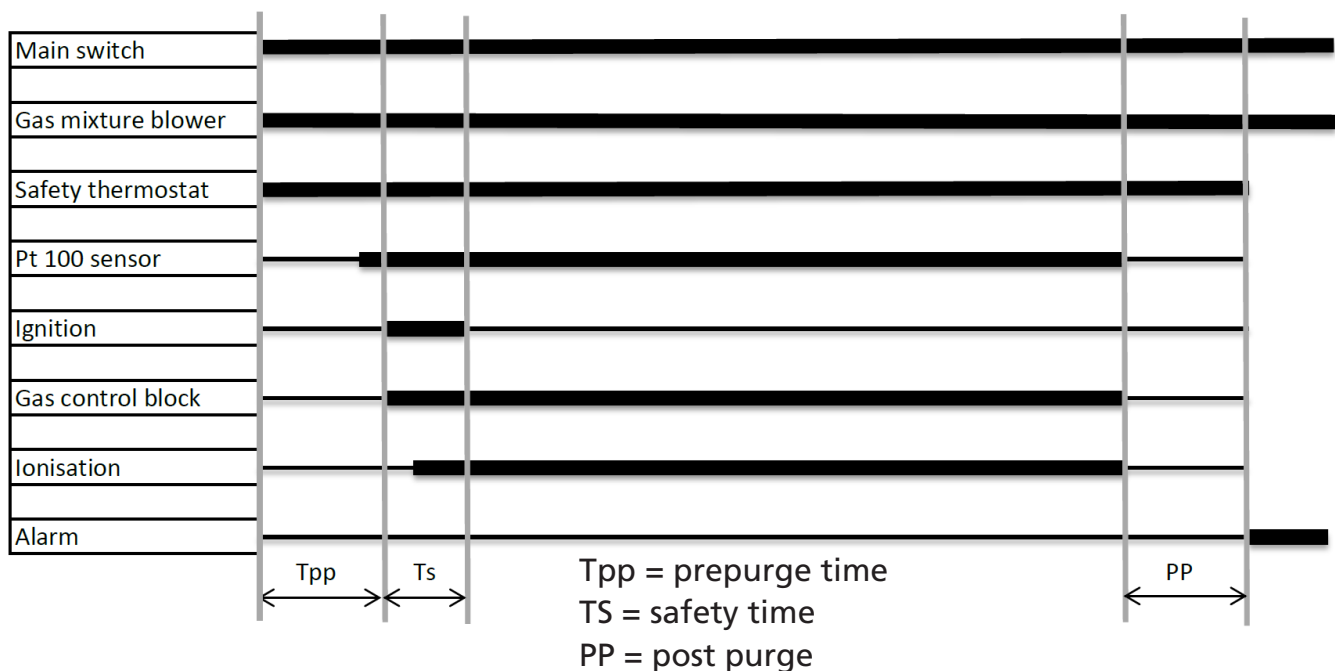
GAS TECHNICAL DATA

Gas type	Inlet pressure mbar - inch wc - PSI	min pressure (Qn-Hi) max pressure (Qn-Hi) mbar - inch wc - PSI	Consumption kg - cfm - LBS	Consumption m3/h	Specific density kg/m3 - lb/cf
G20	20 - 8 - 0,3	17 - 7 - 0,25 25 - 10 - 0,36	1,0 - 0,80 - 2.2	1,37	0,718 - 0,044
G31	37 - 15 - 0,54	25 - 10 - 0,36 55 - 22 - 0,36	1,0 - 0,29 - 2.2	0,49	2,011 - 0,128

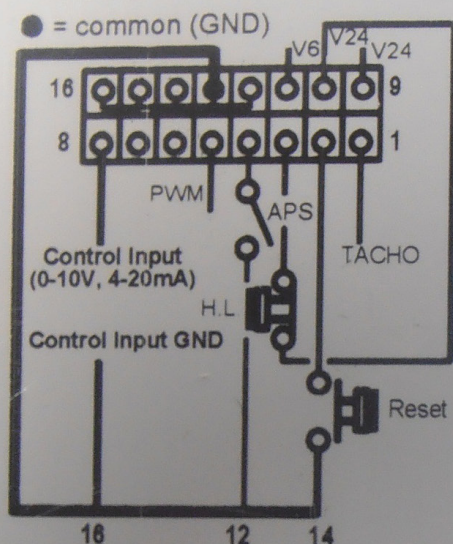
Gas type	Orifice mm - inch	Air inlet mm - inch	Power KW - BTU
G20	4,2 - 1/6	18,1 - 17/24	14.7 - 50.000
G31	3,2 - 1/8	18,1 - 17/24	14.7 - 50.000

Qn = power (inlet)
 Hi = inferior caloric value
 LPG should contain at
 least 50% Propane!

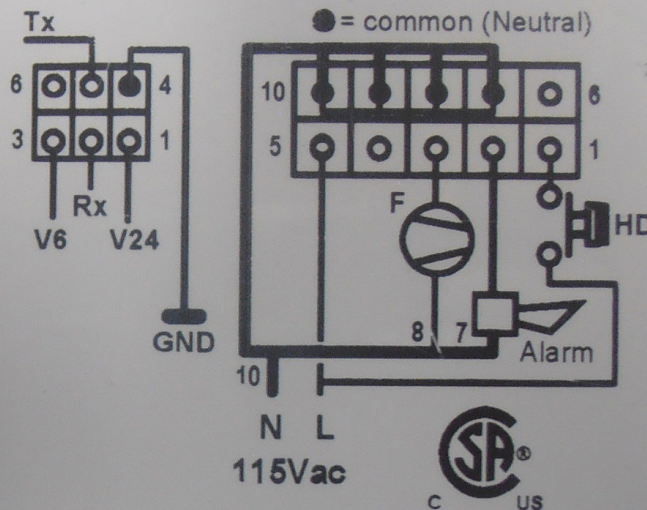
TIMING DIAGRAM GAS BURNER SAFETY CONTROL



STICKER ON GAS BURNER SAFETY CONTROL



Circuito 24V DC



Circuito 115V

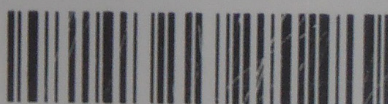
-014A

S4965V 2131

115Vac, 60Hz, 2.5VA

Made in E.C.

CE-0063BR1922



04196131750017

Ts = 5s

dc 1317 CZ

sn 0017

24V circuit:

Tacho (nr.1) = White wire to speed regulation gas mixture blower.

Reset (nr.2) = Brown wire to reset knob on side wall.

High limit (nr.3) = Yellow wire to high limit thermostat.

APS (nr.4) = Not connected.

PWM (nr.5) = Black wire to speed regulation gas mixture blower.

BL (nr.9) = Blue wire to speed regulation gas mixture blower.

O (nr.10) = Orange wire to high limit thermostat.

GR (nr.13) = Grey wire to speed regulation gas mixture blower.

115 V circuit:

HD (nr. 1) = White wire to relay K1.

On/off regulation by PT sensor

Alarm (nr. 2) = Brown wire to red external alarm indication on side wall and alarm indication on burner safety control.

F (nr.3) = Grey wire to stand-by speed of gas mixture blower.

Burn on (nr.4) = Not connected.

L (nr.5) = Orange wire for live connection 115V.

Nr. 7 to 10 = Black-blue- red-yellow wires for neutral.

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
$^{\circ}\text{F}$	$^{\circ}\text{C}$	± 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.

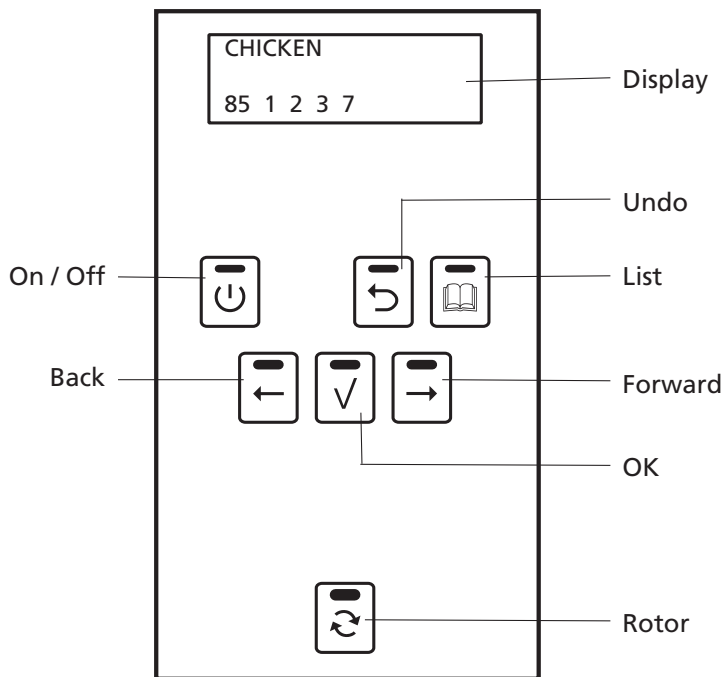
1. Remove the wiring from the sensor.
2. Connect a temperature sensor to the probe for comparison.
3. Test the probe with an Ohmmeter.

DRIVE MOTOR, BLOWER AND TRANSFORMER TEST

Note: When testing the resistance remove the wiring.

Type	Description	Voltage	Resistance Ω
TDR 7	Drive motor	208	Between white A and white wire ~ 234 Between white A and brown wire ~ 117 Between white and brown wire ~ 117
TDR 7	Blower rotisserie	208	Between blue and brown wire ~ 310 Between blue and black wire ~ 190 Between brown and black wire ~ 500
TDR 7	Transformer	230/12	Between white and white wire ~9 Between yellow and red wire ~0.5 Between grey and blue wire ~0.5 Between all other color combinations infinite
TDR 7	Transformer	115/230	Between pink and black wire ~1.6 Between white and brown wire ~1.6 Between yellow and red wire ~1.6 Between grey and blue wire ~1.6 Between all other color combinations infinite

CONTROL LOCATION



Key	Function
On / Off	Switching the unit On / Off
Undo	Go back to previous menu
List	Recipe / programming modus
Forward	One step ahead in setting
Rotor	Switching the rotor on
OK	Acknowledge a function or change
Back	One step back in setting

ERROR CODES ON DISPLAY

Error 11: Full contact between wires of PT sensor. Temp. indication on display doesn't go up.

Error 33: No connection between wires of PT sensor. Temp. indication on display 317°C/602°F.

Error 55: Heating malfunction. Temperature rise in °C/minute of the PT sensor during cooking of the products is under the minimum value as indicated in parameter "Temp. grad." See also the parameterlist on page 57 and explanation on page 52.

Error 77: If the expected heat number is more than 20% lower than the stored heat number in the cooking program. This error does not result in a complete shut down of the rotisserie, but is stored in the fault messages in the service menu.

Error 88: If the expected heat number is more than 20% higher than the stored heat number in the cooking program. This error does not result in a complete shut down of the rotisserie, but is stored in the fault messages in the service menu.

App. Error: - Parameter file cannot be opened when switching the TDR on.

- Failure during loading of parameters or programs.
- Communication failure keypad and CPU.

For explanation and solving of the errors see general troubleshooting list on page 58.

GAS BLOCK HONEYWELL TYPE VK4115V - 2029

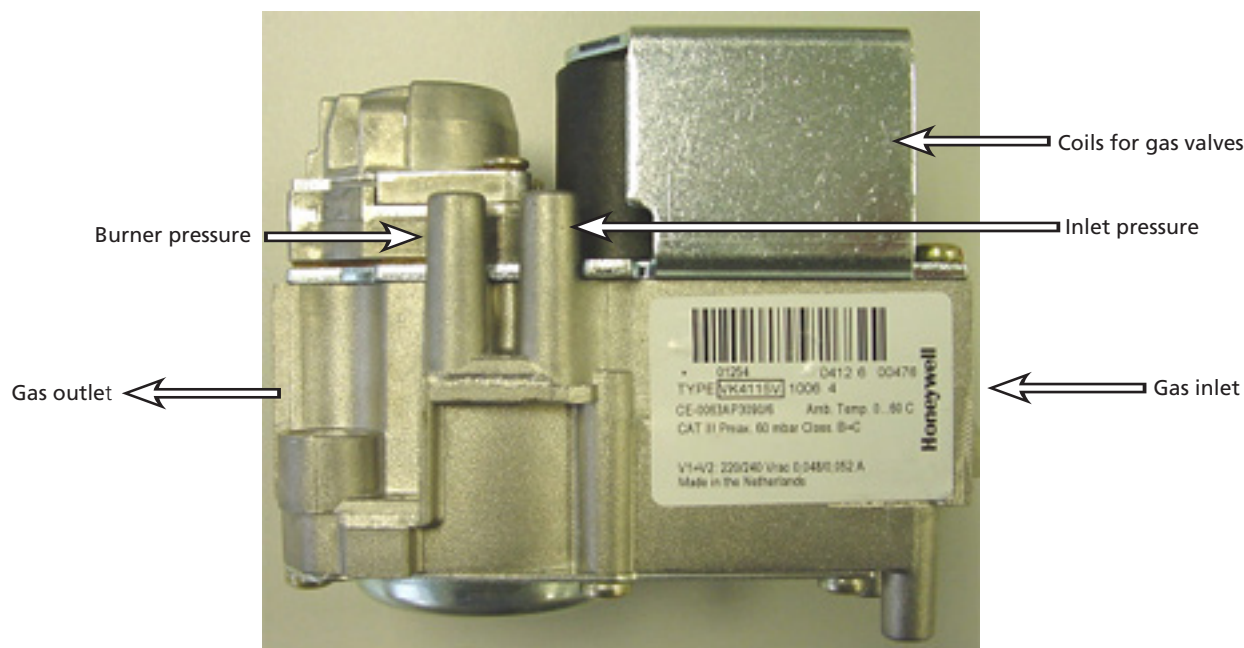
Gas inlet: Inlet of gas after gas pressure reduction valve (max. 22" H₂O). Pressure depending of gas type (see table on page 38).

Gas outlet: Outlet of gas into gas mixture blower.

Coils: 2 Coils for the gas valves.

Inlet pressure: Measuring tube (during operation) for gas pressure after reduction valve. In order to measure loosen the screw on inside of tube.

Outlet or burner pressure: Measuring tube of gas going into gas mixture blower. In order to measure loosen the screw on inside of tube.



Measuring notes:

1. Inlet pressure: During operation you measure the pressure of the setting of the reduction valve.

2. Outlet pressure: During operation you measure a pressure of zero.

You can use this measuring point also to check if the gas valves are opening. When you start up the machine and the valve is not opened yet you measure a underpressure due to the suction of the gas mixture blower and this pressure will be zero when the valve is opened.

IGNITION/IONIZATION SET

When placing a new ignition/ionization set or for checking the adjustment of this set see drawing below. Here you can find the distance between the spark plug and the distance between the ignition pins and the burner bed and the distance between the ionisation pin and the burner bed.

burner bed
ionisation pin
ignition pins

Pos. number	Amount	Unit	Article number	Description
1	1	pc	9290542	Ass. coupling piece
2	1	pc	92921135	Ignition mechanism
3	1	pc	9292102	Gasket, burner
4	1	pc	9292103	Gasket, blower flange
5	1	pc	9292108	Gasket, ignition
6	2	pc	9294438	Shim Ignition

REVISION	REV. DATE	REMARK	Surface treatment	Geom. tolerance
Tol. principle		Ben. tolerance		
MATERIAL		DRINK	Koolen	APPROVED
MATERIAL ART. NUMBER		STATUS	In Progress	DATE 28.02.2014
UNIT mm		PROJECT	929	DRAWING NUMBER 92901135
SCALE 1: 2.5		REMARKS		
DESCRIPTION		Serv. Set. Burner		
ART. NUMBER		REV.		
92901135		A4		

- Important dimensions:**

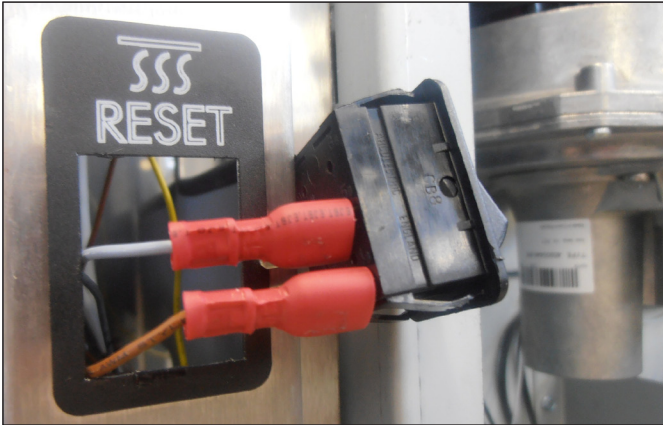
 - 6 and 8 mm = distance between ignition pins and burner bed.
 - 10 mm = distance between ionisation pin and burner bed.
 - 4.5 mm = distance between the two ignition pins.

Important dimensions:

 - 4.5 mm = 1/6" 8 mm = 1/3"
 - 6 mm = 1/4" 10 mm = 2/5"

TEMPORARY BRIDGING OF RESET SWITCH

For testing of the system, when reset switch could be malfunctioning, it is possible to bridge the reset switch by temporary, for 2 seconds, connecting both the grey and brown wires together. In this way you can perform a test and do a check up on the reset switch.



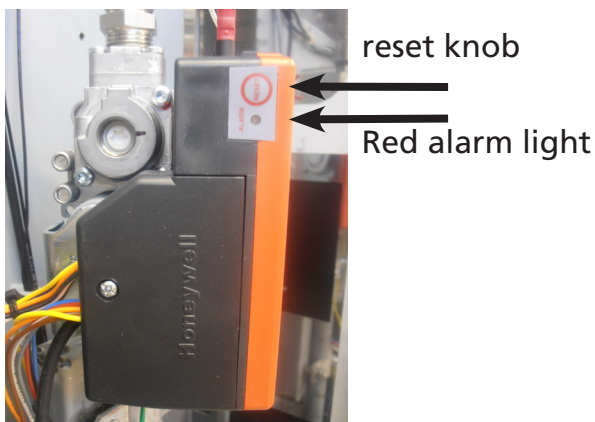
1. Remove the 2 grey and brown wires from the reset switch.

2. Connect these 2 jacks together with a separate wire.

3. Start a program and disconnect the 2 jacks.

RESETTING OF GAS BURNER SAFETY CONTROL

For testing of the system, when reset switch could be malfunctioning, it is possible to make a reset direct on the gas burner safety control. In this way you can perform a test and do a check up on the reset switch.



1. Remove right hand panel according prior procedure.

2. Press the reset knob.

3. Start a program.

FLUE GAS ANALYSER

With the flue gas analyser you can measure the exhaust gas on the rotisserie for toxicity.
With the use of a Testo 330-1LL you get the following measurements:

Testo 330-1LL

V1.21	01297080		
100035026	G 20		
06.03.2014	11:42:13		
Fuel:	Natural gas		
O2 ref.:	3.0%		
CO2 max:	9.1%		
5.2 %	Oxygen		
9.0 %	CO2		
1.33	Lambda		
5 ppm	CO		
0.01	GI		
26.7 %	qR		
73	efficiency		
130 °F	dew point	54°C	
713 °F	Exhaust gas temp.	378°C	
74 °F	Ambient temp.	23°C	



The 2 most important values are the CO2 percentage and the exhaust gas temperature.

CO2% G 20 between 8.7 - 8.9%

CO2% G 31 between 10.8 - 11.0%

CO2% LP: 50 % Propane - 50 % Butane 11.9 - 12.1%

CO2% LP: 60 % Propane - 40 % Butane 11.7 - 11.9%

CO2% LP: 70 % Propane - 30 % Butane 11.4 - 11.6%

CO2% LP: 80 % Propane - 20 % Butane 11.4 - 11.6%

CO2% LP: 90 % Propane - 10 % Butane 11.7 - 11.9%

CO2% LP: 60 % Propane - 40 % Butane 11.3 - 11.5%

CO max value 500 ppm

Exhaust gas between 698 - 788 °F (370 - 420 °C)

GAS CONSUMPTION

With a flow meter you can measure the gas consumption/flow. See table on page 38. To get an accurate consumption you have to do a measurement of 3-5 minutes. During this period the rotisserie the rotisserie may not turn off.



MAINTENANCE GAS PROCESSING

The customer should have the gas rotisserie periodically checked by a skilled technician according to local, state or national regulations.

First remove the right side panel according to the procedure in removal and replacement of parts.

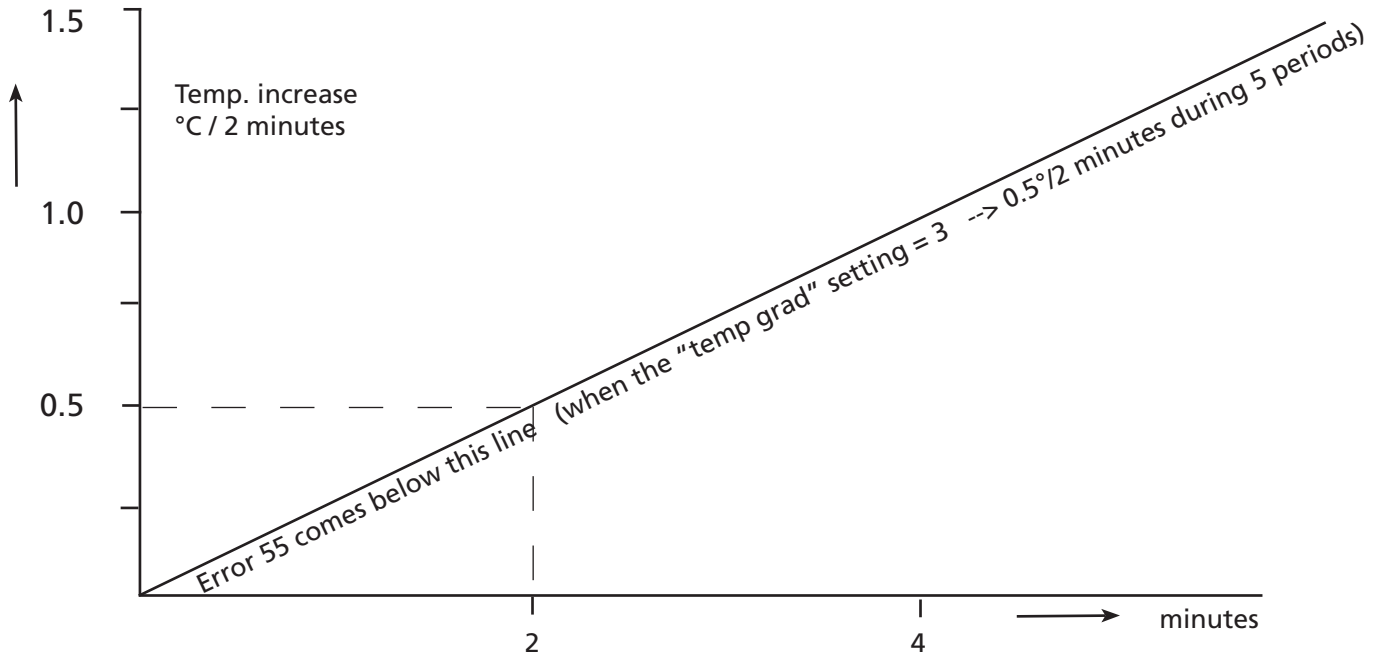
- Check for gas leaks and/or bad connections of the gas supply inside and outside.
- Check the gas burner and the ignition/ionisation set.
- Check the adjustment of the ignition/ionisation set.
- Check all gaskets.
- Check the inlet pressure and re-adjust if necessary. For the correct value, see table page 10.
- Check the consumption of the gas, see table on page 38.
- Measure the exhaust gas with a flue gas analyzer, see page 45.
- Check the electrical supply.
- Check the software version.
- Make a test run.

TROUBLESHOOTING FOR THE TDR 7 GAS ROTISSERIES

Symptom	Possible causes
No power to oven controls.	<ol style="list-style-type: none"> 1. Main breaker open. 2. Fuse F1 or F2 burned. 3. Fuse (125 mA) on power and I/O board burned. 4. Wiring loose.
Main fuse or breaker blows.	<ol style="list-style-type: none"> 1. Wiring incorrectly. 2. Drive motor, blower or contactor switch shorted. 3. Wiring shorted.
Drive motor does not run during cook cycle.	<ol style="list-style-type: none"> 1. Capacitor malfunction. 2. Power and I/O board malfunction. Also check relay X12. 3. Motor malfunction. 4. Wiring loose.
Drive motor stops and runs again after a certain period.	<ol style="list-style-type: none"> 1. Thermal protection activated (105°C / 221°F). This shuts off after the temperature is below 105°C / 221°F.
Blower motor does not run.	<ol style="list-style-type: none"> 1. Capacitor malfunction. 2. Motor inoperative. 3. Power and I/O board malfunction. Also check relay X6. 4. Wiring loose.
Blower motor stops and runs again after a certain period.	<ol style="list-style-type: none"> 1. Thermal protection activated (150°C / 302°F). This shuts off after the temperature is below 150°C / 302°C.
Oven temperature differs from temperature setting in program mode.	<ol style="list-style-type: none"> 1. Safety thermostat malfunction. 2. Blower motor(s) inoperative (turning direction?) 3. Electronic control inoperative. 4. PT-1000-sensor malfunction. 5. Dirty fan guard or fan blade(s).
Oven temperature does not reach desired temperature during cook cycle.	<ol style="list-style-type: none"> 1. Safety thermostat malfunction. 2. PT-1000-sensor malfunction. 3. Electronic control inoperative. 4. Contactor inoperative.
No display and/or keypad does not function.	<ol style="list-style-type: none"> 1. Main breaker open. 2. Remove plug out of socket and connect plug again (reset of key sensitivity). 3. Loose flat cable from CPU/display to power and I/O board. 4. Fuse (125 mA) on power and I/O board burned. 5. Power and I/O board malfunction. 6. Loose flatcable from CPU/display to keypad. 7. Keypad malfunction. Check also the adhesive of the keypad. 8. Earth wire on CPU board makes contact with the solder point on the board (see CPU board page 28).
Blue LED light On/Off key is fading in and out. Keypad does not function.	<ol style="list-style-type: none"> 1. Flatcable from keypad on the operation panel is connected incorrectly. Must be connected to "Touchpanel 1" connector of CPU board (see CPU board page 28).
No ignition / no spark (reset light is burning).	<ol style="list-style-type: none"> 1. Check polarity of plug. 2. Gas burner safety control malfunction. 3. Distance (4 mm) between ignition pins not in order. 4. Wiring loose.
No ignition of the gas in the burner (reset light is burning).	<ol style="list-style-type: none"> 1. Reset switch malfunction. 2. Gas supply closed. 3. Gas block malfunction. 4. Gas burner safety control malfunction. 5. Burner control measures wrong speed of gas mixture blower (change blower). Also see working on page 37. 6. Wiring loose.

Symptom	Possible causes
No ignition of the gas in the burner (reset light is not burning).	<ol style="list-style-type: none"> 1. Reset switch malfunction. 2. Reset light on operation panel broken. 3. Reset on gas control block is on. Press this to reset. See page 44. 4. Gas burner safety control malfunction. 5. Wiring loose.
Reset light is burning continuous.	<ol style="list-style-type: none"> 1. Safety thermostat tripped. Check the adjustment of thermostat. 2. Too many resets made (more than 4 and also red indication on burner control is flashing). Pull the plug out and in again. 3. Reset switch malfunction. See also page 44.
Burner switches on and off intermittently during operation.	<ol style="list-style-type: none"> 1. Reset switch malfunction. 2. Adjustment of ionisation pin. 3. Gas pressure too low (under 15 mbar). 4. Gas burner safety control malfunction.
Gas ignites in burner but cuts off after a short time. (reset light is burning).	<ol style="list-style-type: none"> 1. Ionization pin malfunction. 2. Adjustment of ionization pin. 3. Loose wiring of ionization pin. 4. Gas burner safety control malfunction.
Burner stops during operation.	<ol style="list-style-type: none"> 1. Gas supply blocked. 2. Adjustment of ionization pin. 3. Ionization pin malfunction. 4. Gas burner safety control malfunction. 5. Safety thermostat tripped. Check the adjustment of thermostat. 6. Wiring ionization pin.
Gas mixture blower only runs in high speed.	<ol style="list-style-type: none"> 1. Gas burner safety control malfunction. 2. Gas mixture blower malfunction. 3. Wiring loose.
Error 11.	<ol style="list-style-type: none"> 1. PT sensor malfunction. 2. Wiring PT sensor shortened.
Error 33.	<ol style="list-style-type: none"> 1. PT sensor malfunction. 2. Wiring PT sensor loose.
Error 55. See also extra explanation on next page.	<ol style="list-style-type: none"> 1. P.T. sensor malfunction. 2. Parameter setting of "temp.grad" is not on value 3. (see page 52). 3. Setting of temp. in cooking program is too high (solved in software version V11.03.07 and higher). Load latest software. 4. Safety thermostat malfunction.
Error 77. See also extra explanation on page 41.	<ol style="list-style-type: none"> 1. Check heat number in cooking program. 2. Cooking program malfunction. Erase program, create new program, run a reference batch and run a second batch for verification.
Error 88. See also extra explanation on page 41.	<ol style="list-style-type: none"> 1. Check heat number in cooking program. 2. Heating element malfunction. 3. Cooking program malfunction. Erase program, create new program, run a reference batch and run a second batch for verification.
Application error. A: No standard screen when switching on. B: APP. error on screen.	<p>A1. Make a complete reset by pulling out the plug for 1 sec. A2. CPU board malfunction.</p> <p>B1. Memory stick failure. B2. Load latest software version. (solved in V11.03.08 or higher).</p>

ERROR 55 EXPLANATION



- Note:**
1. Measuring starts 5 minutes after beginning of a heating step.
 2. Duration is 5 periods of 2 minutes.
 3. Measuring stops at 150°C/302°F or when temp. in cabinet is < 30°C than the set temperature.

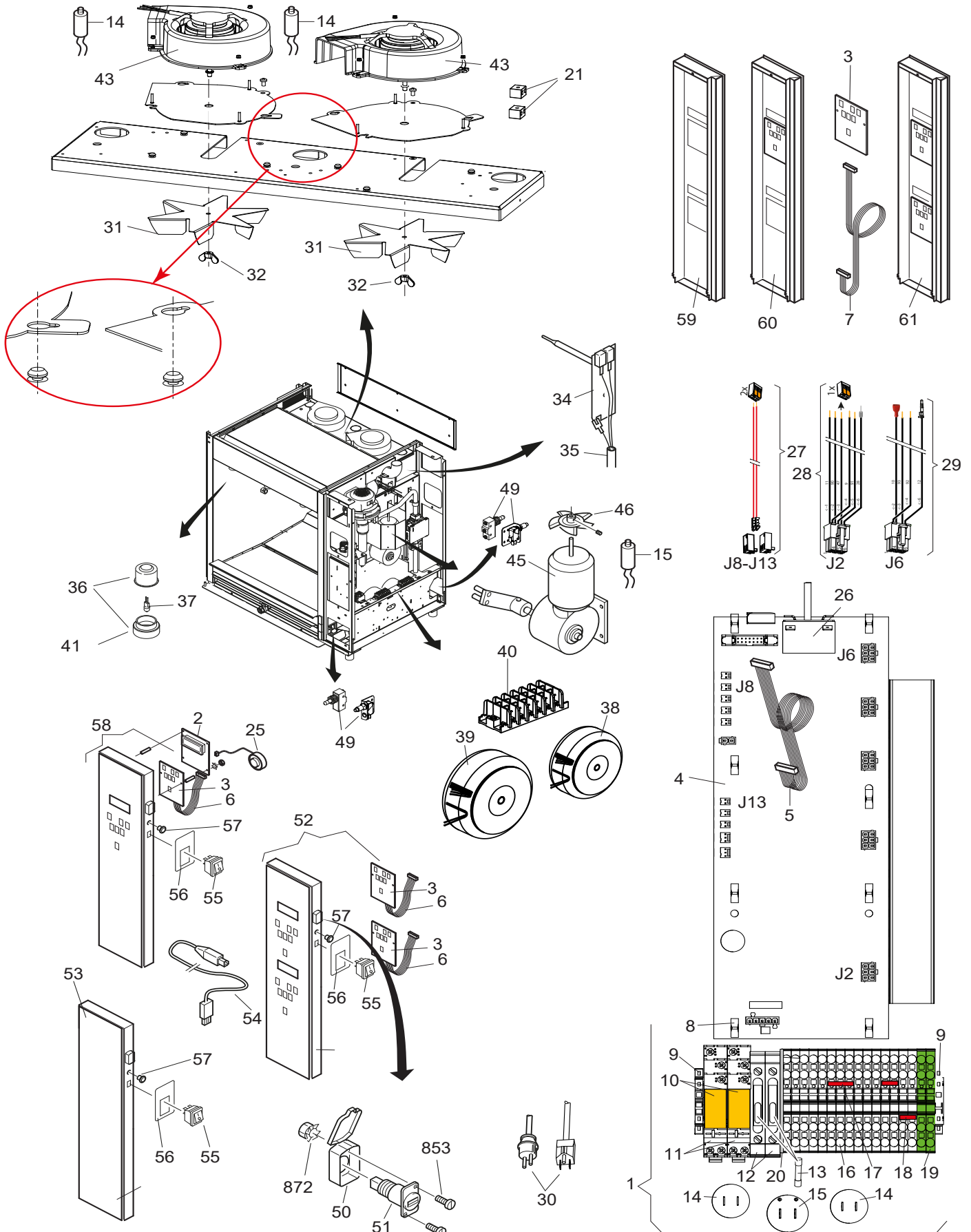
Necessary line currents:

TDR8 with neutral 3x 16A. Without neutral 3x 27A.

TDR5 with neutral 3x 8,5A. Without neutral 3x 14A.

Possible cause	Caused by	Explanation	Solution
Energy supply problem	Safety thermostat	Not adjusted to it's maximum	Fully turn clock-wise (cw)
		Broken thermostat.	Replace thermostat
	Broken temperature sensor	Sensor gives a wrong value	Replace sensor
	Wrong setting of "temp grad" parameter	Default setting is 3, --> 0.5° per 2 minutes	Check setting
Too much energy absorption	Products are stuffed with a very humid substance		Put "temp grad" setting on 2 or 1.

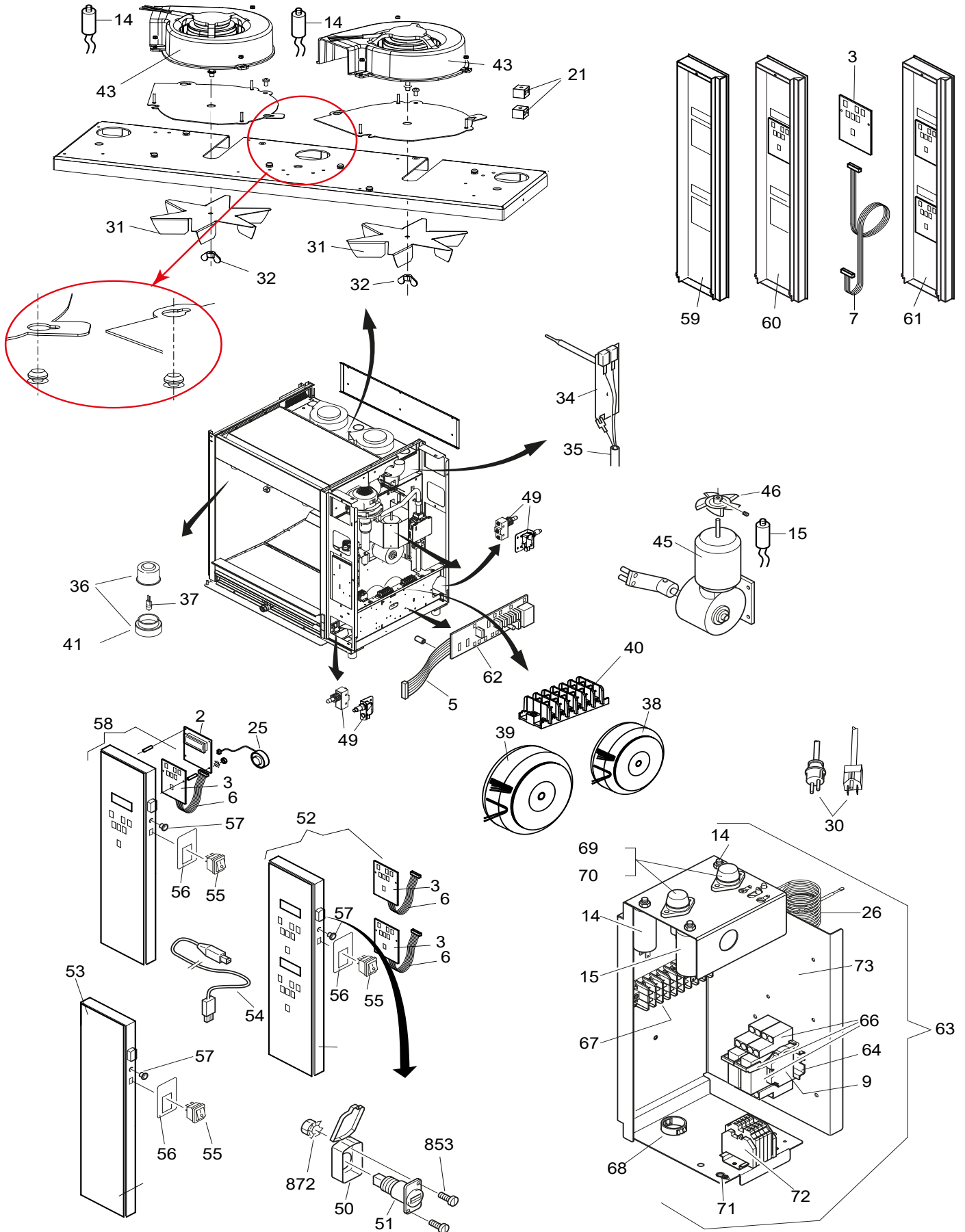
TDR 7 P GAS - ELECTRICAL PARTS FROM SERIAL NUMBER 100097688



Pos.	Part number	Description	Qty.	Prio
1	9290343	Electric panel, ass.	1	
2	9292040s	CPU board + LCD	1	1
3	9292041	Keypad + short flatcable	1	
4	9192400s	Power & I/O board	1	1
5	9172314	Ribbon cable L= 1500 mm, 14 pins	1	1
6	9292081	Ribbon cable 10p 85 mm.	1	1
7	9292044	Ribbon cable 10p 1100 mm	1	
8	9110028	Spacer, PCB mounting	1	
9	9191222	endclamp	2	
10	9191140	Relay	2	1
11	9191141	Socket, relay	2	
12	9191218	Fuse holder	2	
13	3701279	Fuse 3,15A slow, ceramic 32x6,3	2	1
14	9110030	Capacitor 1.5 uF	2	1
15	3701228	Capacitor 2.5 uF	1	1
16	9191240	Terminal, 4 pole 4 ² Grey	15	
17	9191237	Plug-in bridge FBS 3-6 PHX	1	
18	9191238	Plug-in bridge FBS 2-6 PHX	2	
19	9191239	Terminal, 4 pole 4 ² Green	2	
20	9191223	Endcap, terminal	1	
21	9171110	Terminal block, ceramic	2	
25	9172362	Buzzer 12V	1	1
26	9040970	Safety thermostat 100-320°C	1	2
27	9310850s	Wire repair set inputs	1	1
28	9290862s	Wire repair set TDRp gas J2	1	1
29	9290863s	Wire repair set TDRp gas J6	1	1
30	9088796	Connecting cable with plug Nema 15-50P	1	
31	9141934	Fan blade	2	
32	9073150	Wing nut, left hand threaded	2	
34	9172310	Temperature sensor PT 1000	1	1
35	9044140	Sensor cable	1	
36	9171135s	Lamp holder, incl. glass	6	
37	3701052	Lamp 20W, 12V/300°C	6	1
38	9171049	Ring core transformer, secundair 2x12V	1	2
39	9171056	Ring core transformer, 115V / 230V	1	2
40	9151010	Connecting block 6-pole	2	

Pos.	Part number	Description	Qty.	Prio
41	9171136	Glass lamp holder	6	2
43	9140027	Blower + fanblade + wing-nut	2	1
45	9293002s	Gear motor, complete with drive head	1	1
46	2000072	Fanblade Ø 150 mm, gear-motor	1	
49	3701233S	Door switch (model on availability)	2	1
50	9291010	Cover USB adapter	1	
51	9291011	USB adapter	1	
52	9298543s	Operation panel ass. stacked + keypad with flatcable	1	2
53	9298544s	front panel, lower unit	1	
54	9291012	USB cable	1	
55	9291024	Reset switch	1	1
56	9123417	Sticker, reset	1	
57	9291025	Signal light, red	1	2
58	9298542s	Operation panel, Glass + backplate + keypad with flatcable	1	2
59	9298534s	Back panel, ass. Glass + backplate	1	
60	9298532s	Back panel ass. pass through + keypad	1	
61	9298535s	Back panel ass. stacked pass through + keypads	1	

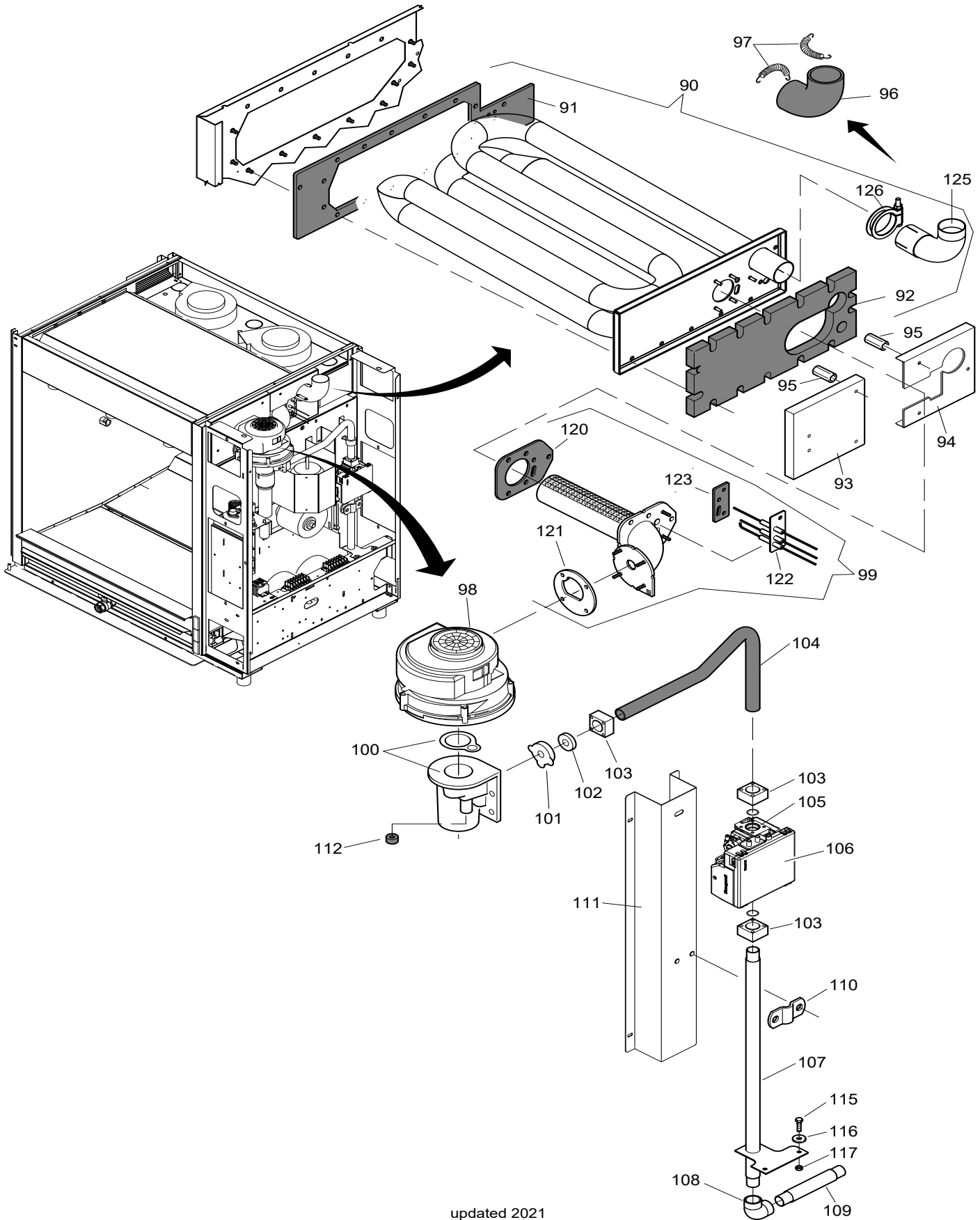
TDR 7 P GAS - ELECTRICAL PARTS UNTIL SERIAL NUMBER 100097687



Pos.	Part number	Description	Qty.	Prio
2	9292040S	CPU board + LCD	1	1
3	9292041	Keypad + short flatcable	1	
			1	1
5	9172314	Ribbon cable L= 1500 mm, 14 pins	1	1
6	9292081	Ribbon cable 10p 85 mm.	1	1
7	9292044	Ribbon cable 10p 1100 mm	1	
8	9110028	Spacer, PCB mounting	1	
9	9191222	endclamp	2	
10	9191140	Relay	2	1
11	9191141	Socket, relay	2	
12	9191218	Fuse holder	2	
13	3701279	Fuse 3,15A slow, ceramic 32x6,3	2	1
14	9110030	Capacitor 1.5 uF	2	1
15	3701228	Capacitor 2.5 uF	1	1
16	9191240	Terminal, 4 pole 4 ² Grey	15	
17	9191237	Plug-in bridge FBS 3-6 PHX	1	
18	9191238	Plug-in bridge FBS 2-6 PHX	2	
19	9191239	Terminal, 4 pole 4 ² Green	2	
20	9191223	Endcap, terminal	1	
21	9171110	Terminal block, ceramic	2	
25	9172362	Buzzer 12V	1	1
26	9040970	Safety thermostat 100- 320°C	1	2
27	9310850s	Wire repair set inputs	1	1
28		Wire repair set TDRp gas J2	1	1
29		Wire repair set TDRp gas J6	1	1
30	9088796	Connecting cable with plug Nema 15-50P	1	
31	9141934	Fan blade	2	
32	9073150	Wing nut, left hand threaded	2	
34	9172310	Temperature sensor PT 1000	1	1
35	9044140	Sensor cable	1	
36	9171135S	Lamp holder, incl. glass	6	
37	3701052	Lamp 20W, 12V/300°C	6	1
38	9171049	Ring core transformer, se- cundair 2x12V	1	2
39	9171056	Ring core transformer, 115V / 230V	1	2
40	9151010	Connecting block 6-pole	2	

Pos.	Part number	Description	Qty.	Prio
41	9171136	Glass lamp holder	6	2
43	9140027	Blower + fanblade + wing- nut	2	1
45	9293002s	Gear motor, complete with drive head	1	1
46	2000072	Fanblade Ø 150 mm, gear- motor	1	
49	3701233S	Door switch (model on availability)	2	1
50	9291010	Cover USB adapter	1	
51	9291011	USB adapter	1	
52	9298543s	Operation panel ass. stac- ked + keypad with flatca- ble	1	2
53	9298544s	front panel, lower unit	1	
54	9291012	USB cable	1	
55	9291024	Reset switch	1	1
56	9123417	Sticker, reset	1	
57	9291025	Signal light, red	1	2
58	9298542s	Operation panel, Glass + backplate + keypad with flatcable	1	2
59	9298534s	Back panel, ass. Glass + backplate	1	
60	9298532s	Back panel ass. pass throu- gh + keypad	1	
61	9298535s	Back panel ass. stacked pass through + keypads	1	
62	9192202	Power & I/O board	1	1
63	9290219	Electric panel, ass.	1	
64	9077088	Rail	2	
66	9290114s	relay with socket	2	2
67	8033659	Connecting block 9-pole	1	
68	9070840	Grommet	1	
69	9044213	Fuse SC3, 300V	2	1
70	9044205	Fuse holder	2	
71	166555	Earth symbol	1	
72	9172371	Connecting block, ass.	1	
73	9294416	Mounting panel	1	

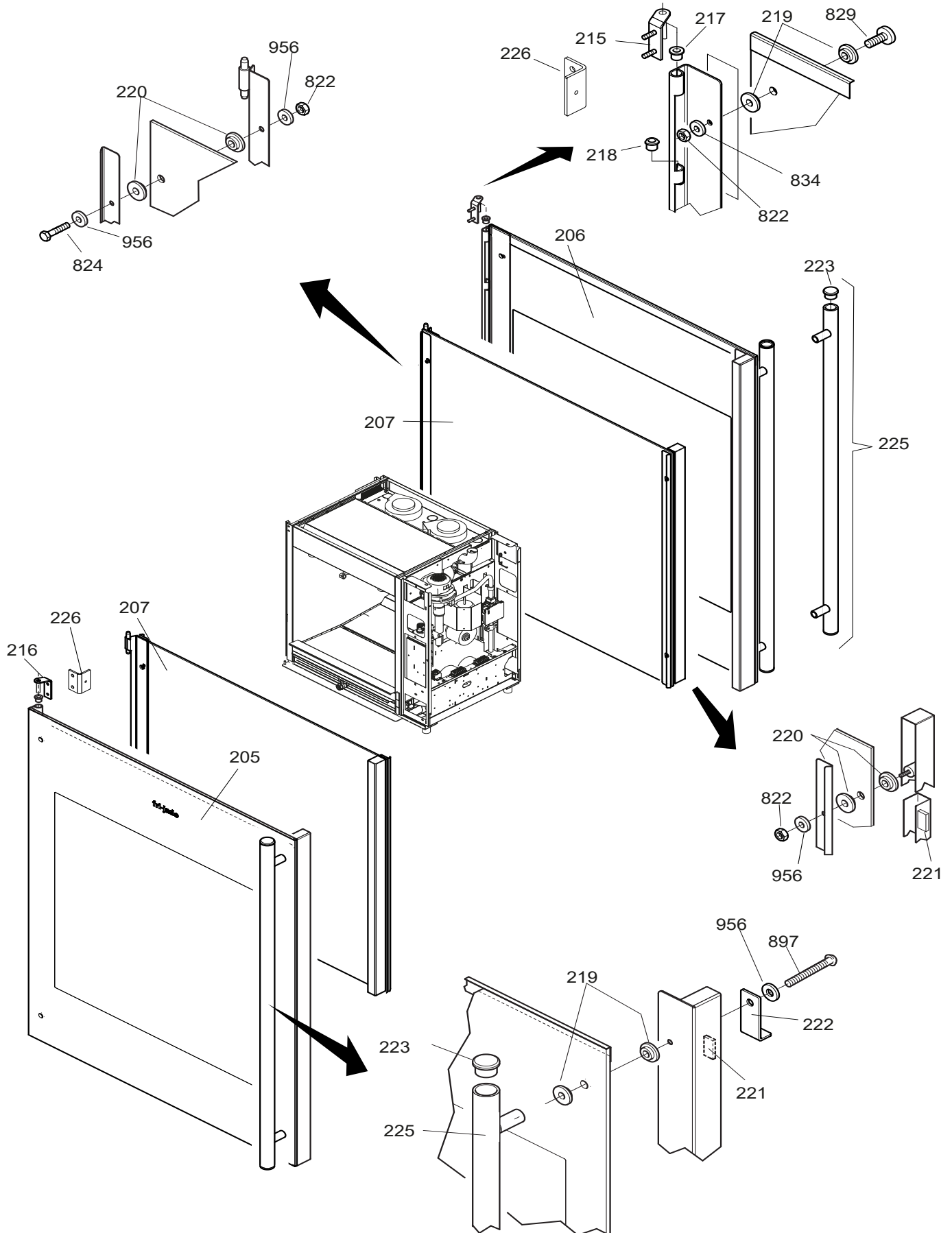
TDR 7 P GAS - GAS PARTS



updated 2021
TDR8P Gas USA

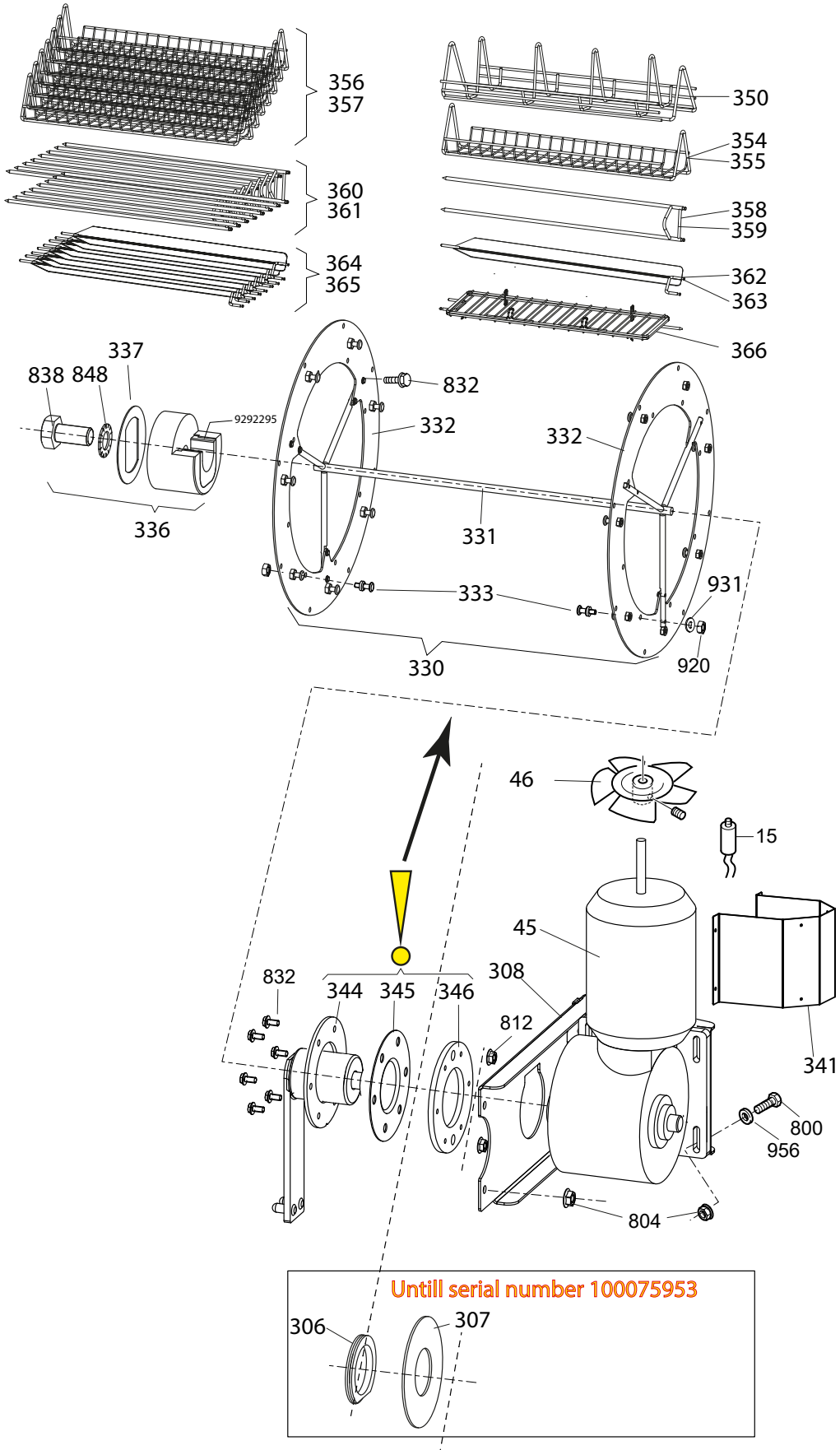
Pos.	Part number	Description	Qty.	Prio
90	9290550	Heat exchanger	1	
91	9292106	Insulation, heat exchanger	1	
92	9292109	Insulation board, heat exchanger	1	
93	9290221	Insulation + sheet left ass.	1	
94	9290222	Insulation + sheet right ass.	1	
95	9070793	3d nut M6	7	
96	9292107	Insulation exhaust pipe	1	2
97	9291018	Spring for insulation exhaust pipe	2	
98	9291030	Gas mixture blower, 115V	1	1
99	9290113S	Burner + ignition set	1	2
100	9171094	Venturi tube, incl. gasket	1	
101	9171099	Holder, orifice	1	
102	9174498	Orifice 4,2 mm (G20/25)	1	
102	9292128	Orifice 3,2 mm (G31)	1	
103	9171092	Flange + gasket	3	
104	9292120	Coupler tube + coupling 1/2" OD	1-3	
105	9291035S	Gas control block, 115V Propane gas	1	2
106	9293044S	Gas burner safety control, 115V Natural gas (G20)	1	1
106	9293049S	Gas burner safety control, 115V Propane gas	1	1
107	9290551	Gas tube 1/2" with clamp plate	1	
108	9171053	Elbow 1/2"	1	
109	9173072	Tube 1/2" NPT 130mm	1	
110	9291029	Bracket for tube	2	
111	9294482	Mounting plate for gas tube	1	
112	9293046	Safety plug, adjustment screw	1	
115	4288231	Tensilock bolt M5 x 10	2	
116	210150	Washer M5	2	
117	9087570	Tensilock nut M5	2	
120	9292102	Gasket for coupling piece	1	
121	9292103	Gasket, blower flange	1	
122	9292113S	Ignition/ionisation set , incl. gasket	1	1
123	9292108	Gasket, ignition set	1	1
125	9292232	Exhaust elbow	1-2	
126	9291106	Pipe clamp 52-55mm	1-2	

TDR 7 P GAS - DOORS



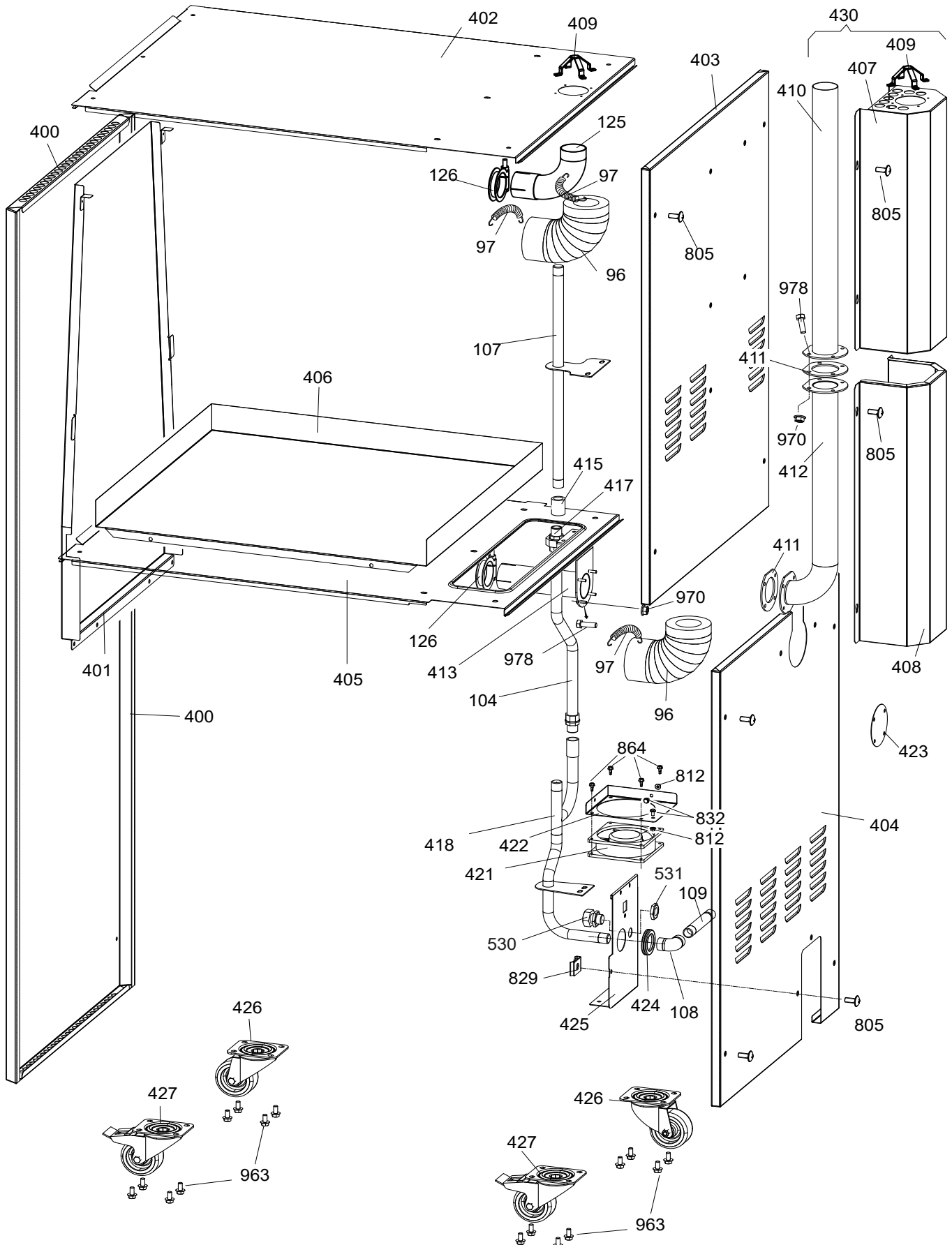
Pos.	Part number	Description	Qty.	Prio
205	9298510s	Door service side, ass., TDR7/8m	1	2
206	9298513s	Door customer side, ass., TDR7/8m	1	2
207	9298512s	Door inside, ass., TDR7/8m	2	2
215	9290410	Hinge, right	1-2	
216	9290409	Hinge, left	1-2	
217	9172054	Brass bearing 8 mm	4-8	
218	9172122	Brass bearing 8 mm, adjusted	4-8	
219	3702342	Flange bush, PTFE 3 mm	8	
220	3702341	Flange bush, PTFE 2 mm	8	
221	9070141	Magnet block		
222	9294229	Blocking bracket	2	
223	2103209	Plug, door handle	4	
225	9298101s	Door handle, kit, TDR7/8	44	
226	9174154	Adjusting bracket	2	
226	9174154	Adjusting bracket	2	

TDR 7 P GAS - ROTOR



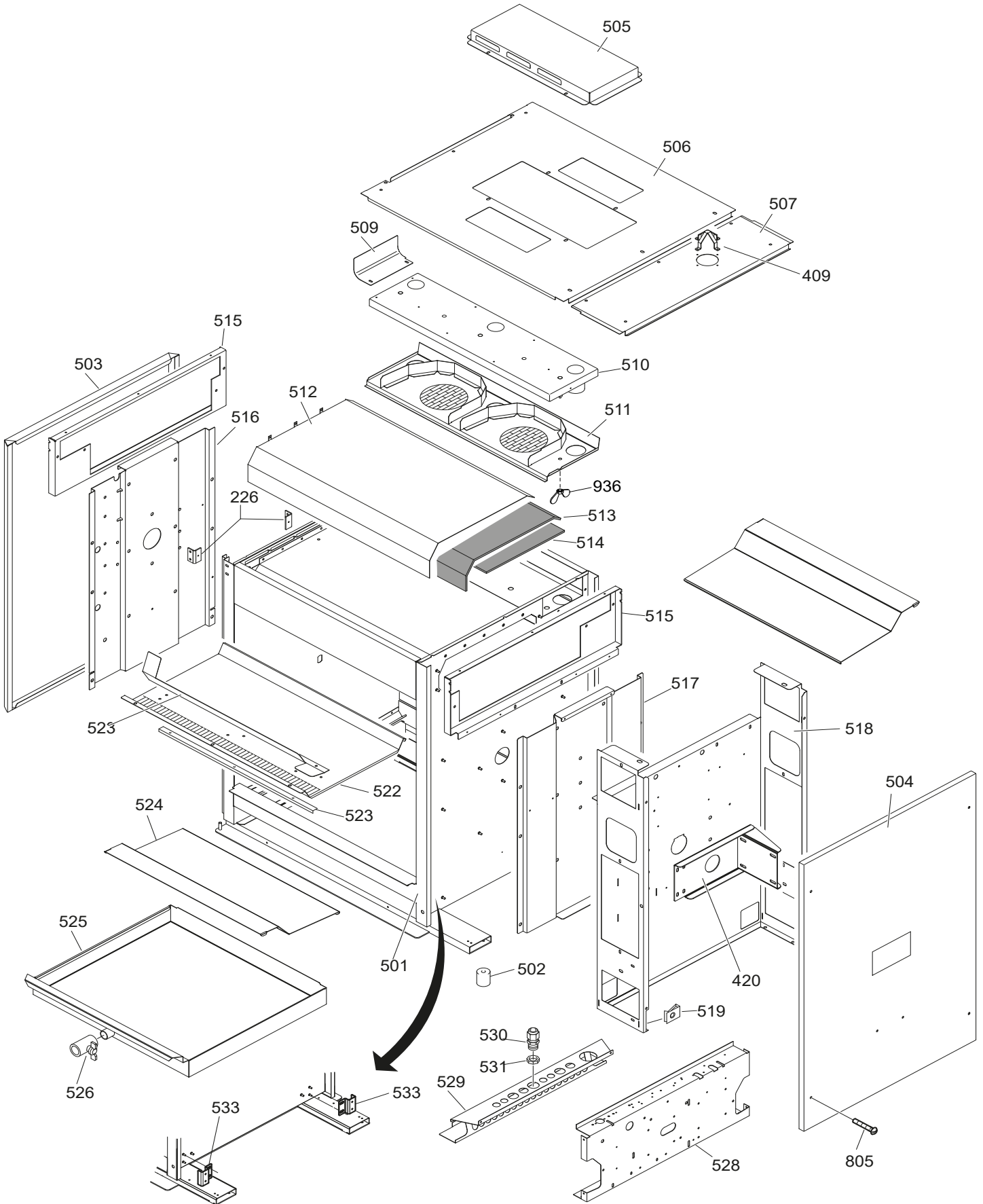
Pos.	Part number	Description	Qty.	Prio
15	3701228	Capacitor 2.5 uF	1	1
45	9293002s	Gear motor, complete with drive head	1	1
46	2000072	Fanblade Ø 150 mm, gearmotor	1	
306	9073131	Seal ring, Teflon	1	
307	9110797	Seal, silicon	1	
308	9290444	Support plate, rotor motor	1	
330	9172274	Rotorset ass. 8 meat forks, stainless steel	1	
331	9070272	Rotor shaft	1	
332	9174623	Rotor disc 3 mm	1	
333	9172169	Support pin	1	
336	9172063s	Bearing ass., rotor TDR7/8	1	2
337	9292245	Seal	1	
341	9174161	Air guide	1	
344	9294649	Pressure ring, 6 holes	1	
345	9292244	Shaft seal, 6 holes	1	
346	9294650	Reinforcement ring, 6 holes	1	
350	9172136	4 Chicken rack		
354	9172134	Meat basket, SS		
355	9172213	Meat basket, SS, coated		
356	9172138	Meat basket, SS, set of 7		
357	9172214	Meat basket, SS, coated, set of 7		
358	9172153	Meat fork, SS		
359	9172242	Meat fork, SS, coated		
360	9172365	Meat fork, SS, set of 8		
361	9172366	Meat fork, SS, coated, set of 8		
362	9112480	V-spit, SS		
363	9172215	V-spit, SS, coated		
364	9172284	V-spit, SS, set of 8		
365	9172285	V-spit, SS, coated, set of 8		
366	9312086	Butterfly, 3 chicken rack		

TDR 7 P GAS - STACKING PARTS



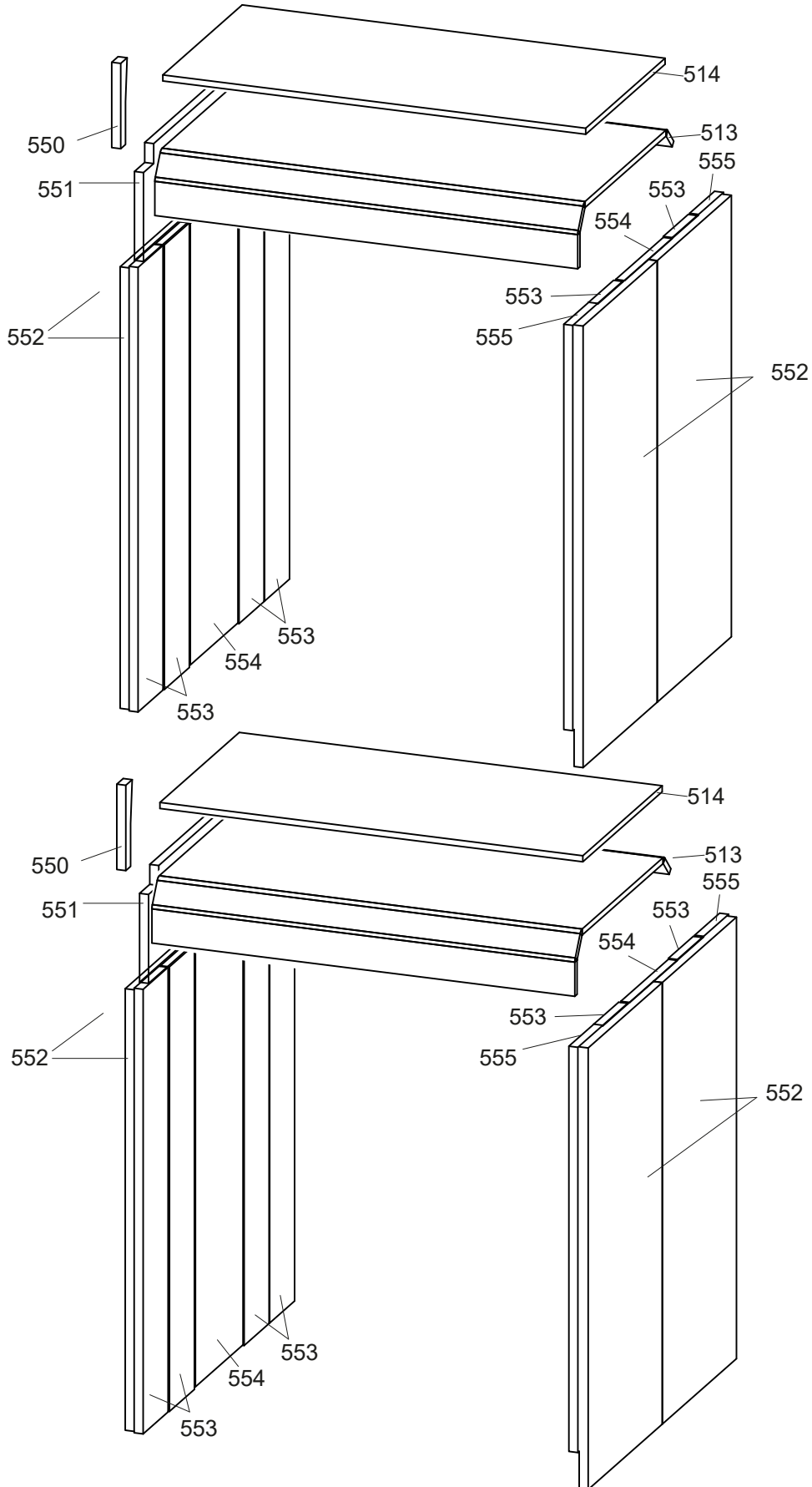
Pos.	Part number	Description	Qty.	Prio
96	9292107	Insulation exhaust pipe	1	2
97	9291018	Spring for insulation exhaust pipe	2	
104	9292120	Coupler tube + coupling 1/2" OD	1-3	
107	9290551	Gas tube 1/2" with suspension	1	
108	9171053	Elbow 1/2"	1	
109	9173072	Tube 1/2" NPT 130mm	1	
125	9292232	Exhaust elbow	1-2	
126	9291106	Pipe clamp 52-55mm	1-2	
400	9294514	Side panel left, stacked.	1	
401	9294515	Air guide	1	
402	9294655	Top panel	1	
403	9294512	side panel upper right	1	
404	9294513	Side panel lower right.	1	
405	9294656	Top panel lower unit	1	
406	9294041	Grease leak guard	1	
407	9294511	Upper cover, exhaust	1	
408	9294510	Lower cover, exhaust	1	
409	9174485	Drop in guard, exhaust	2	
410	9290561	Upper exhaust pipe	1	
411	9292229	Gasket	2	
412	9290498	Lower exhaust pipe	1	
413	9290499	Coupler pipe with suspension	1	
415	3721059	Socket 1/2"	1	
418	9290505	Lower gas pipe with branch	1	
421	3500031	Fan	1	
422	9294062	Suspension bracket	1	
423	9294529	Transport cover, exhaust	1	
424	9171116	Membrane tulle DG 36	1	
425	9294531	Mounting bracket, stacked	1	
426	9172065	Castor	2	
427	9172066	Castor with brake	2	
430	9290194s	Exhaust kit		

TDR 7 P GAS - SHEET METAL



Pos.	Part number	Description	Qty.	Prio
501	Frame, ass.	1	
502	9171125	Leg, rubber 50 mm	4	
503	9294180	Side panel, left	1	
504	9294018	Side panel, right	1	
505	9294160	Top cover	1	
506	9294032	Top plate	1	
507	9294422	Cover, removeable	1	
508	9174485	Cover, exhaust	1	
509	9174408	Plate, air guide	1	
510	9170568	Mounting plate, blowers	1	
511	9290528	Air guide plate	1	
512	9294485	Cover, top	1	
513	9292118	Insulation top, large	1	
514	9292119	Insulation top, small	1	
515	9294404	Reinforcement, top plate	2	
516	9294405	Reinforcement, side plate, left	1	
517	9294406	Reinforcement, side plate, right	1	
518	9294415	Cover plate, machine components	1	
519	9172053	Nut M5	8	
520	9170444	Support, gear motor	1	
521	9294479	Air guide plate	1	
522	9174417	Plate, air guide	1	
523	9174427	Plate, air guide	1	
524	9294014	Bottom plate, stainless steel	8	
525	9290405	Drawer	1	
526	9171008	Drain-tap with handle	1	
528	9294025	Mounting plate	1	
529	9294019	Spark catcher	1	
530	9222076	Strain relief M20	1	
531	9222077	Connector M20	1	
533	9294065	Bracket, door switch	2	

TDR 7 P GAS - INSULATION



Pos.	Part number	Description	Qty.	Prio
513	9292118	Insulation top, large	1	
514	9292119	Insulation top, small	1	
550	9293089	Insulation 141x21-28	1	
551	9293090	Insulation 623x180	1	
552	9293087	Insulation 327x730	4	
553	9293085	Insulation 110x735	6	
554	9293086	Insulation 210x730	2	
555	9293088	Insulation 110x670	2	

FASTENERS

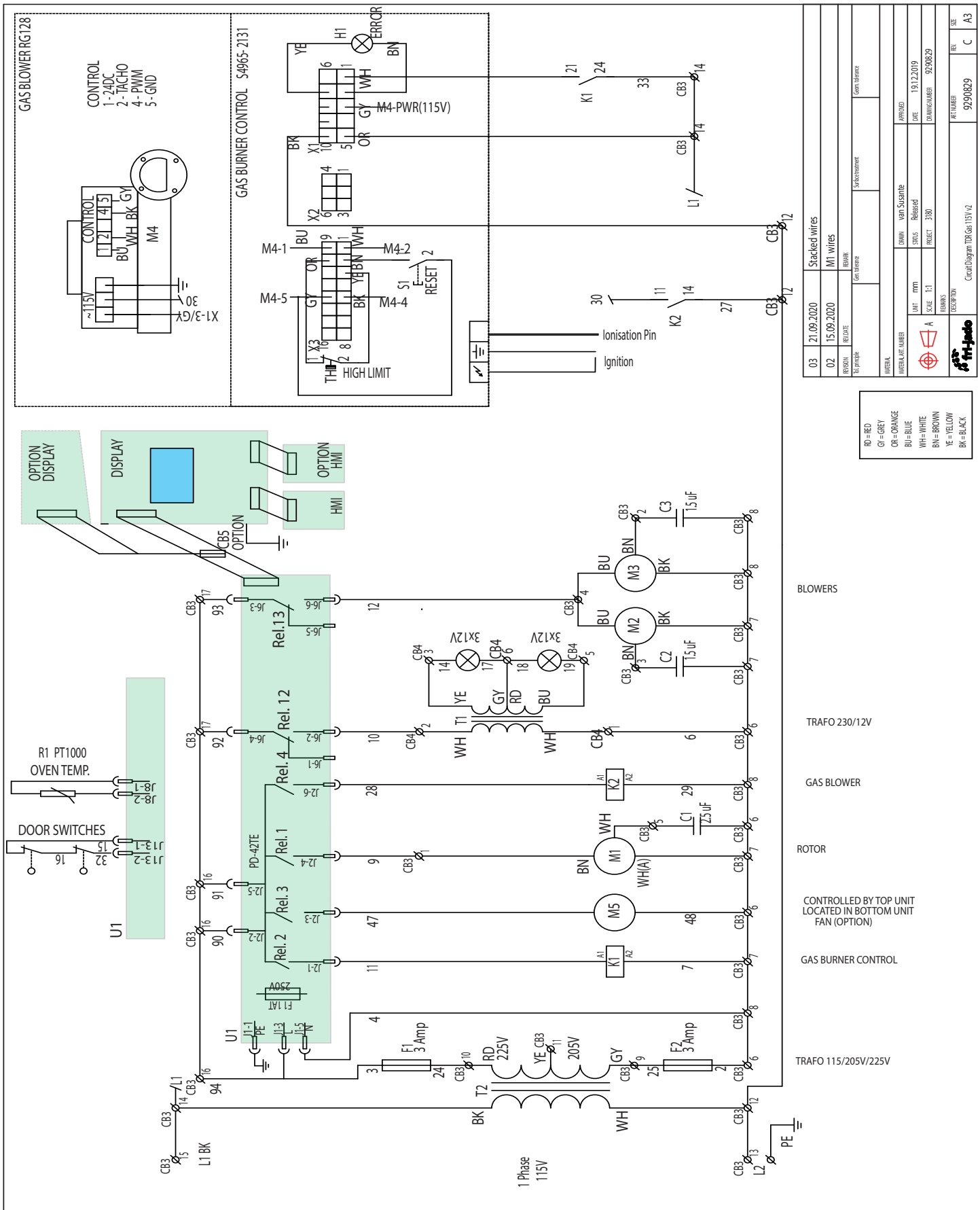
Pos.	Part number	Description
800	4280107	Bolt M6x20 ZP
801	4289559	Lockwasher M6, serrated ZP
802	4288321	Screw M5x16, SS socket button head.
804	4285092	Nut M6, black serrated
805	4288232	Screw M5x12, SS cross recess, wide button head
806	4286713	Bolt M6x16, ZP threadforming
810	4288325	Screw M5x12, SS socket, wide button head
812	9087570	Nut M5, black serrated
814	4289787	Bolt M6x30 ZP
817	4287549	Washer M8, ZP
819	0196673	Bolt M8x25, ZP
820	0141149	Screw M5x16, SS Cross recess pan head
822	0142315	Nut M5, SS hexagonal
824	9191050	Bolt, SS M5x18
825	0142103	Washer M5, SS
826	4280218	Screw M5x45, SS Cross recess pan head
827	4280208	Screw M4x8, SS Cross recess pan head
828	4280215	Screw M5x8, SS Cross recess pan head
829	4280558	Screw M5x16, SS Slotted wide head
830	9192065	Capnut M4, ZP
831	0142129	Washer M4, SS
832	4288231	Bolt M5x10, SS serrated
833	0142307	Nut M4, SS
834	4311110	Washer M5, SS ø5xØ15
835	0142111	Washer M6, SS
836	4285035	Nut M6, Brass
837	0195910	Capnut M6, BNP
838	4285076	Bolt M8x16, SS
841	0147017	Screw M2,5x16, SS Slotted pan head
842	0142293	Nut M2,5, SS hexagonal
843	9191130	starlock washer, 3mm black
845	0141081	0
846	4288323	Screw M5x20 mushroom head, with flange, 10 pcs
847	9070688	Bolt M8x12, SS
848	9008518	Lockwasher, M8 SS serrated
849	0142292	Nut M3
853	0141050	Screw M3x10, SS Cross recess pan head

Pos.	Part number	Description
854	0141076	Screw M3x20, SS Cross recess pan head
855	0141078	Screw M3x30, SS Cross recess pan head
856	0141035	Screw M3x5, SS Cross recess pan head
858	0141075	Screw M3x16, SS Cross recess pan head
859	4312810	Socket set screw M3x6, SS
861	4285151	starlock washer, 6mm
862	9191041	Circlips, E type for 6mm shaft
863	4287540	Screw M4x10, BNP
864	4285319	Screw 4,8x13, ZP Self drilling and tapping.
866	4287620	Screw 4,2x12, NP self tapping
868	4285078	Nut 1/4" bsw ZP
871	9191049	Set screw M5x5, black
872	4285010	Nut M3, ZP with lockwasher
873	3701248	Spacer 7mm, Ø3,2x6 NP
874	0149296	Spacer 10mm, Ø4,2x8 Nylon
875	9057347	Spacer 10mm, Ø5,2x10 Nylon
876	0141165	Screw M5x25, SS Cross recess pan head
877	4285135	Bolt M5x10, ZP thread forming
878	0137344	Screw M5x30, SS Cross recess pan head
879	4287610	Screw, ZP selftapping 3,5x13
880	9008178	Bolt M5x8, SS
881	0141246	Bolt M6x12, SS
882	0141117	Screw M4x45, SS Cross recess pan head
883	0142365	Locknut M6, ZP
885	4288324	Screw M4x8, SS Cross recess pan head
888	6962153	Washer M6, ZP ø6xØ25
889	6802013	Rivet nut, M5, ZP
890	9172053	Nut M5, for sheet metal
891	4288058	Bolt M5x20, ZP
892	0141521	Nut M6, SS
893	0146987	Washer M8, SS
894	0211520	Bolt M5x12, SS
895	0144359	Locknut M5, SS
896	4285408	Capnut M5, BNP
897	4288320	Screw M5x50, SS hexagonal
898	9073987	Washer M8, SS ø8xØ25
900	9008869	Bolt M8x50, ZP

Pos.	Part number	Description
902	4288319	Screw 6x20, ZP CR threadforming
903	4289402	Lockwasher M8, ZP
904	3701280	Lockwasher, starlock for 10mm shaft
905	0141393	Screw M4x10, SS countersunk
906	0141084	Screw M4x10, SS Cross recess pan head
907	4288327	Screw M5x25, SS Socket pan head
908	9006930	Lockwasher M4, countersunk SS serrated
909	0141092	Screw M4x12, SS Cross recess pan head
910	4287520	Washer M4, Brass
911	4285020	Nut M4, Brass
912	4280128	Bolt M4x12, SS
914	0144347	Locknut M4, ZP
915	8047381	Washer M6, SS ø6xØ25
920	0141547	Nut M8, SS
922	2800066	Connection nut M8x24, ZP
923	4285051	Connection nut M10x30, ZP
925	0195596	Bolt M8x10, ZP Socket head
926	9070793	Connection nut M6x18, ZP
929	0197378	Washer M12, Zp
930	9008056	Nut M12, ZP
931	0142056	Lockwasher M8, SS
933	9077004	Socket set screw M4x6, SS
934	9301049	Circlips external ø25
935	4287557	Washer M10
936	9073149	Wingnut M6, SS
937	2800082	Wingnut M6, Brass Nickle plated
939	4312027	Connection nut M5x15, ZP
940	4280540	Screw M5x6, SS countersunk
941	4311215	Screw , socket head M6 x 30
942	0141123	Screw pan head, Philips M5x10, SS
943	149299	Spacer, Ø8xø4,2, H15, black
944	0139142	Screw hexagon head M6x40, SS
945	4285410	Capnut M12 SS low profile
946	4286728	Set screw M8x40, socket
947	4280239	Screw M12x20, hexagon ZP
948	0197380	Washer M12, SS
949	0142975	0
950	4285120	Screw M4x20, thread rolling
951	8071043	Nut M4, serrated ZP
952	6962187	0
953	0197807	Screw M4x30, slotted ZP

Pos.	Part number	Description
954	4285084	Screw 4,8x19, ZP Self drilling and tapping.
955	9008217	Blind rivet 4x8,6
956	9174680	Washer ø5,2xØ20x2mm
957	4285047	nut M8 hexagon, thin DIN 439B
958	0195783	Screw M10x30 sock button head
959	9191108	Wing screw M6x10 SS
960	0141204	Screw M4x16, Pan head SS
961	0149210	Screw M5x6, Pan head
962	0141539	Screw M5x10, SS countersunk
963	4288233	Screw M8x16, ZP serrated
965	4288330	Screw M8x12, SS button head, wide flange
966	4285414	Capnut, M4 ss
967	0149298	Spacer 10mm, Ø3,4x6 Nylon
968	0149299	Spacer 15mm, Ø4,2x8 Nylon
969	0251473	Washer M4, ZP ø4xØ16
970	9087575	Nut M5 hexagon, tensilock A4
971	4280555	Screw M6x16, Brass nickel plated
972	6390168	Rivet nut, M6 ss
973	9261029	Wing screw M5x10 SS
974	0141131	M5x12 kruiskop
975	9008543	Nut M12, SS
976	4280110	Bolt M6x20, SS hexagon head
977	4286723	Hex. screw M8x20 flange thread forming
978	0211521	Screw M5x16, SS hex. Head

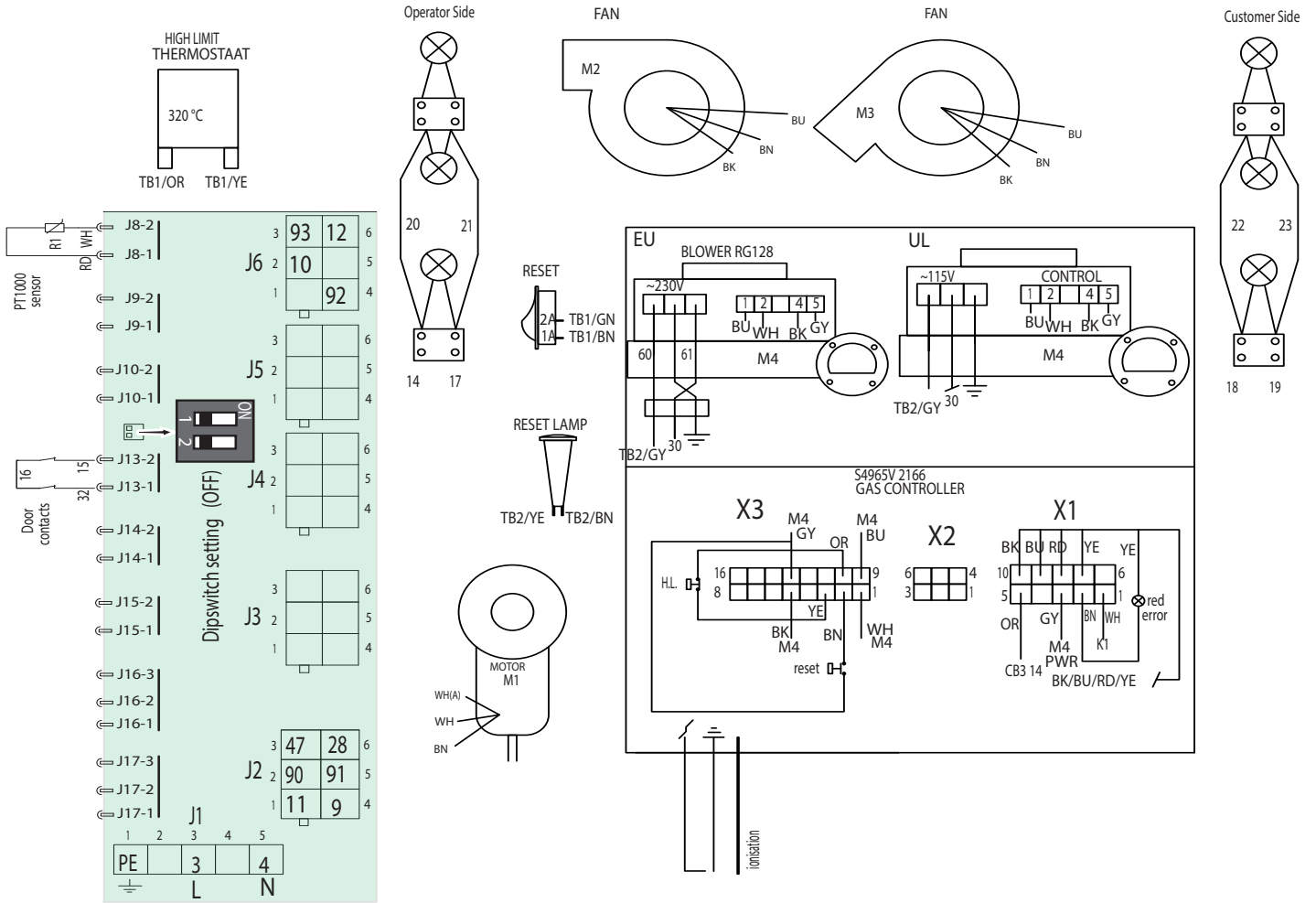
CIRCUIT DIAGRAM TDR 7 P GAS FROM SERIAL NUMBER 100097688



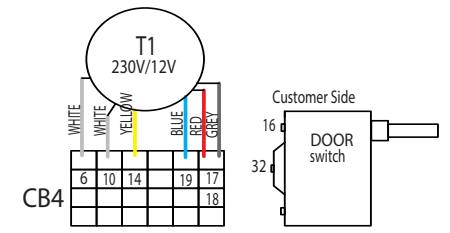
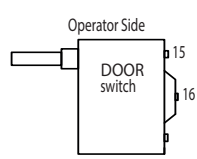
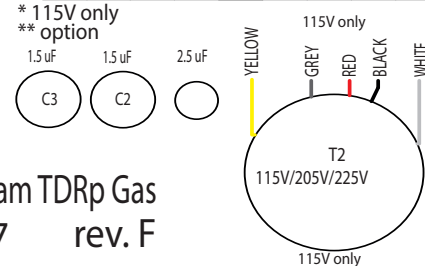
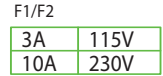
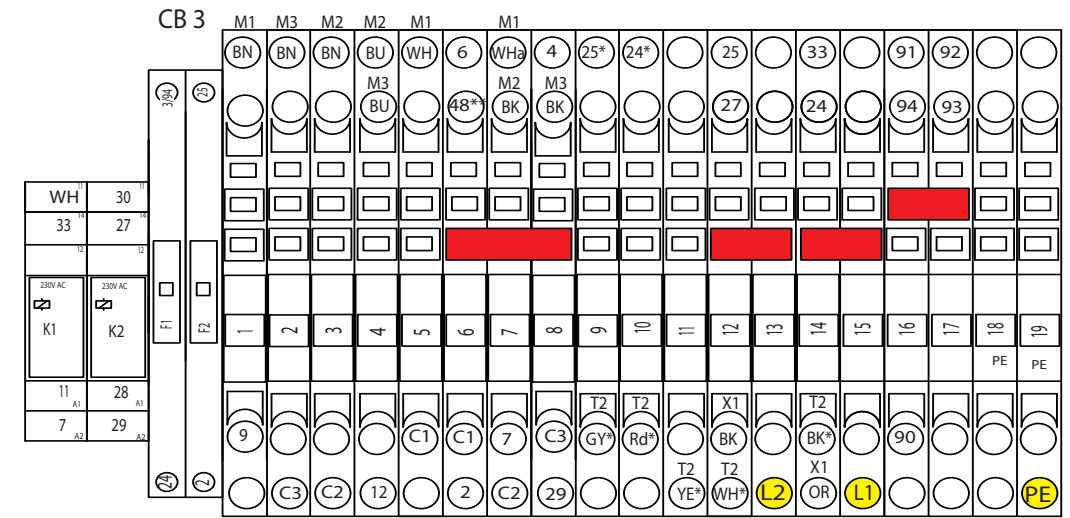
03	21.09.2020	Stacked wires
02	15.09.2020	M1 wires
REVISION	RE/DATE	REWORK
1		Get reference
DRAWING: Non-Susceptible DATE: 19.12.2019 PROJECT: 330 DIMENSION: 9200x29		
UNIT: mm SCALE: 1:1 PROJECT: 330		
DRAWING NUMBER: 9200x29 DIMENSION: 9200x29		
PART NUMBER: 9200x29 REL: C SIZE: A3		

Legend:
 RD=RED
 GR=GREY
 OR=ORANGE
 BU=BLUE
 WH=WHITE
 BN=BROWN
 YE=YELLOW
 BK=BLACK

WIRING DIAGRAM TDR 7 P GAS FROM SERIAL NUMBER 100097688

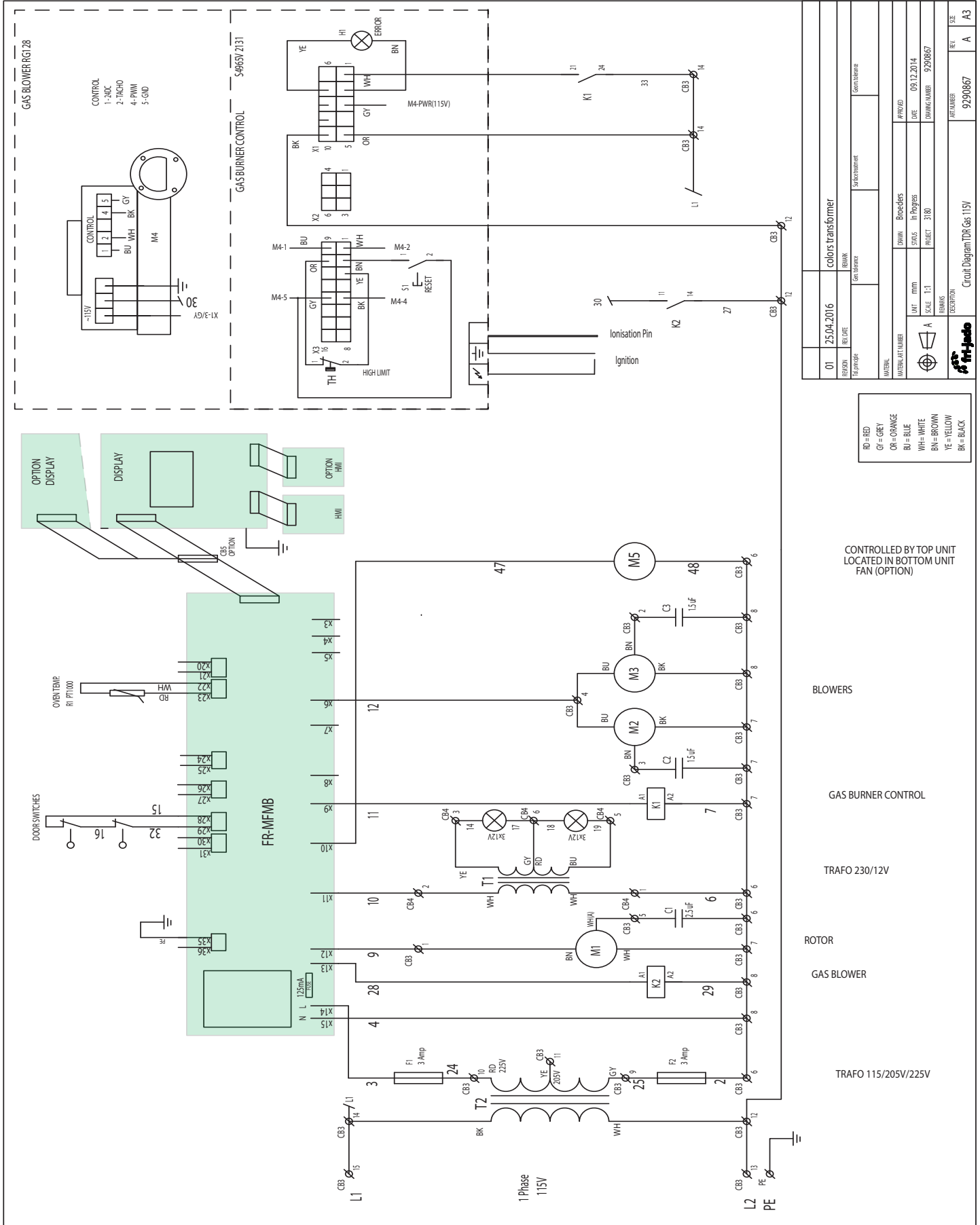


- RD = RED
- GY = GREY
- OR = ORANGE
- BU = BLUE
- WH = WHITE
- BN = BROWN
- YE = YELLOW
- BK = BLACK



Wiring Diagram TDRp Gas 9290857 rev. F

CIRCUIT DIAGRAM TDR 7 P GAS UNTILL SERIAL NUMBER 10097687



REVISION	01	25.04.2016	colors transformer
BY	mmph		
CHECKED			
APPROVED			
DATE		09.12.2014	
DRAWING NUMBER		9290867	
PROJECT		3180	
SCALE	1:1		
UNIT	mm		
DRAWN	Broeders		
IN PROGRESS			
DESCRIPTION	Circuit Diagram TDR Gas 115V		
REVISION			
DATE			
BY			
CHECKED			
APPROVED			
DATE			
DRAWING NUMBER			
PROJECT			
SCALE			
UNIT			
DRAWN			
IN PROGRESS			
DESCRIPTION	Circuit Diagram TDR Gas 115V		
REVISION			
DATE			
BY			
CHECKED			
APPROVED			
DATE			
DRAWING NUMBER			
PROJECT			
SCALE			
UNIT			
DRAWN			
IN PROGRESS			
DESCRIPTION	Circuit Diagram TDR Gas 115V		
REVISION			
DATE			
BY			
CHECKED			
APPROVED			
DATE			
DRAWING NUMBER			
PROJECT			
SCALE			
UNIT			
DRAWN			
IN PROGRESS			
DESCRIPTION	Circuit Diagram TDR Gas 115V		
REVISION			
DATE			
BY			
CHECKED			
APPROVED			
DATE			
DRAWING NUMBER			
PROJECT			
SCALE			
UNIT			
DRAWN			
IN PROGRESS			
DESCRIPTION	Circuit Diagram TDR Gas 115V		

RD = RED
GY = GREY
OR = ORANGE
BU = BLUE
WH = WHITE
BN = BROWN
YE = YELLOW
BK = BLACK

CONTROLLED BY TOP UNIT
LOCATED IN BOTTOM UNIT
FAN (OPTION)

BLOWERS

GAS BURNER CONTROL

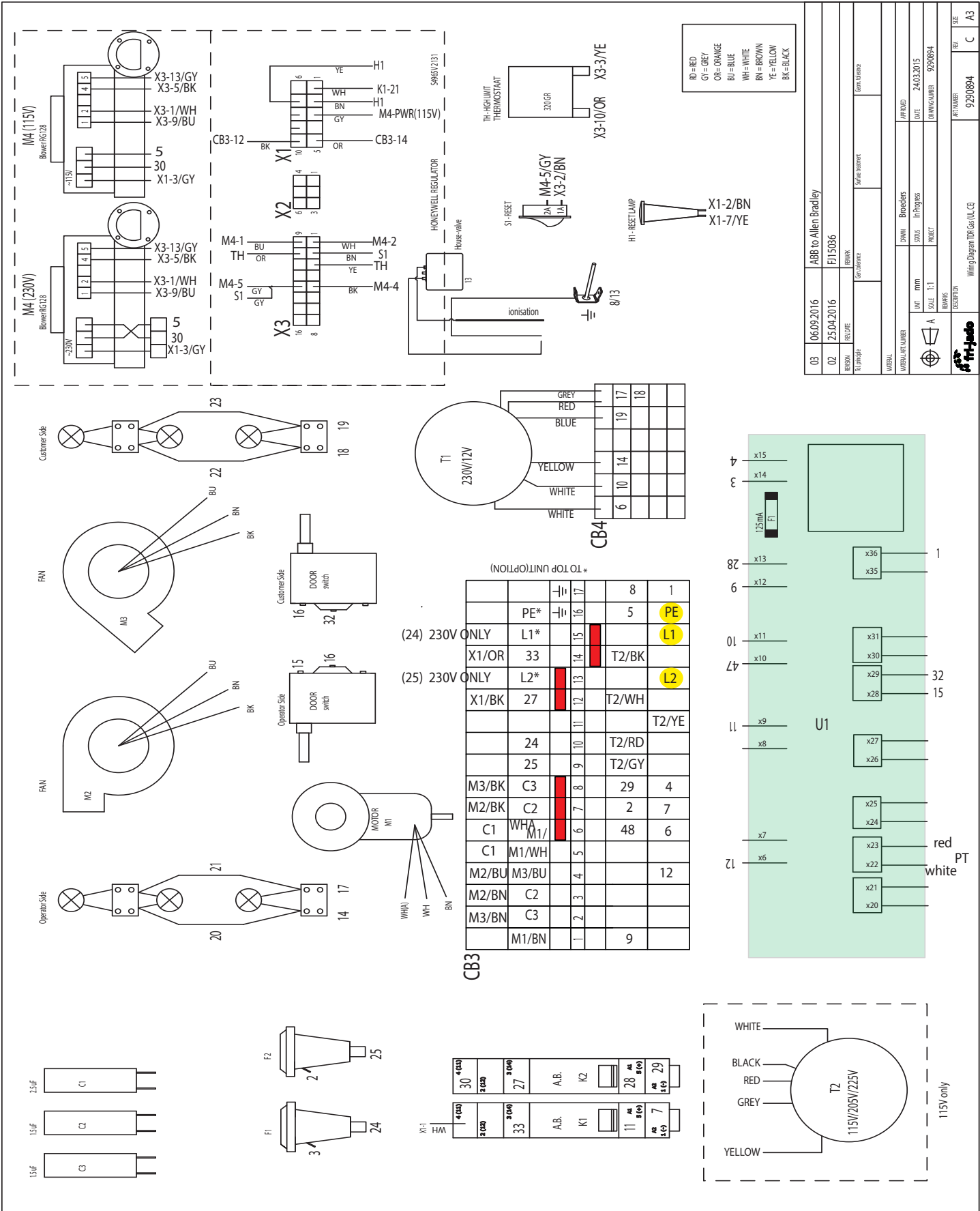
TRAFO 230/12V

ROTOR

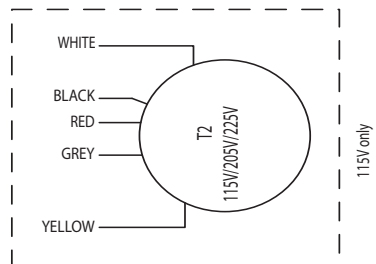
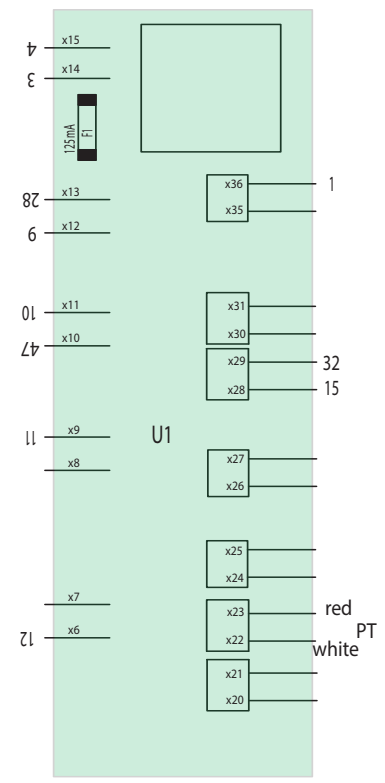
GAS BLOWER

TRAFO 115/205V/225V

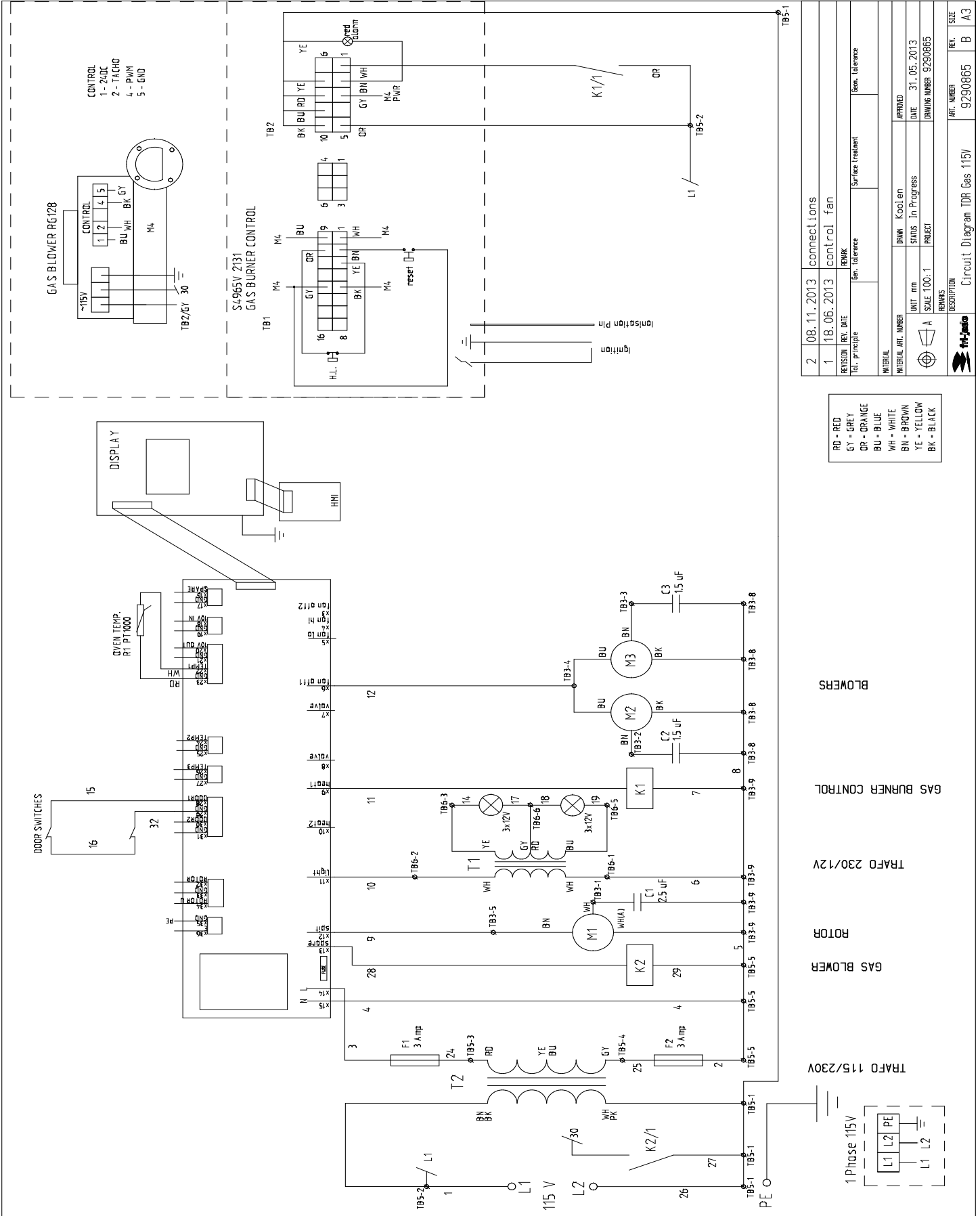
WIRING DIAGRAM TDR 8 P GAS UNTILL SERIAL NUMBER 100097687



03	06/09/2016	ABB to Allen Bradley	REV. 02	9290894	C	A3
02	25/04/2016	F15036	REV. 01	9290894		
REASON	FR/CD	Gen. change	REMARK	Surface treatment	Gen. change	
DATE	24/03/2015	APPROVED	DATE	24/03/2015	PROJECT	9290894
SCALE	1:1	PROJECT	DATE	24/03/2015	PROJECT	9290894
SCALE	1:1	PROJECT	DATE	24/03/2015	PROJECT	9290894
SCALE	1:1	PROJECT	DATE	24/03/2015	PROJECT	9290894
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SCALE	1:1	PROJECT	DATE	24/03/2015	PROJECT	9290894
SCALE	1:1	PROJECT	DATE	24/03/2015	PROJECT	9290894



CIRCUIT DIAGRAM TDR 7 P GAS UNTILL SERIAL NUMBER 100080362



CONTROL
 1 - 24DC
 2 - TACHO
 4 - PWM
 5 - GND

GAS BLOWER RG128

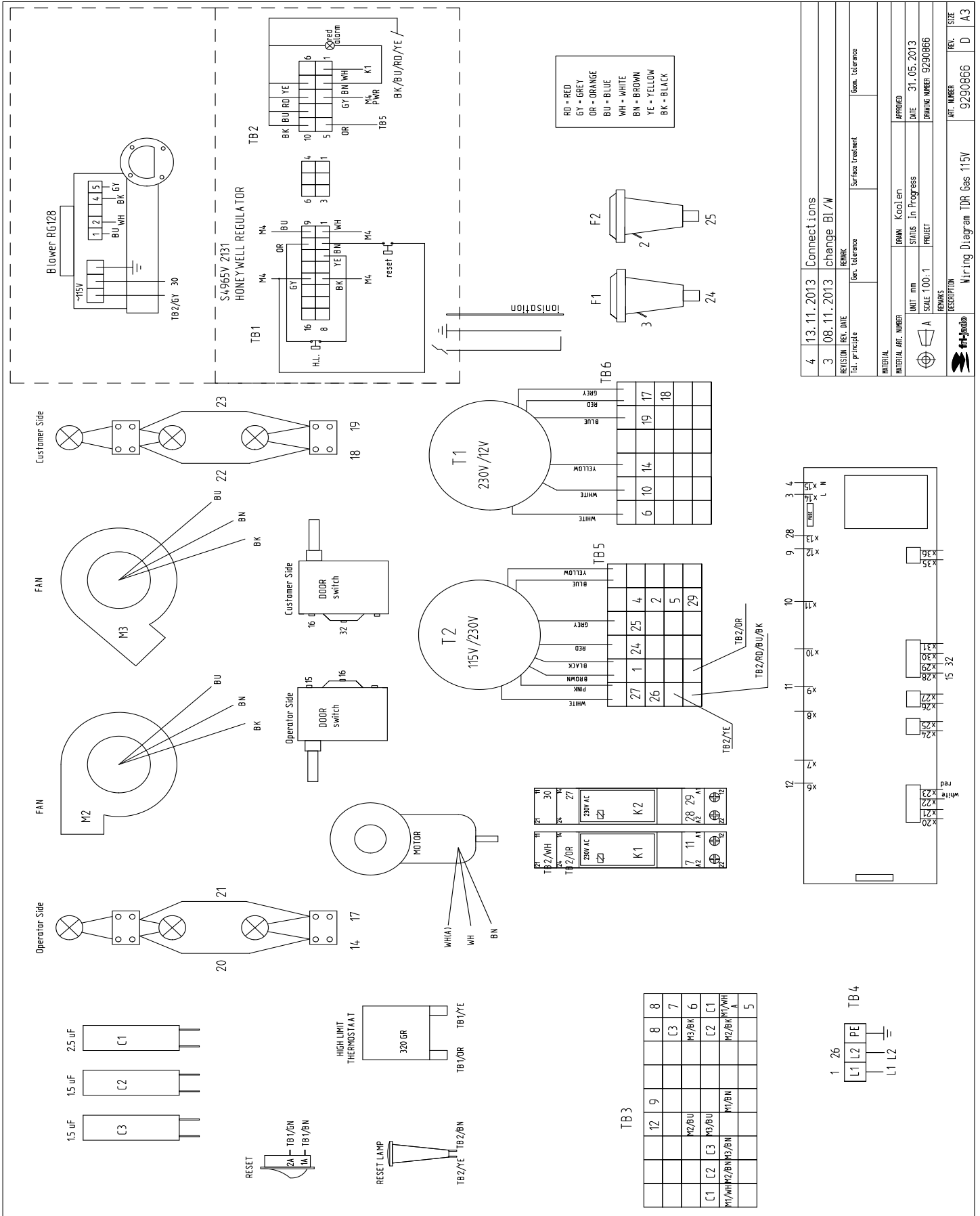
S4965V 2131
 GAS BURNER CONTROL

RD - RED
 GY - GREY
 OR - ORANGE
 BU - BLUE
 WH - WHITE
 BN - BROWN
 YE - YELLOW
 BK - BLACK

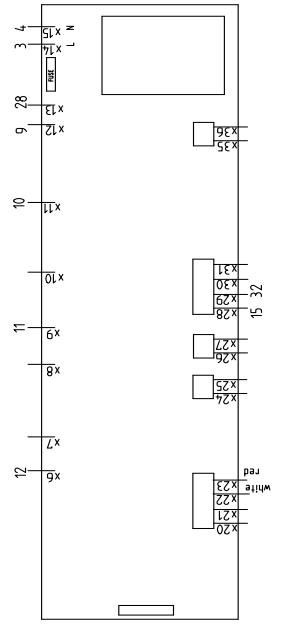
2	08.11.2013	connections
1	18.06.2013	control fan
REVISION REV. DATE		REMARK
Tab. principle		Surface treatment
Tab. tolerance		Tab. tolerance
MATERIAL		
MATERIAL ART. NUMBER	BRAND	Koolen
UNIT mm	STATUS	In Progress
SCALE 100:1	PROJECT	
REMARKS		
DESCRIPTION		
Circuit Diagram TDR Gas 115V		
ART. NUMBER	REV.	SIZE
9290865	B	A3

DISPLAY	HMI
DOOR SWITCHES	15, 16, 32
OVEN TEMP. RT PT1000	12
RAFO 115/230V	26
GAS BLOWER	27
ROTOR	28
TRAFO 230/12V	29
GAS BURNER CONTROL	30
BLOWERS	31

WIRING DIAGRAM TDR 7 P GAS UNTILL SERIAL NUMBER 100080362

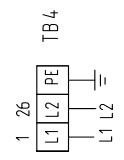


4	13.11.2013	Connections
3	08.11.2013	change Bl/W
REVISION REV. DATE		REMARK
Tot. principle		Sec. tolerance
		Geom. tolerance
MATERIAL		
MATERIAL REF. NUMBER	BRAND	Kool en
UNIT mm	STATUS	In Progress
SCALE 100:1	PROJECT	
REVISIONS		
REV. NUMBER	REV. DATE	REV. SIZE
9290866		D A3
DESCRIPTION		
Wiring Diagram TDR Gas 115V		



TB3

	12	9	8	8
			C3	7
		M2/BU	M3/BK	6
	C1	C3	M3/BU	C2
	M1/WH	M2/BN	M3/BN	M1/WH
				5



EMPTY PAGE

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