



Cook & Hold Ovens Smoker Ovens Deluxe Control

300-TH	750-SK
500-TH	1000-SK
750-TH	1200-SK
1000-TH	1750-SK
1200-TH	
1750-TH	



MN-46712-EN

REV.02
04/21

EN



Manufacturer's Information

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Original instructions The content in this manual is written in American English.

Alto-Shaam 24/7 Emergency Repair Service

Call	Call 800-558-8744 to reach our 24-hour emergency service call center for immediate access to local authorized service agencies outside standard business hours. The emergency service access is provided exclusively for Alto-Shaam equipment and is available throughout the United States through Alto-Shaam's toll free number.
Availability	Emergency service access is available seven days a week, including holidays.

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Manufacturer's Information 2

Foreword 3

 Alto-Shaam 24/7 Emergency Repair Service 3

Table of Contents 5

Safety 7

 The Meaning of Signal Words 7

 Safety Precautions. 8

Operation 11

 How to Turn On and Turn Off the Oven 11

 How to View and Set up WiFi Connection. 12

 How to Set up an Ethernet Connection 15

 How to Update Software with a USB Drive 17

Components 19

 Component Identification 19

 Front Panel Identification 20

 Back Panel Identification 21

 Component Access Panels Identification. 22

 Control Panel 23

 Interface Board 24

 300-TH—Electrical Component Identification 25

 500-TH/SK, 750-TH/SK, 1000-TH/SK—Electrical
Component Identification. 26

 1250-TH/SK, 1750-TH/SK—Electrical Component Identification 27

 Internal Components Identification. 38

 Internal Components 39

Maintenance 41

 Maintenance Schedule 41

 How to Clean the Oven 43

Troubleshooting 45

 Error Codes. 45

 High Limit Alarm. 46

 The Display does not Illuminate 47

 The Oven does not Heat 49

 The Product Probe does not Work 50

 The Smoke Function does not Operate. 51

 The Screen is not Responsive/Incorrect
Response to the Selected Icon 53

TABLE OF CONTENTS

The Oven Overheats 54
Cheflinc.alto-shaam.com is Not Available on Your Device 56
Cannot Connect to cheflinc.alto-shaam.com 57
The Oven is not Displayed on the Dashboard 58
Unable to Assign Recipes from the Dashboard to Ovens in the Field 59

Schematics **61**

The Meaning of Signal Words

This manual contains signal words where needed. These signal words must be obeyed to reduce the risk of death, personal injury, or equipment damage. The meaning of these signal words is explained below.

**DANGER**

Danger indicates a hazardous situation which, if not avoided, will result in serious injury or death.

**WARNING**

Warning indicates a hazardous situation which, if not avoided, could result in serious injury or death.

**CAUTION**

Caution indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

NOTICE

Notice indicates a situation which, if not avoided, could result in property damage.



NOTE: Note indicates additional information that is important to a concept or procedure.

Safety Precautions

Before you begin

Read and understand all instructions in this manual.

Electrical precautions

Obey these electrical precautions when using the appliance:

- Connect the appliance to a properly grounded outlet. Do not use the appliance if it is not properly grounded. Consult an electrician if there is any doubt that the outlet used is properly grounded.
 - Keep the cord away from hot surfaces.
 - Do not attempt to service the appliance or its cord and plug.
 - Do not operate the appliance if it has a damaged cord or plug.
 - Do not immerse the cord or plug in water.
 - Do not let the cord hang over the edge of a table or counter.
 - Do not use an extension cord.
-

Usage precautions

Obey these usage precautions when using the appliance:

- Only use this appliance for its intended use of heating or cooking.
 - Always keep liquids, or foods that can become liquid when heated, level and at or below eye level where they can be seen.
 - Always open the appliance door very slowly. Escaping hot vapors or steam can cause serious injury.
 - Use utensils and protective clothing such as dry oven mitts when loading and unloading the appliance.
 - Use caution when using the appliance. Floors adjacent to the appliance may become slippery.
 - Do not cover or block any of the openings of this appliance.
 - Do not cover shelves or any other part of this appliance with metal foil.
 - Do not use this appliance near water such as a sink, in a wet location, near a swimming pool, or similar locations.
-

Maintenance precautions

Obey these maintenance precautions when maintaining the appliance:

- Obey precautions in the manual, on tags, and on labels attached to or shipped with the appliance.
- Only clean the appliance when the oven is disconnected from the power source.
- Do not store the appliance outdoors.
- Do not clean the appliance with metal scouring pads.
- Do not use corrosive chemicals when cleaning the appliance.
- Do not use a hose or water jet to clean the appliance.
- Do not use the appliance cavity for storage.
- Do not leave flammable materials, cooking utensils, or food inside the appliance when it is not in use.

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Operator training

All personnel using the appliance must have proper operator training. Before using the appliance:

- Read and understand the operating instructions contained in all the documentation delivered with the appliance.
- Know the location and proper use of all controls.
- Keep this manual and all supplied instructions, diagrams, schematics, parts lists, notices, and labels with the appliance if the appliance is sold or moved to another location.
- Contact Alto-Shaam for additional training if needed.

Operator qualifications

Only trained personnel with the following operator qualifications are permitted to use the appliance:

- Have received proper instruction on how to use the appliance.
- Have demonstrated their ability with commercial kitchens and commercial appliances.

The appliance must not be used by:

- Persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision concerning use of the appliance by person responsible for their safety.
- People impaired by drugs or alcohol.

- Children should be supervised to ensure that they do not play with the appliance.
- Children shall neither clean nor maintain the appliance.

Condition of appliance

Only use the appliance when:

- All controls operate correctly.
- The appliance is installed correctly.
- The appliance is clean.
- The appliance labels are legible.

Servicing the appliance

- Only trained personnel are permitted to service or repair the appliance. Repairs that are not performed by an authorized service partner or trained technician will void the warranty and relieve Alto-Shaam of all liability.
- To prevent serious injury, death or property damage, have the appliance inspected and serviced at least every twelve (12) months by an authorized service partner or trained technician.
- Contact Alto-Shaam for the authorized service partner in your area.

Personal Protective Equipment (PPE)

Wear the following Personal Protective Equipment (PPE) while cleaning the appliance:

- Protective gloves
 - Protective clothing
 - Eye protection
 - Face protection
-

Use of restraining devices

A restraining device (tether) must be installed to any appliance that is hard-wired and mounted on casters. The tether must:

- Be secured to the building's structure.
- Limit the movement of the appliance so that no stress is transmitted to the electrical conduit.

A connection point for the tether is located on the back of the appliance.

A tether is not supplied by nor available from the manufacturer.

Service Technician Training

Only trained personnel are permitted to service or repair the appliance. Service technicians must be knowledgeable in current codes and standards as stated by the appropriate agencies, such as:

- The National Fire Protection Association (NFPA)
- National Electrical Code (NEC)
- The Service Technician's employer

How to Turn On and Turn Off the Oven

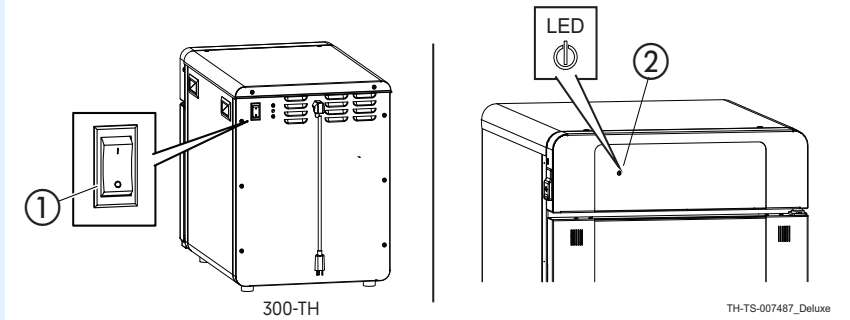
Before you begin

The oven must be connected to electric power.

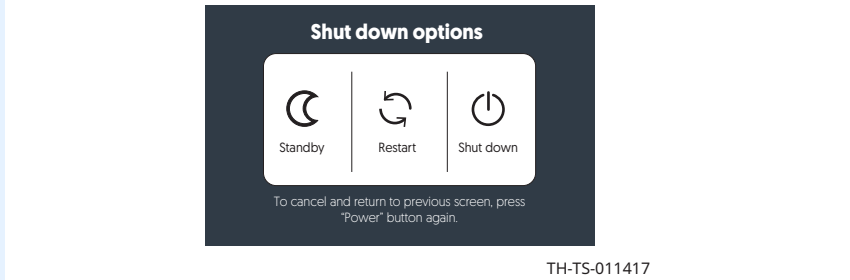
Turning on the oven

To turn on the oven, do the following.

Step	Action
1.	<p>Set the power switch ① to the ON position (300-TH only). Touch and hold the ON/OFF button ② for two (2) seconds.</p>  <p>The oven is now on.</p>
2.	<p>To turn off the oven, do the following.</p> <p>Touch and hold the ON/OFF button for 5 seconds. The Shut Down Options screen displays.</p>  <p>3.</p>



Turning off the oven



Result

The oven is now off.

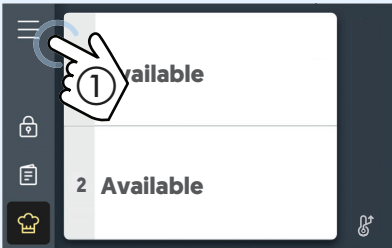



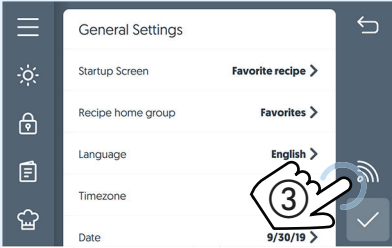
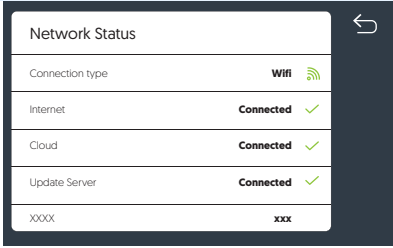
How to View and Set up WiFi Connection

Before you begin

- The facility must have WiFi.
- Do not connect to a guest network.

Procedure

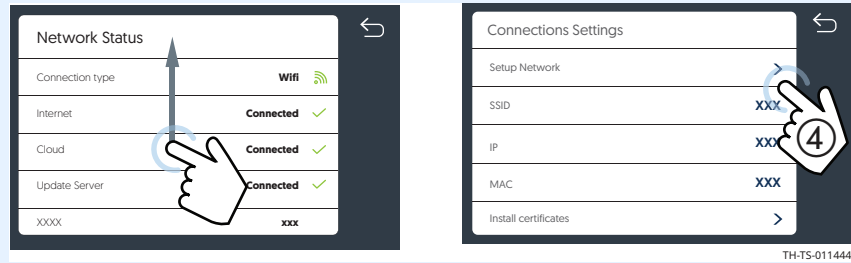
To set up WiFi, do the following.

Step	Action
1.	<p>Touch the menu icon ①. The menu screen displays.</p>   <p style="text-align: right; font-size: small;">TH-TS-009945</p>
2.	<p>Touch the settings icon ②. The general settings screen displays.</p>   <p style="text-align: right; font-size: small;">TH-TS-011442</p>
3.	<p>Touch the WiFi icon ③. The Network Status screen displays.</p>   <p style="text-align: right; font-size: small;">AS-TS-009332</p>

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4. **Scroll** to “Connection settings”. **Touch** the Setup Network icon ④.

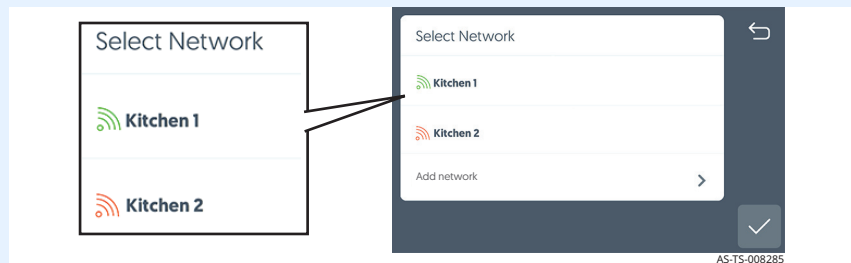


5. **Touch** the WiFi icon ⑤.



The available networks will show on the screen. The color of the network icon indicates the strength of the signal for each network.

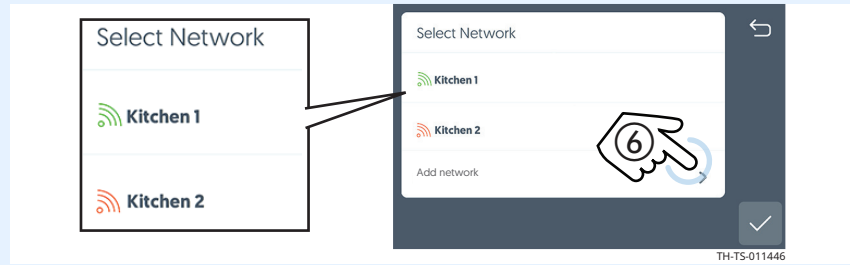
- Green = strong
- Yellow = medium
- Red = weak



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6. If the network is not displayed, **touch** the “Add network” icon ⑥.



Enter the SSID using the keypad. Then, **touch** the arrow key.

Enter the security type. Then, **touch** the check mark.

Enter the password using the keypad. Then, **touch** the arrow key.

Touch the check mark when finished.

Result

The procedure is now complete.

How to Set up an Ethernet Connection

Before you begin

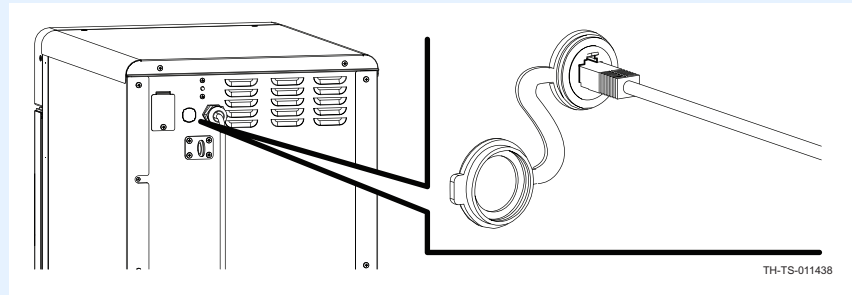
- The facility must have an Ethernet port.
- You will need an Ethernet cable.

Procedure

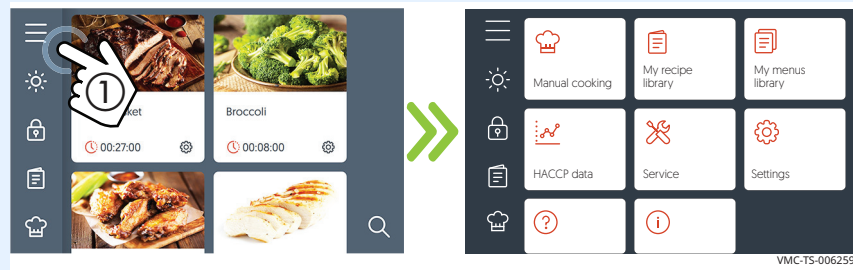
To set up an Ethernet connection, do the following.

Step	Action
------	--------

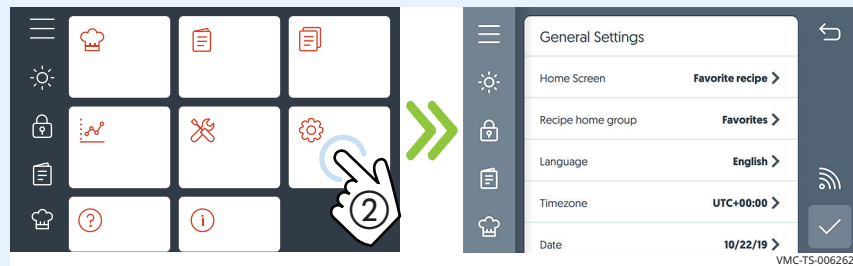
- | | |
|----|---|
| 1. | Plug the Ethernet cord into the Ethernet port on the oven and the wall outlet. |
|----|---|



- | | |
|----|---|
| 2. | Touch the menu icon ①. The menu screen displays. |
|----|---|



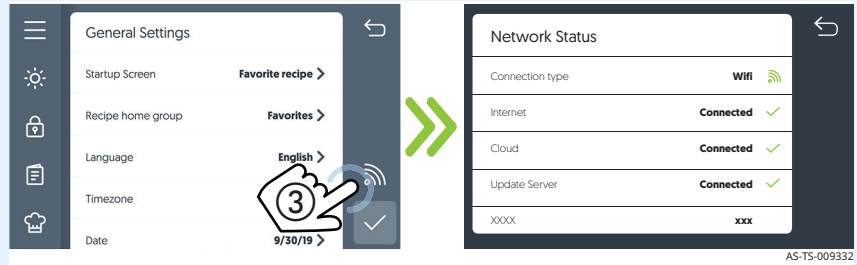
- | | |
|----|---|
| 3. | Touch the settings icon ②. The general settings screen displays. |
|----|---|



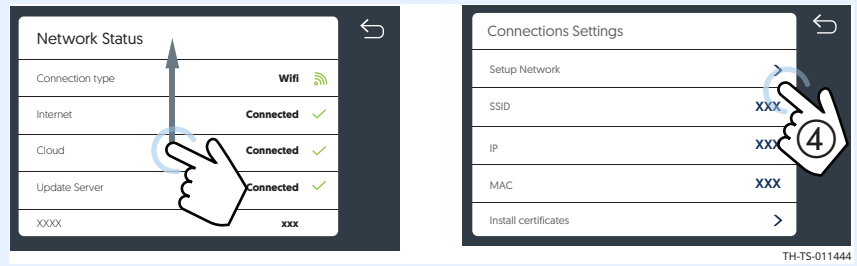
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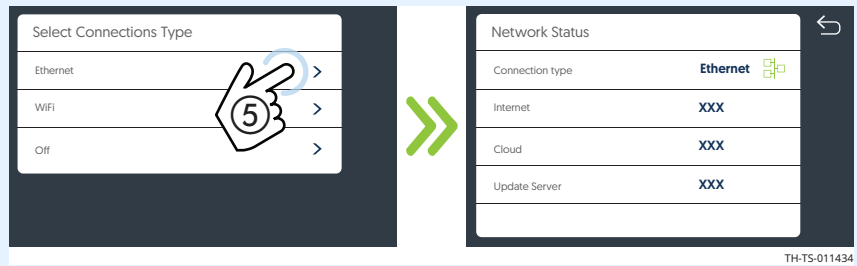
4. **Touch** the WiFi icon ③. The Network Status screen displays.



5. **Scroll** to “Connection settings”. **Touch** the Setup Network icon ④.



6. **Touch** the Ethernet icon ⑤. Follow any prompts.



Result

The Ethernet connection is now set up.

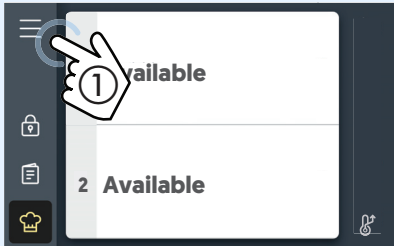
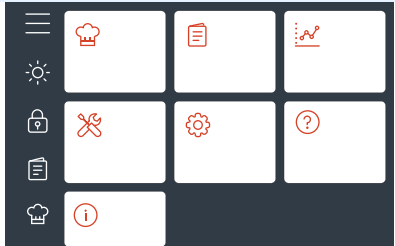
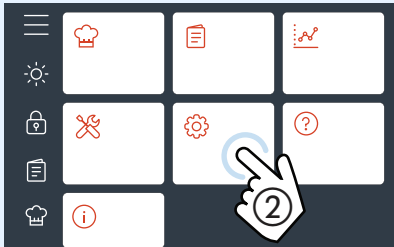
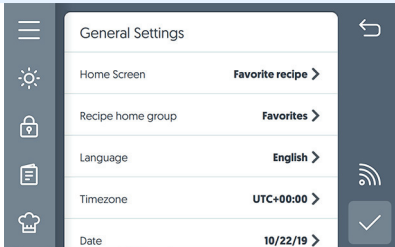
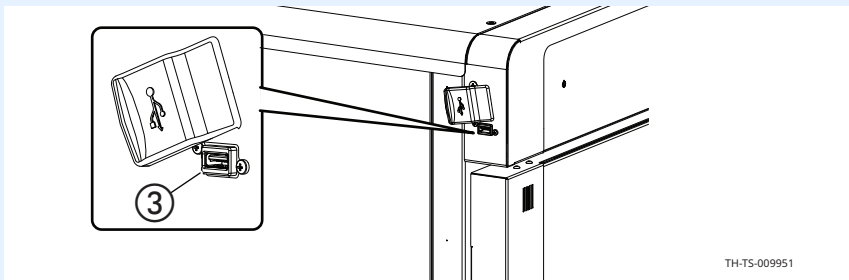
How to Update Software with a USB Drive

Before you begin

- You will need a USB drive with the updated software. To download the most up to date oven software and register for email notifications when new software versions are released, please visit <https://www.alto-shaam.com/en/customer-support/software-downloads>.
- Do not remove the USB drive during the update process.

Procedure

To update the software, do the following.

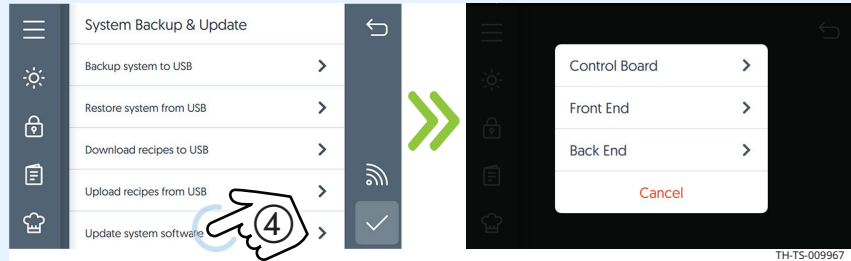
Step	Action
1.	<p>Touch the menu icon ①. The menu screen displays.</p>   <p style="text-align: right; font-size: small;">TH-TS-009945</p>
2.	<p>Touch the Settings icon ②. The general settings screen displays.</p>   <p style="text-align: right; font-size: small;">TH-TS-009947</p>
3.	<p>Plug the USB drive into the port ③.</p>  <p style="text-align: right; font-size: small;">TH-TS-009951</p>

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4. **Scroll** to System Backup & Update.

Touch the Update system software ④ setting.



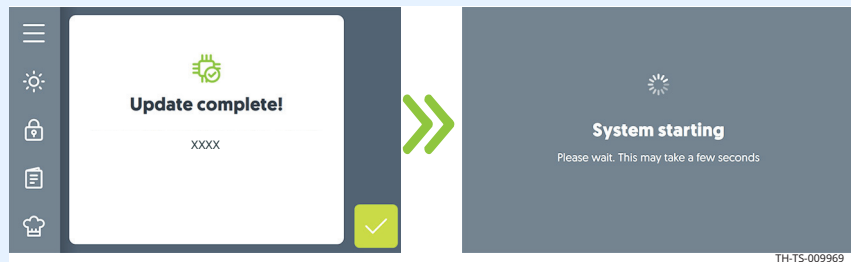
Touch Control Board (CB) to update the control board. The oven loads the selected software. The oven verifies the file and then updates the CB.

NOTICE Do not remove the USB drive during the update process.

Touch Front End to update the user interface software. The oven loads the selected software.

Touch Back End to update the supporting software between the control board (CB) and interface board (IB). The oven loads the selected software.

5. **Touch** the green check mark when the update is complete to restart the oven.



6. **Remove** the USB drive.

Result

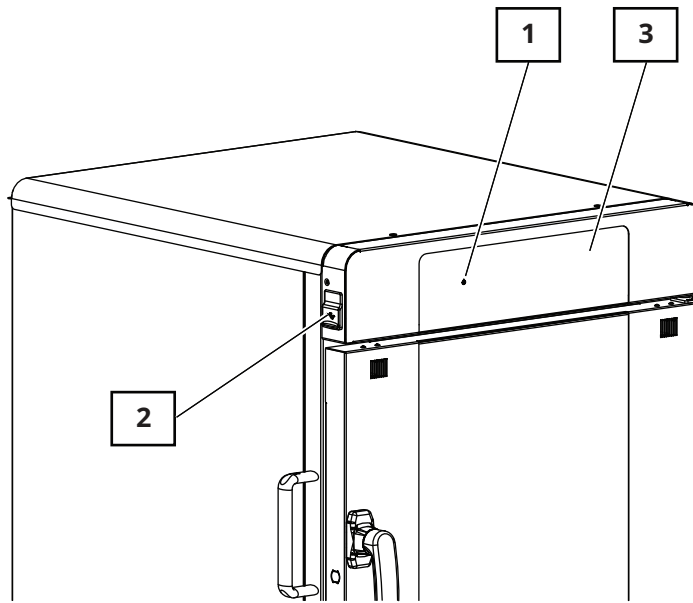
The software has now been updated.

Component Identification



COMPONENTS

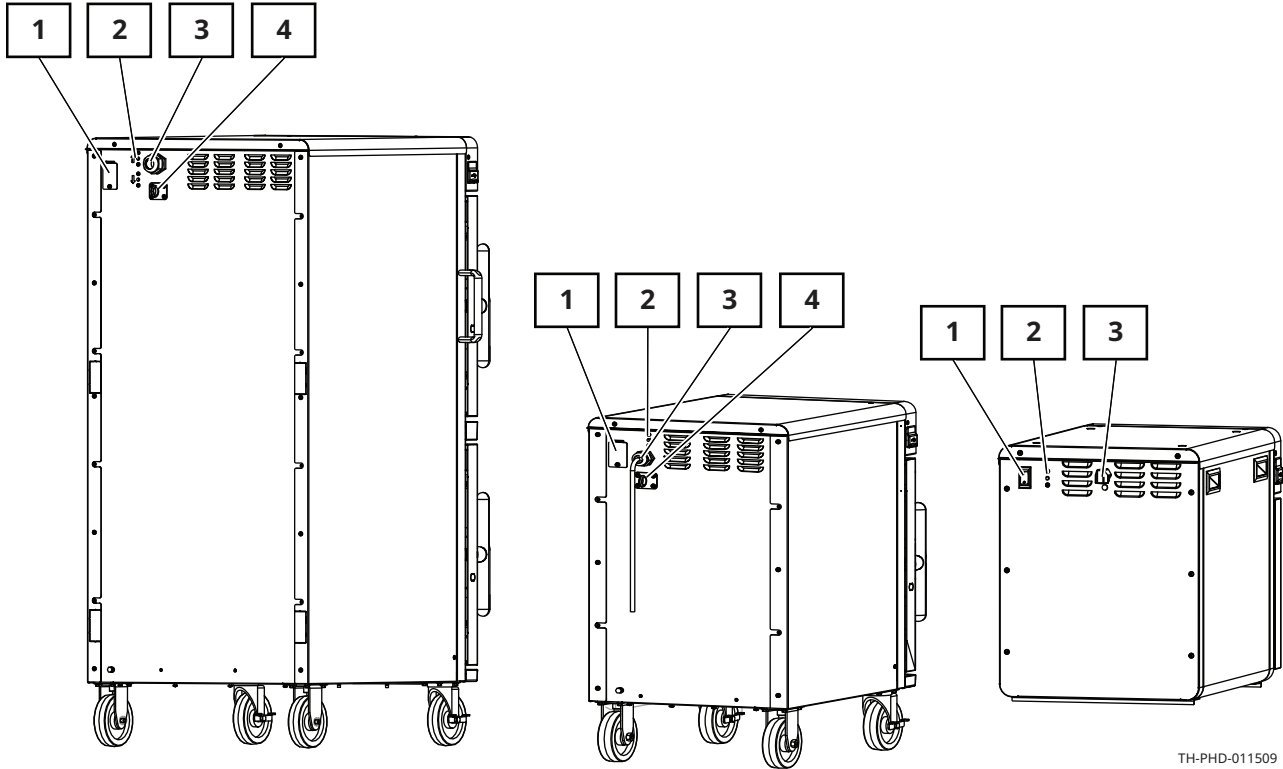
Front Panel Identification



TH-PHD-011505

Ref.	Description
1	ON/OFF button
2	USB port
3	Control panel display

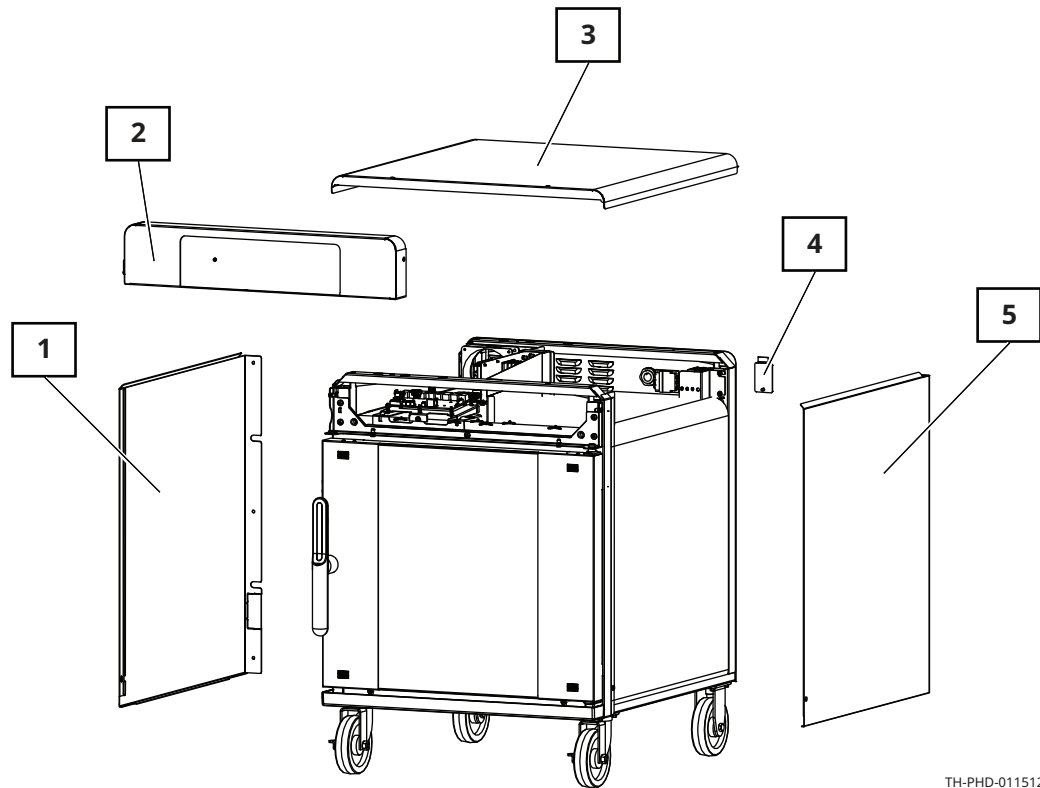
Back Panel Identification



TH-PHD-011509

Ref.	Description
1	Circuit breakers
	ON/OFF switch (TH-300 only)
2	High limit(s)
3	Electrical supply
4	Tether ring

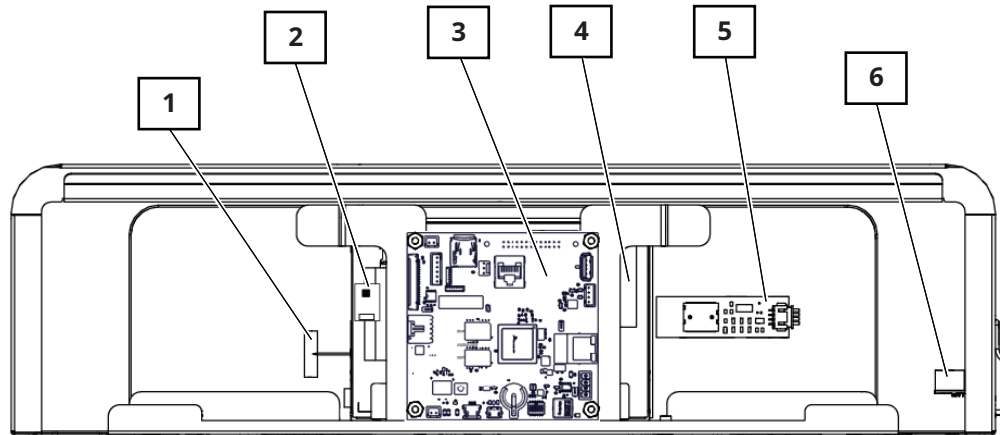
Component Access Panels Identification



TH-PHD-011512

Ref.	Description	Provides access to
1	Left side panel	Door switch (right hand hinge door) Heating element terminal block (500-TH)
2	Control panel	Interface board
3	Top service panel	Electrical components
4	Circuit breaker access panel	Circuit breakers (500-TH and larger)
5	Right side panel	Door switch (left hand hinge door) Heating element terminal blocks (all except the 300-TH)

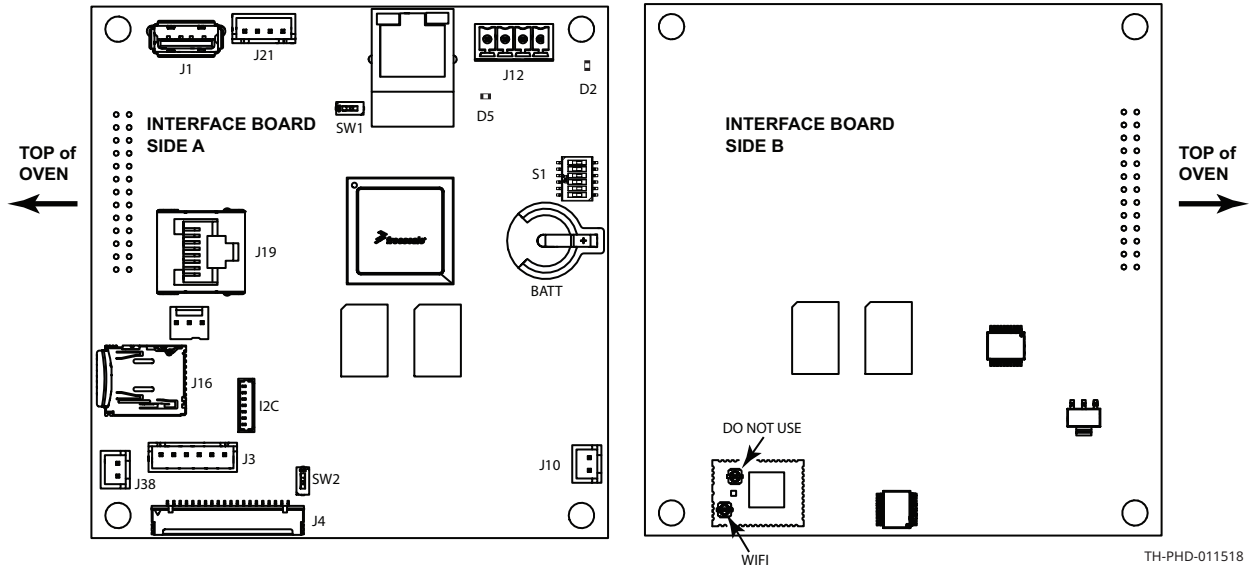
Control Panel



VMC-PHD-007596

Ref.	Description
1	WIFI antenna (Not serviceable)
2	Capacitive touch controller board (Not serviceable)
3	Interface board
4	Liquid Crystal Display (LCD) (Not serviceable)
5	ON/OFF board (Not serviceable)
6	USB port

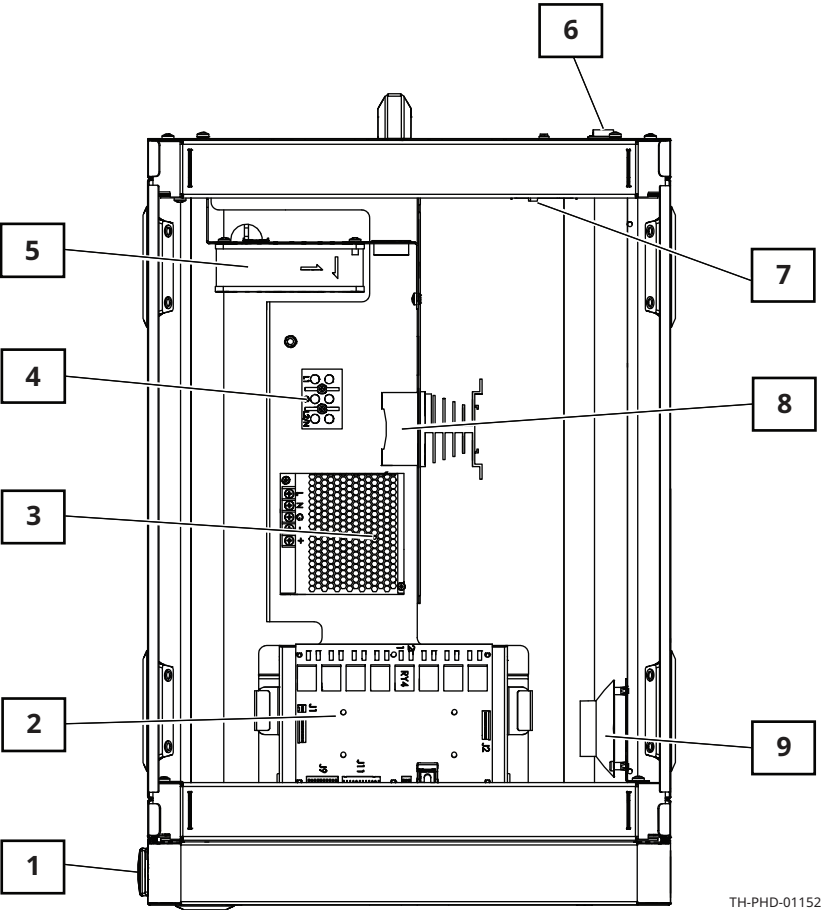
Interface Board



TH-PHD-011518

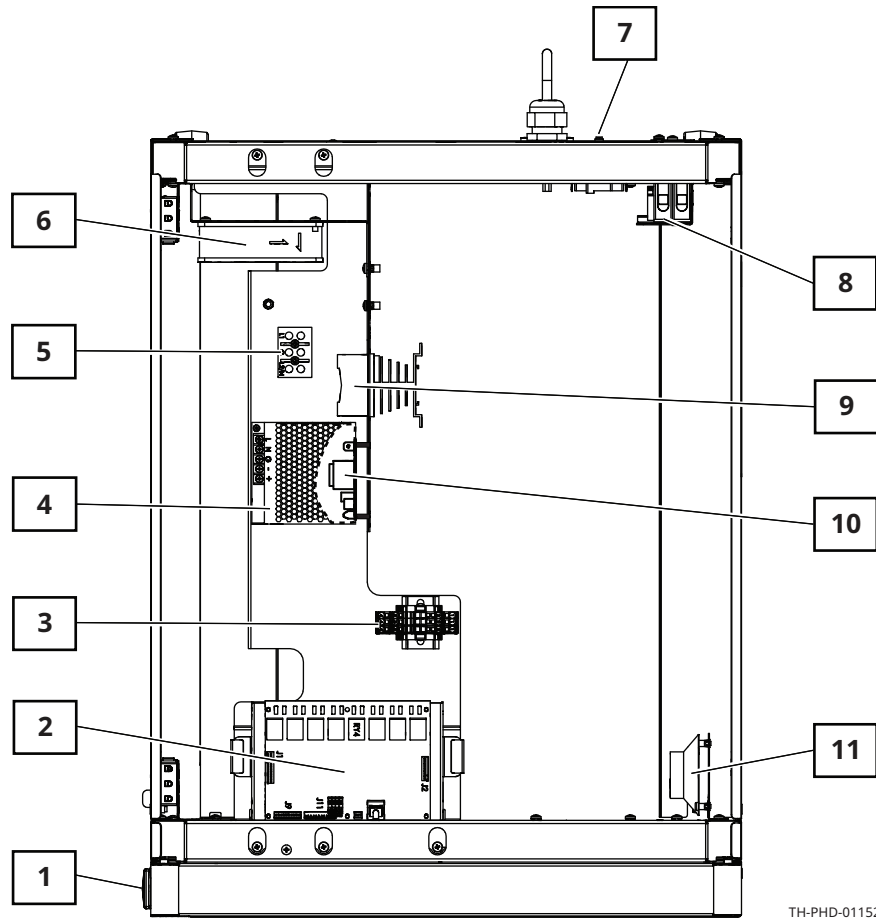
Ref.	Description
BATT	Clock battery
D2	5V IN
D5	12V IN
I2C	Capacitive touch cable
J1	USB connector
J3	Display back light
J4	LCD interface
J10	Speaker
J12	12 VDC power
J16	8 GB micro SD card
J19	Communication to control board
J21	ON/OFF board
J38	Speaker
S1	DIP switches (#4 on)
SW1	DIP switch (off)
SW2	DIP switch (off)
WIFI	WIFI antenna (conductor closest to the edge of the board)

300-TH—Electrical Component Identification



Ref.	Description	Ref.	Description
1	USB port	6	ON/OFF switch
2	Control board	7	High limit switch
3	12VDC power supply	8	Solid State Relay (SSR)
4	Terminal blocks (L1, GND, L2/N)	9	Speaker
5	Cooling fan	—	—

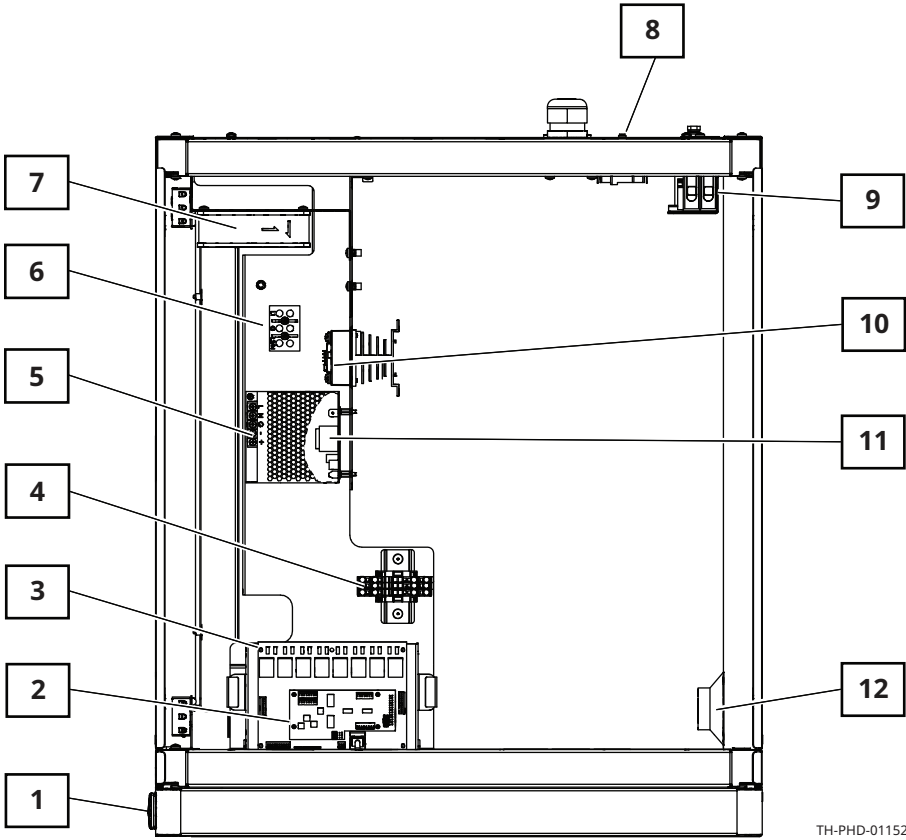
500-TH/SK, 750-TH/SK, 1000-TH/SK—Electrical Component Identification



TH-PHD-011524

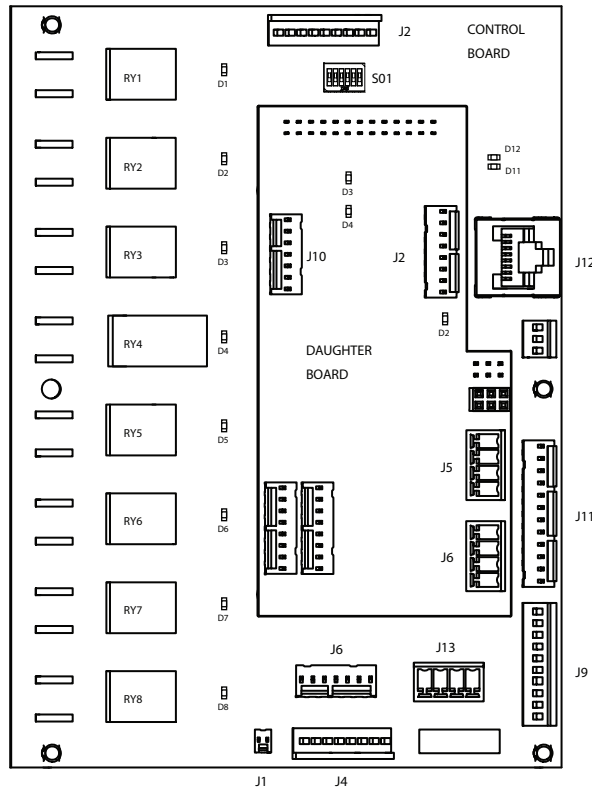
Ref.	Description	Ref.	Description
1	USB port	7	High limit switch
2	Control board	8	Circuit breakers
3	Terminal blocks	9	Solid State Relay (SSR)
4	12VDC power supply	10	Voltage monitor
5	Terminal blocks (L1, GND, L2/N)	11	Speaker
6	Cooling fan	—	—

1250-TH/SK, 1750-TH/SK—Electrical Component Identification



Ref.	Description	Ref.	Description
1	USB port	7	Cooling fan
2	Daughter board	8	High limit switch(es)
3	Control board	9	Circuit breakers
4	Terminal blocks	10	Solid State Relay (SSR)
5	12VDC power supply	11	Voltage monitor
6	Terminal blocks (L1, GND, L2/N)	12	Speaker

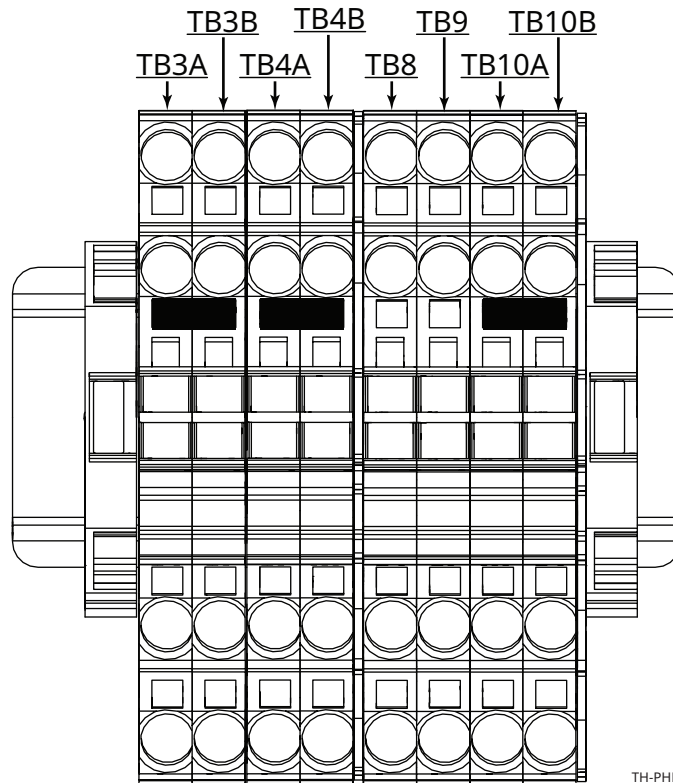
Control Board (CB) and Daughter Board (DB)



TH-PHD-011530

Ref.	Description (CB)	Ref.	Description (CB)	Ref.	Description (DB)
RY1-D1	Smoker - bottom oven	D12	LED	D2	5 VDC
RY2-D2	Smoker - top oven	J1	Voltage monitor	J2	Cooking probes Bottom cavity temperature sensor
RY3-D3	Not used	J2	12VDC power supply	J5	Door handle lights
RY4-D4	Fan	J4	Cooking probes Top cavity temperature sensor	J6	Door handle lights
RY5-D5	Lock - bottom oven	J6	Cooking probes	J10	Cooking probes
RY6-D6	Lock - top oven	J9	Door switch(es) High limit(s)	—	—
RY7-D7	Not used	J10	Cavity lights	—	—
RY8-D8	Not used	J12	Ethernet - IB	—	—
D11	LED	S01	DIP switches - ON 1=Spare 2=Dual cavity 3=208-240V 4=Smoker 5=Latch 6=Demo	—	—

Terminal Blocks

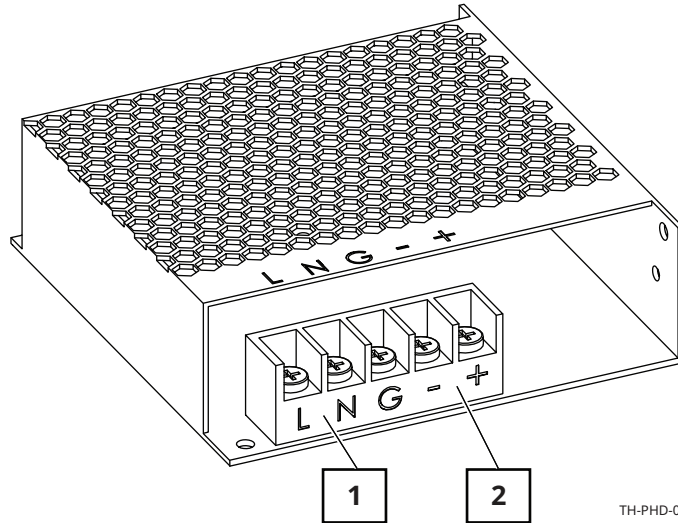


TH-PHD-011533

Ref.	Description	Model
TB3A	L1	750-TH, 1000-TH, 1200-TH, 1750-TH
TB3B	Smoker option	1200-TH, 1750-TH
TB4A	L2/N	750-TH, 1000-TH, 1200-TH, 1750-TH
TB4B	Smoker option	1200-TH, 1750-TH
TB8	DC - Lights, top cavity	1200-TH
TB9	DC - Lights, bottom cavity	1200-TH
TB10A	DC + Lights	1000-TH, 1200-TH, 1750-TH
TB10B	DC + Lights	1200-TH

12VDC Power Supply

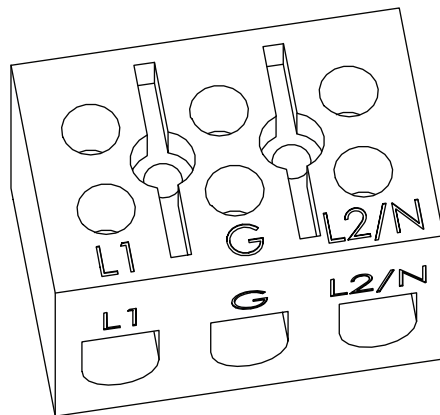
Supplies DC voltage to the control board and the ON/OFF switch.



TH-PHD-011536

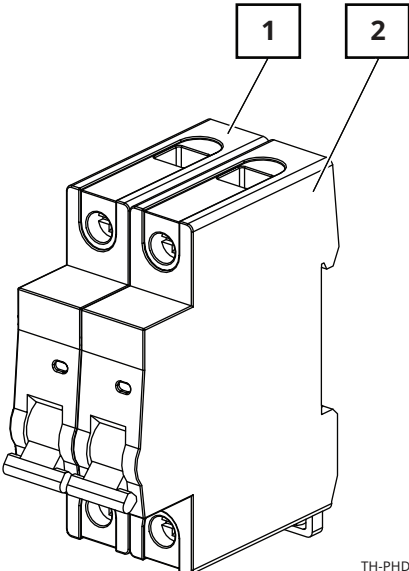
Ref.	Description
1	120-240VAC terminals
2	12VDC terminals

Terminal Blocks (L1, GND, L2/N)



TH-PHD-011539

Circuit Breakers



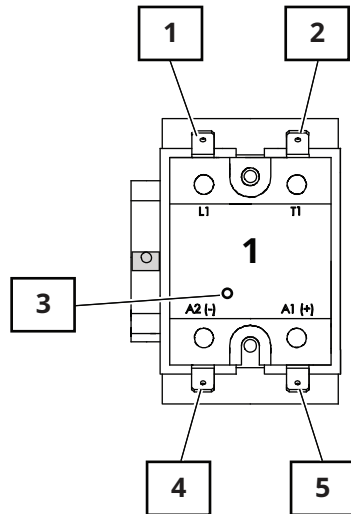
TH-PHD-011542

Ref.	Description
1	Circuit breaker L1
2	Circuit breaker L2/N

Solid State Relay (SSR)

Single cavity

Heater element control.



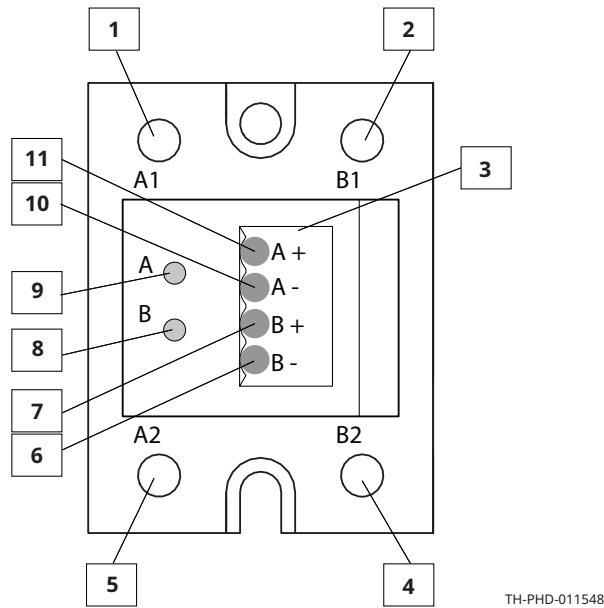
TH-PHD-011545

Ref.	Description
1	L1 terminal, AC line voltage into the SSR
2	T1 terminal, AC load voltage to the heating element
3	Call for heat indicator light
4	A2 (-) terminal, DC control voltage from the control board to the SSR
5	A2 (+) terminal, DC control voltage from the control board to the SSR

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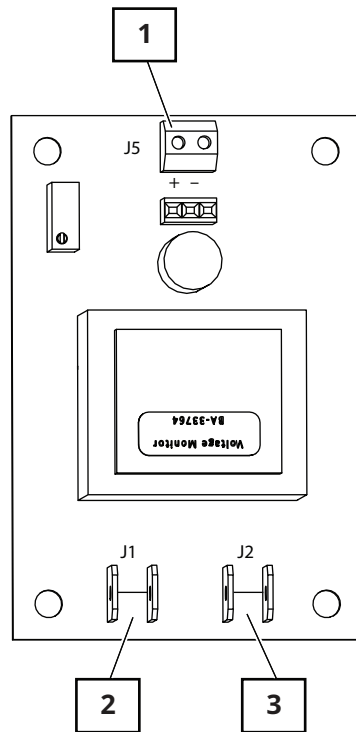
Dual cavity



TH-PHD-011548

Ref.	Description
1	Terminal A1 - Circuit A
2	Terminal B1 - Circuit B
3	Connector
4	Terminal B2 - Circuit B
5	Terminal A2 - Circuit A
6	Circuit B DC- from control board
7	Circuit B DC+ from control board
8	Circuit B call for heat indicator
9	Circuit A call for heat indicator
10	Circuit A DC- from control board
11	Circuit A DC+ from control board

Voltage Monitor (208-240V Ovens Only)



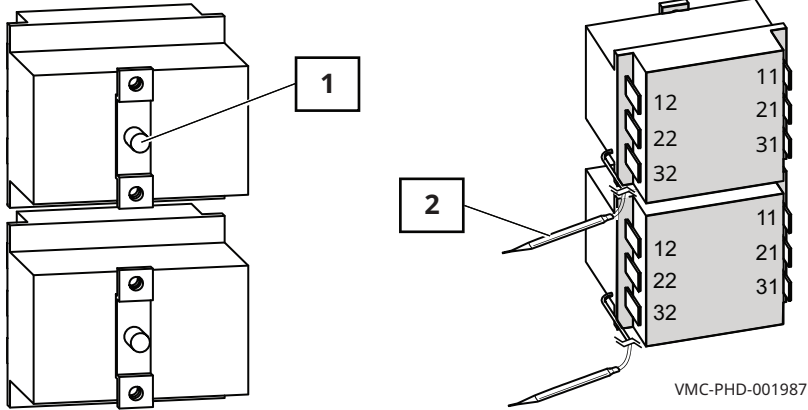
TH-PHD-011551

Input	DC Range
200-209	4.58-5.00
210-219	4.17-4.53
220-229	3.82-4.13
230-239	3.51-3.78
240-249	3.22-3.48
250+	3.20

Ref.	Description
1	J5 DC output
2	J1 AC input
3	J2 AC input

High Limit Switches

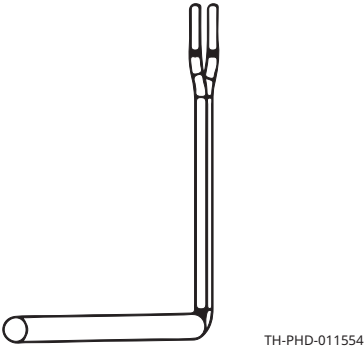
Resettable
 Contacts open at 300°F (149°C)



Ref.	Description
1	Reset button
2	Temperature bulb

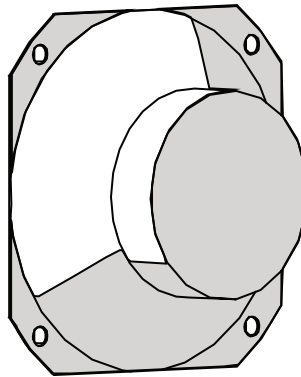
Chamber Air Temperature Probe

100 Ohm at 0°C



Speaker

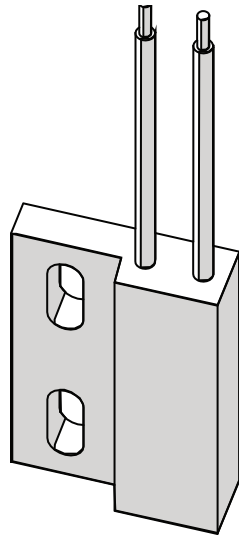
8 Ohms



VMC-PHD-001995

Door Switch

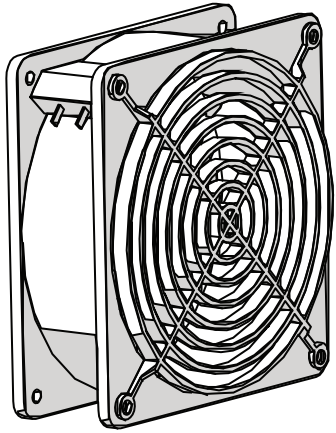
- **Door closed** 0 Ohms; 0 VDC across terminals 1 and 2 (top oven) or 5 and 6 (bottom oven) of connector J9 on the control board.
- **Door open** Infinite Ohms; 8 VDC across terminals 1 and 2 (top oven) or 5 and 6 (bottom oven) of connector J9 on the control board.



VMC-PHD-001999

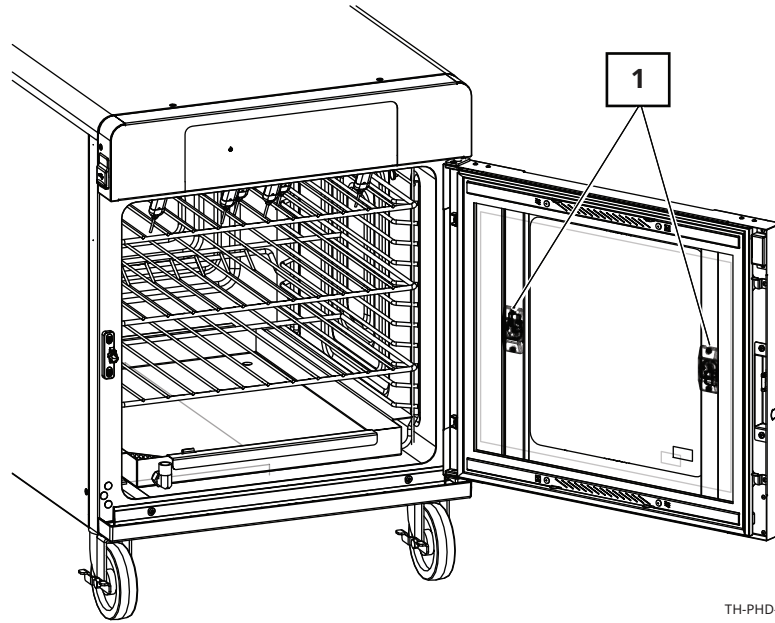
Fan

- Impedance protected
 - 240 Volt
 - 581 Ohm
-



VMC-PHD-002011

Internal Components Identification



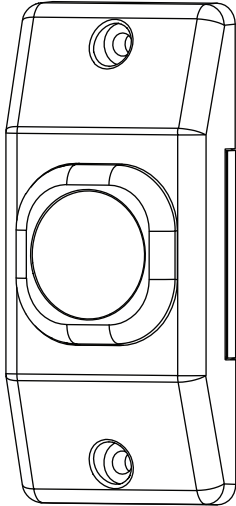
TH-PHD-011557

Ref.	Description
1	Cavity lights

Internal Components

Cavity Light

12 VDC



VMC-PHD-007587

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Maintenance Schedule

Requirements

- See topic *How to Clean the Oven*.
- Make sure the oven is cooled down and off—inside of chamber 140°F (60°C) or less.

Daily

For daily maintenance, do the following.

- See topic *How to Clean the Oven*, and follow the Daily Cleaning procedure.
- **Check** the screen for cracking or peeling. Contact Technical Service if needed.

Weekly

For weekly maintenance, do the following.

- See topic *How to Clean the Oven*, and follow the Weekly Cleaning procedure.
- **Check** the oven for any damage or loose parts.

Monthly

For monthly maintenance, do the following.

- **Inspect** door gasket.
- **Inspect** door window gasket for proper seal.
- **Inspect** cavity door vent slides for proper operation.
- **Inspect** side racks, shelves, and shelf supports for damage.
- **Calibrate** the removable product probe (if applicable)
- **Clean** the cooling fan intake area and exhaust vents.
- **Inspect** door handle screws and tighten if necessary.
- **Inspect** the smoke element (if applicable). If any deformation, cracks or breaks are seen, remove the oven from service and contact a factory authorized service technician.

Yearly

For yearly maintenance, do the following.



NOTE: Must be performed by a qualified professional.

- **Check and tighten** all wire connections.
- **Inspect** the smoke element and smoke element wiring.
- **Measure** the current draw of each cavity. Operate with smoker on if applicable.
- **Test** the heating elements for electrical short to ground.
- **Inspect** the condition of the cord and plug.

Continued on next page

Continued from previous page

- **Check and tighten** the cord connection inside of the appliance control area.
 - **Inspect** the control cooling fans (if applicable).
 - **Measure** the site voltage.
 - **Inspect and adjust** voltage monitor board if needed.
 - **Inspect** and test the product probe and product probe receptacle.
 - **Inspect** and test the control and control functions.
-
- **Inspect** the cavity for structural integrity.
 - **Inspect** the door gaskets for correct shape and seal. Replace/repair as needed.
 - **Inspect** the door handle and hinges. Replace/repair as needed.
 - **Inspect** the full perimeter bumper.
 - **Inspect** the casters.
 - **Do** a cavity temperature calibration procedure per manufacturer's recommendations.

How to Clean the Oven

Before you begin



WARNING: Electric shock hazard.
Set the power switch to the OFF position and unplug the oven before cleaning it.



CAUTION: Burn hazard.
Allow the oven, drip pans, and racks to cool before cleaning.



CAUTION: Corrosive materials hazard.
Wear eye protection and hand protection when cleaning.

NOTICE

Using improper cleaning procedures will damage the oven and void the warranty.
Only use spray cleaner when the electric power is completely removed from the oven.
Do not use steel pads, wire brushes, or scrapers when cleaning.

Daily cleaning procedure

To clean the oven daily, do the following.

Step	Action
1.	Make sure the oven is turned off and cool—cavity is less than 140°F (60°C).
2.	Remove any all detachable items such as wire shelves, side racks, drip pan, and drip tray and clean these items separately.
3.	Remove any spills with disposable paper wipes or a damp cloth.
4.	Wipe the outside of the oven and the drip tray holder with a damp cloth.
5.	Wipe the control panel, door vents, door handles and door gaskets with a non-abrasive nylon scrub pad.
6.	If oven has an optional glass door, clean each side of the window pane with an all-purpose glass cleaner.
7.	Wipe probe, cable assembly, and probe prongs with a non-abrasive nylon scrub pad. Wipe probes with disposable alcohol pad or sanitizing solution recommended for food contact surfaces.
8.	Wipe the outside of the oven with a stainless steel cleaner.

Continued on next page

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Weekly cleaning procedure

To clean the oven weekly, do the following.

Step	Action
1.	Set the power switch to the OFF position and unplug the appliance.
2.	Wipe the exterior areas of the oven with a non-abrasive nylon scrub pad.
3.	Spray the exterior areas of the oven with stainless steel polish.
	<div style="border-left: 2px solid blue; padding-left: 10px;"> <p>NOTICE Use only non-caustic cleaners. Do not spray directly into the fan openings on the back of the oven. Do not use cleaners that contain sodium hydroxide (lye) or phosphorus.</p> </div>
4.	Spray the interior areas of the oven with oven cleaner. Let the cleaner work for 3–5 minutes.
5.	Wipe the interior of the oven with a non-abrasive nylon scrub pad.
6.	Clean the door gasket with a warm water and detergent solution.
7.	If oven has an optional glass door, clean each side of the window pane with an all-purpose glass cleaner.
8.	Plug the appliance in and set the power switch to the ON position when complete.

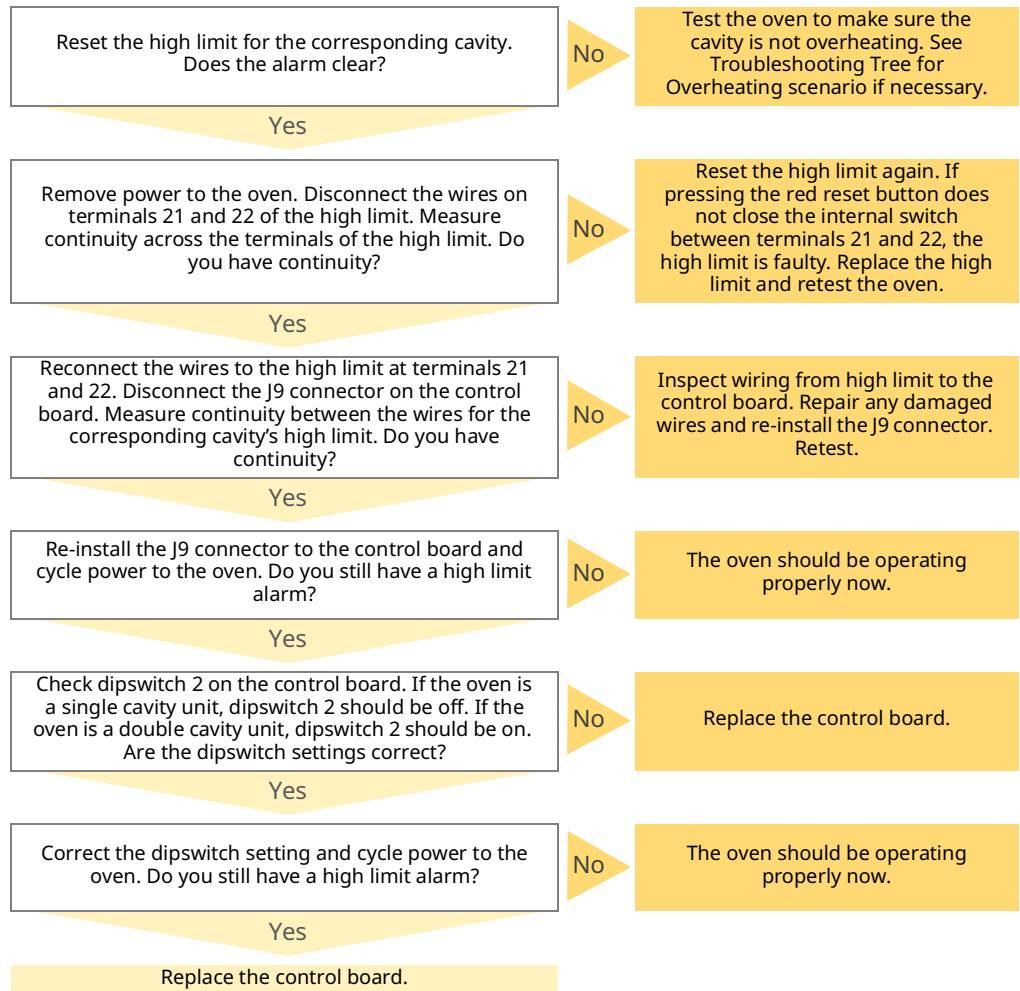
Result

The oven is now clean.

Error Codes

DELUXE CONTROL			
Code	Description	Cause	Remedy
E-10	Cavity probe shorted	Short circuit detected on sensor wires.	1. Sensor connection 2. Sensor 3. Control Board
E-30	Unit under temperature	Cavity temperature remains 25°F (14°C) below target for more than 90 minutes.	Troubleshoot heating element
E-31	Unit over temperature	Cavity temperature is 50°F (28°C) above max allowable cook temperature of 325°F (163°C).	1. Cooling fan not operating 2. Installation clearance requirements not met
E-78	Under voltage	Supply voltage falls below 200V (error doesn't show on screen).	Correct the supply voltage
E-79	Over voltage	Supply voltage exceeds 250V (error doesn't show on screen).	Correct the supply voltage
E-94	Communication	No signal transfer for more than 5 seconds between the Interface Board and the Control Board.	1. Connection of Modbus Cable 2. Modbus Cable 3. Control Board 4. Interface Board
E-108	Check fans	Insufficient internal cooling airflow.	1. Cooling fan filters dirty 2. Cooling fans not operating 3. Installation clearance requirements not met
E-109	High Limit NOTE: Any oven experiencing this error should be investigated by an authorized Alto-Shaam service provider.	Open circuit detected across High Limit Switch	1.Heat Relay(s) stuck closed 2.Connection between High Limit Switch and Control Board 3.High Limit Switch

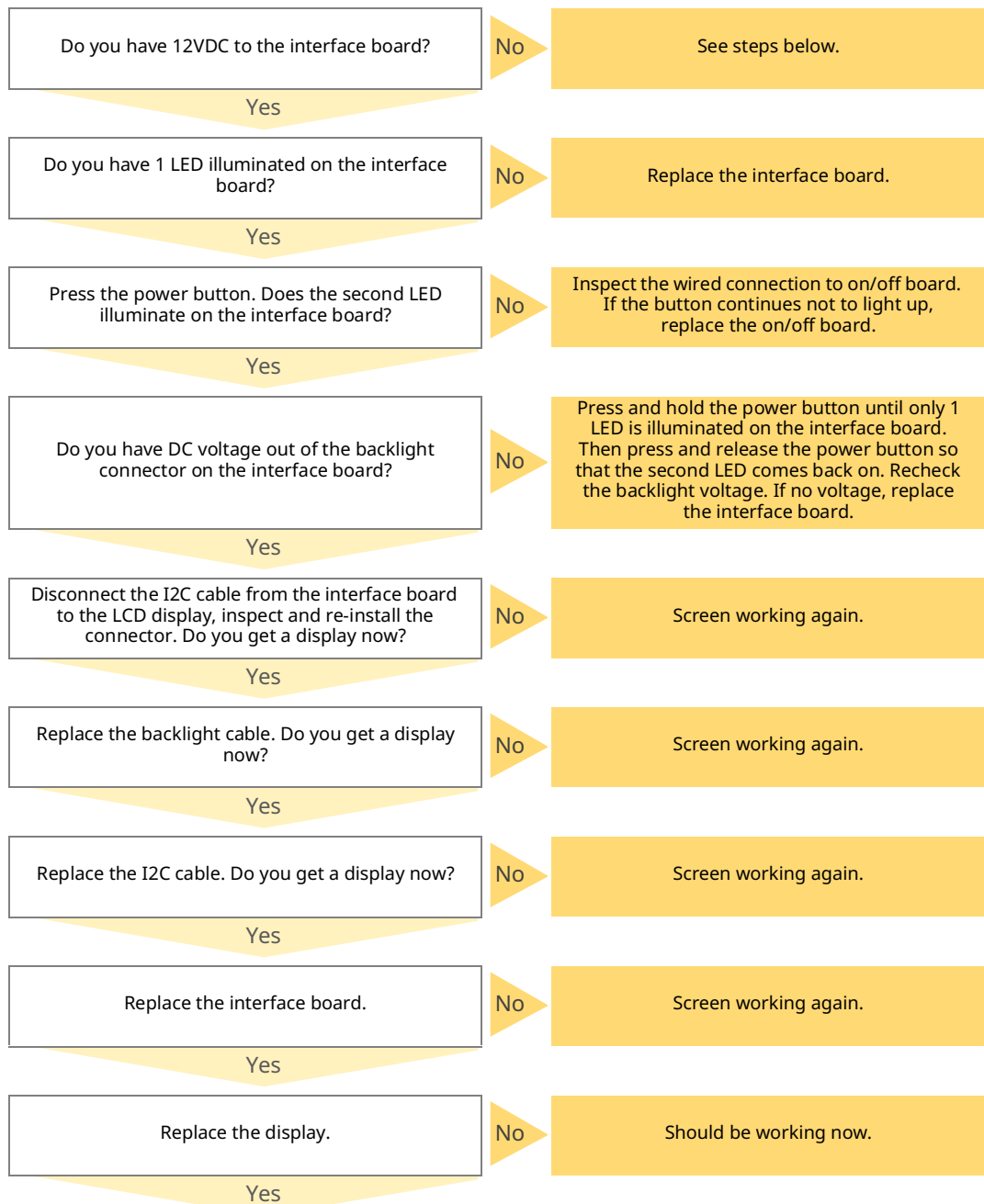
High Limit Alarm

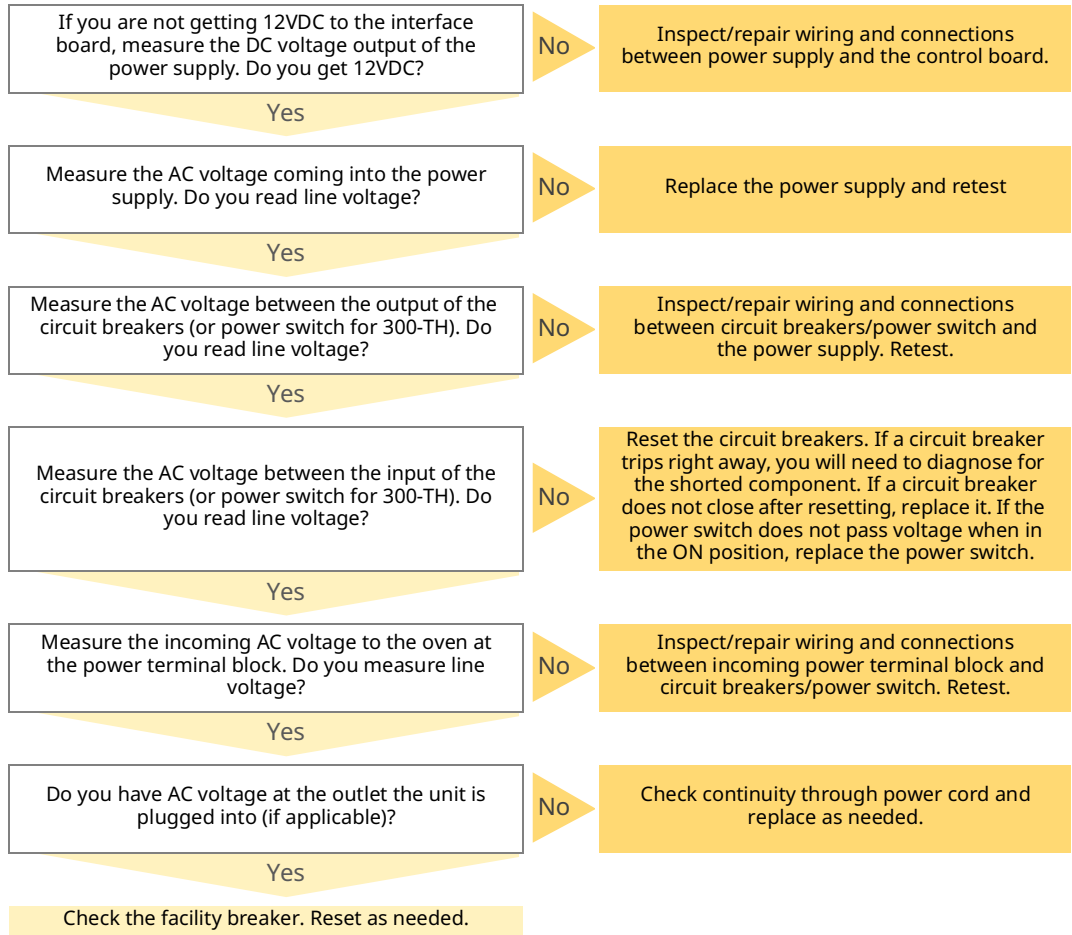


The Display does not Illuminate



WARNING: Electric shock and arc flash hazard.
Use caution when measuring line voltage.
Wear Personal Protective Equipment (PPE).





The Oven does not Heat



WARNING: Electric shock and arc flash hazard.
Use caution when measuring line voltage.
Wear Personal Protective Equipment (PPE).



The Product Probe does not Work



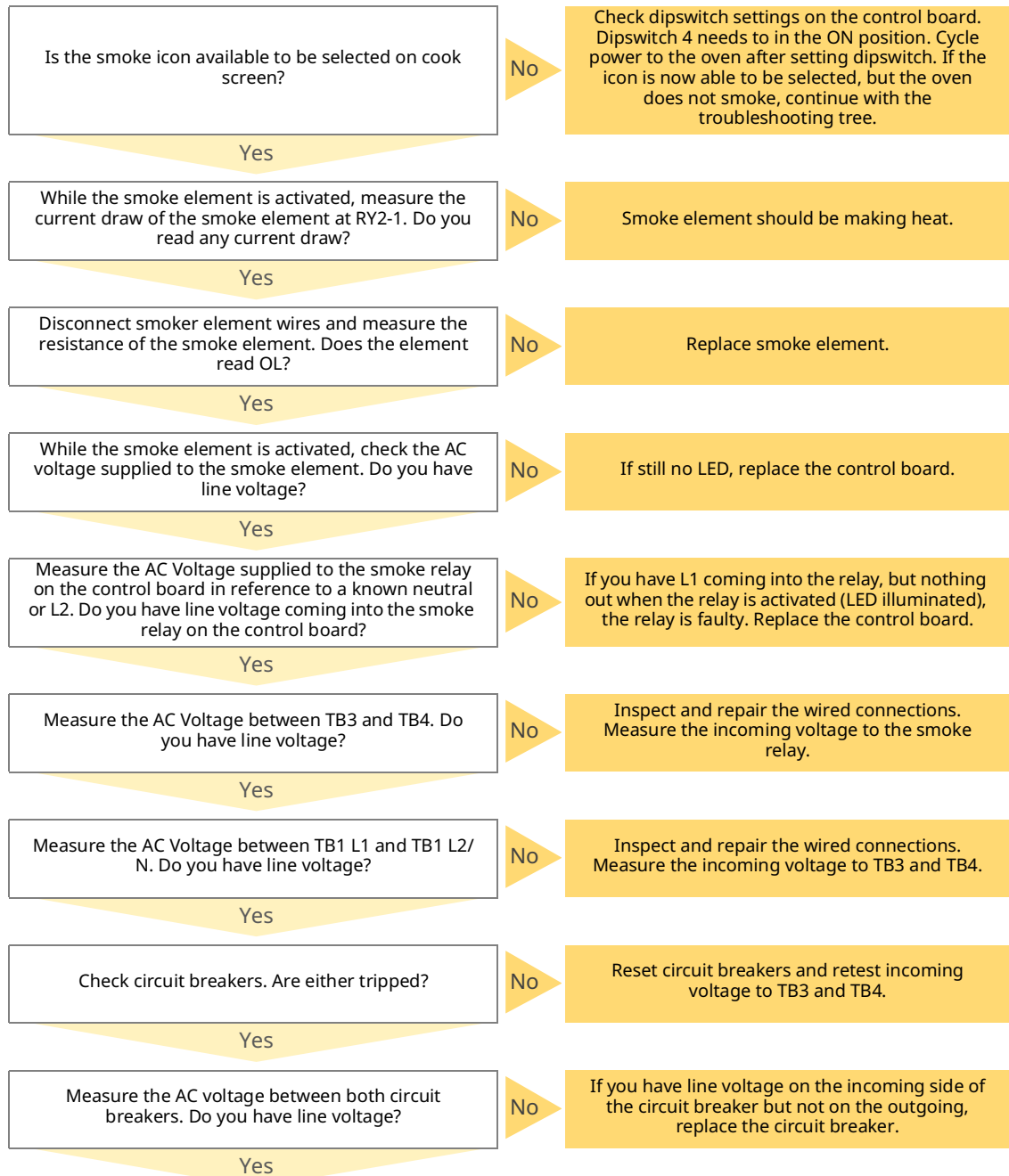
The Smoke Function does not Operate



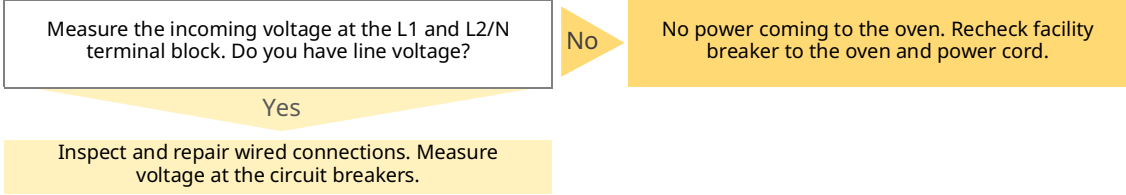
WARNING: Electric shock and arc flash hazard.

Use caution when measuring line voltage.

Wear Personal Protective Equipment (PPE).



TROUBLESHOOTING



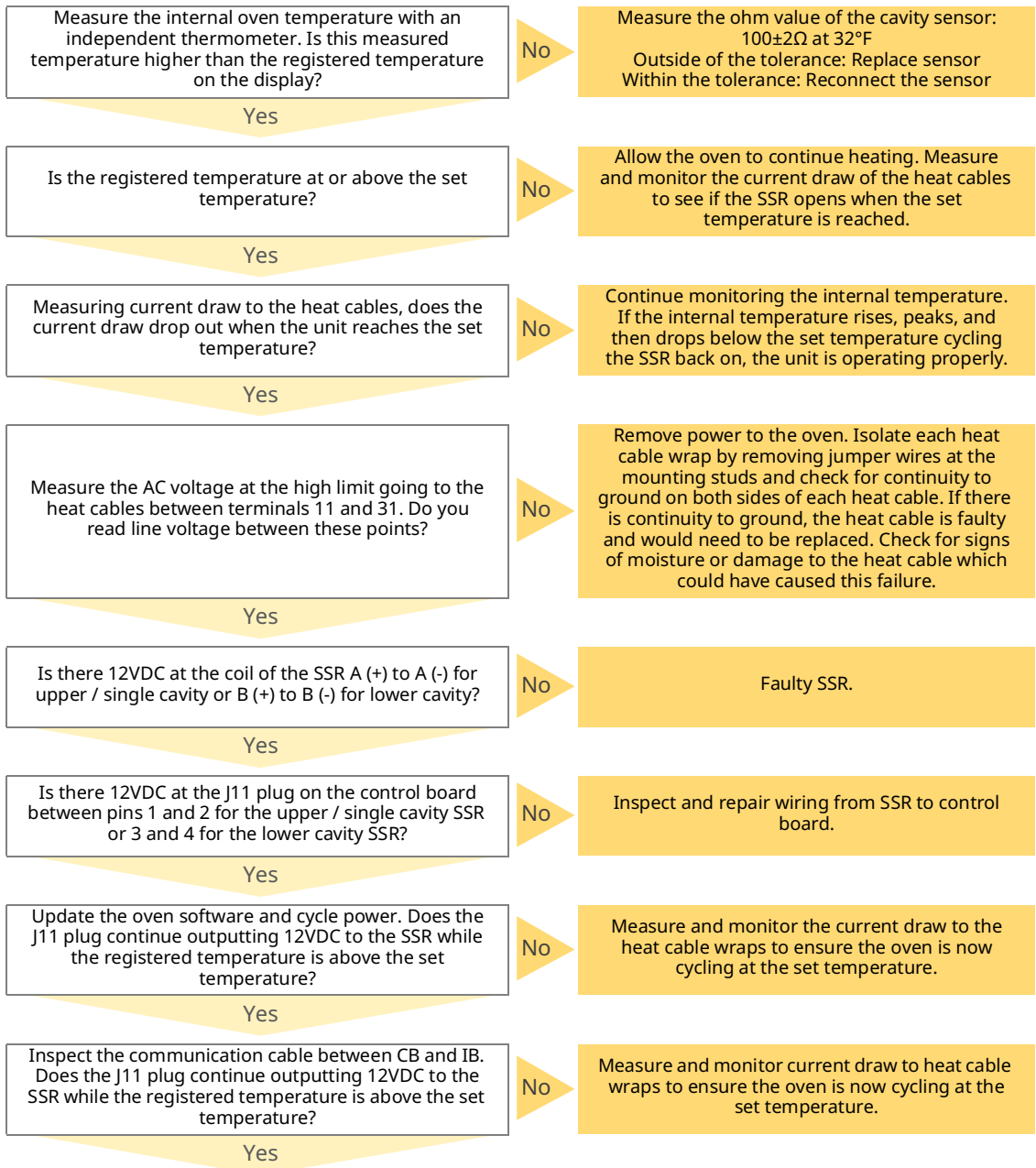
The Screen is not Responsive/Incorrect Response to the Selected Icon

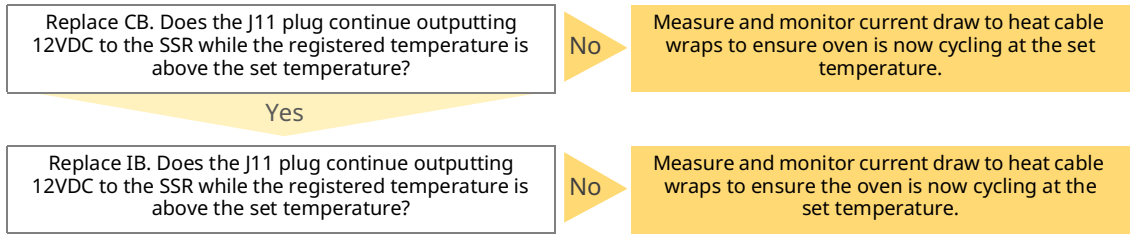


The Oven Overheats

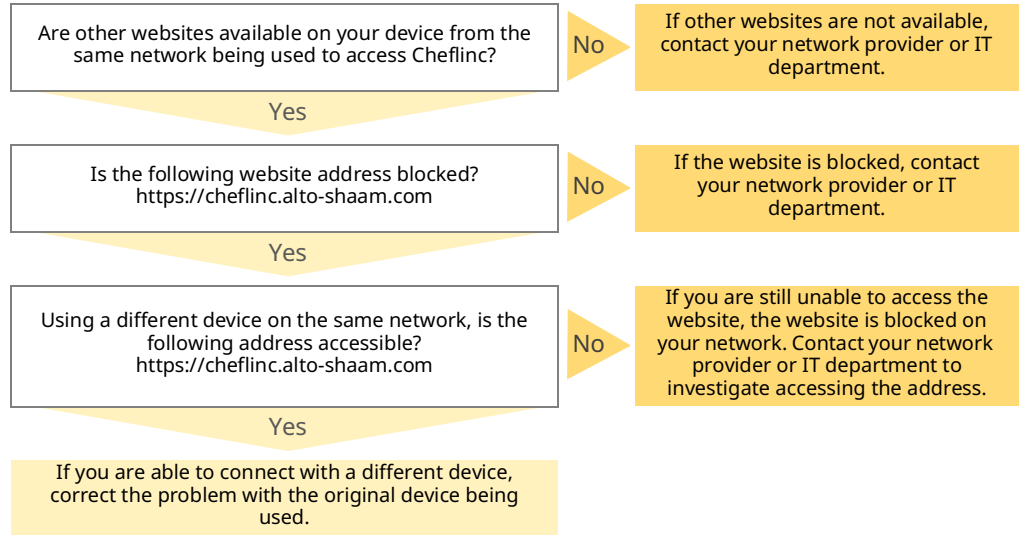


WARNING: Electric shock and arc flash hazard.
Use caution when measuring line voltage.
Wear Personal Protective Equipment (PPE).

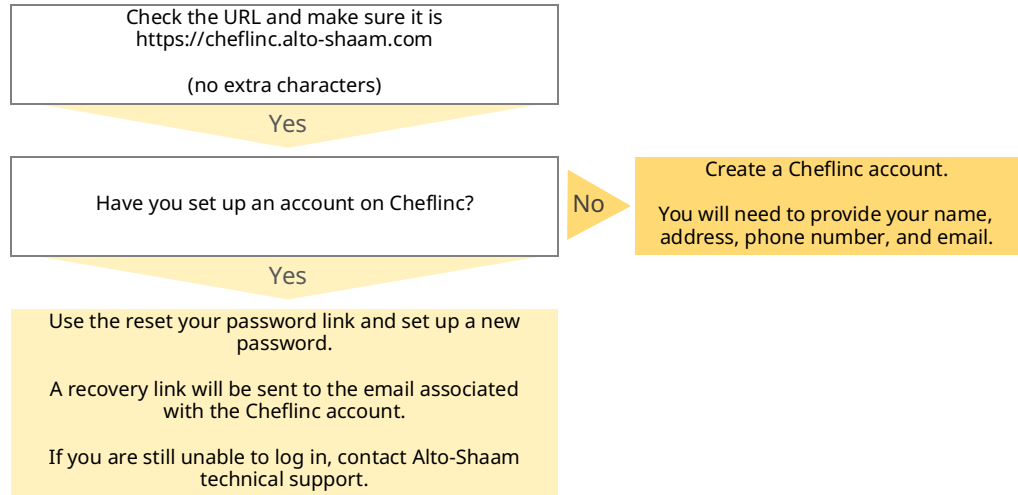




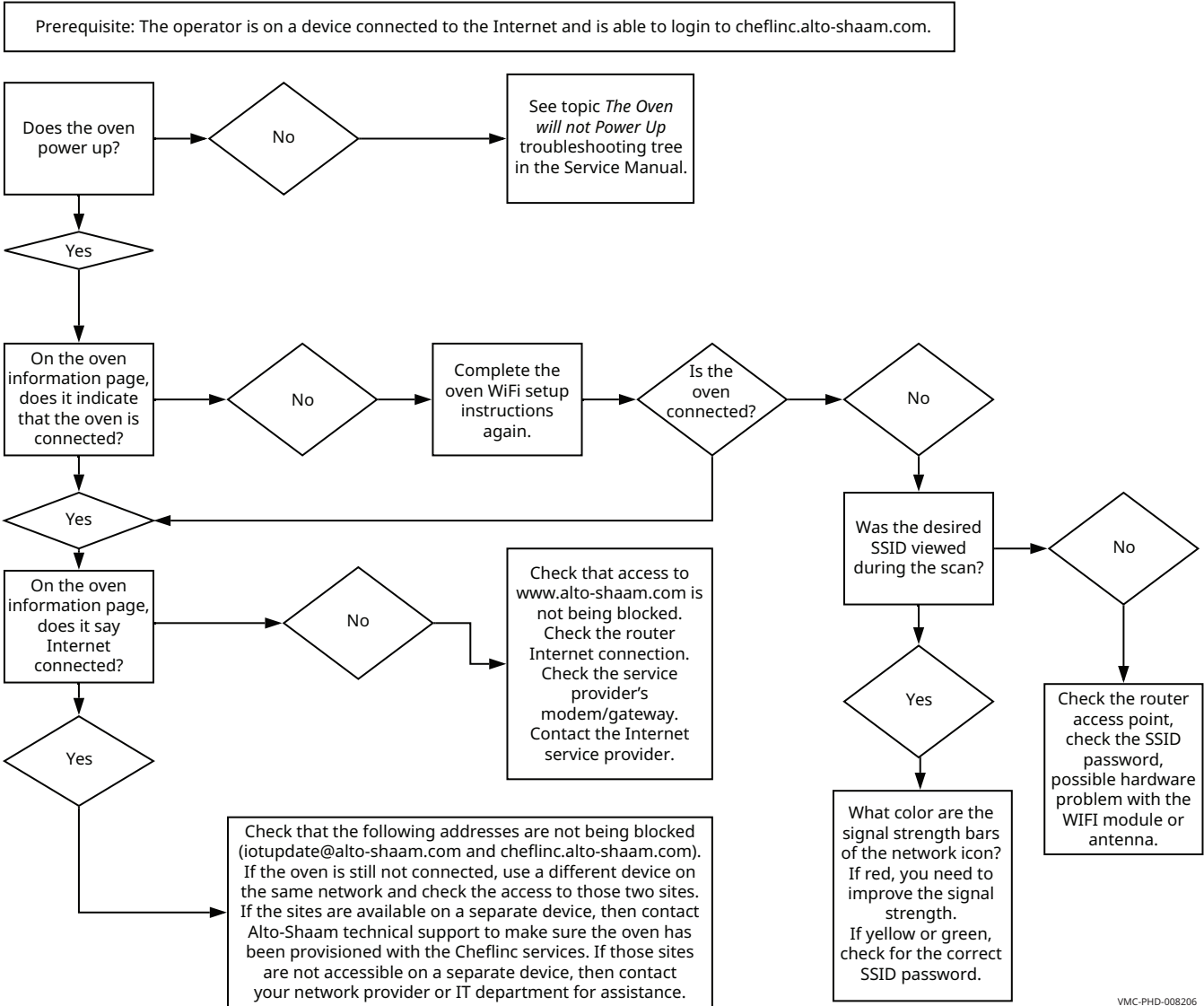
Cheflinc.alto-shaam.com is Not Available on Your Device



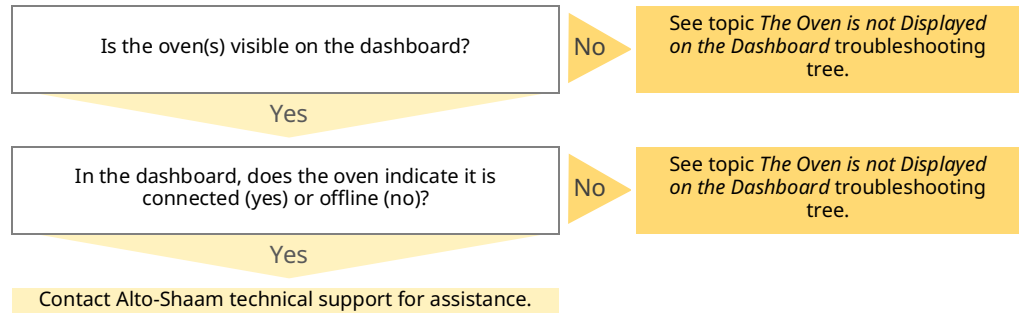
Cannot Connect to cheflinc.alto-shaam.com



The Oven is not Displayed on the Dashboard



Unable to Assign Recipes from the Dashboard to Ovens in the Field



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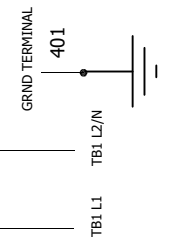
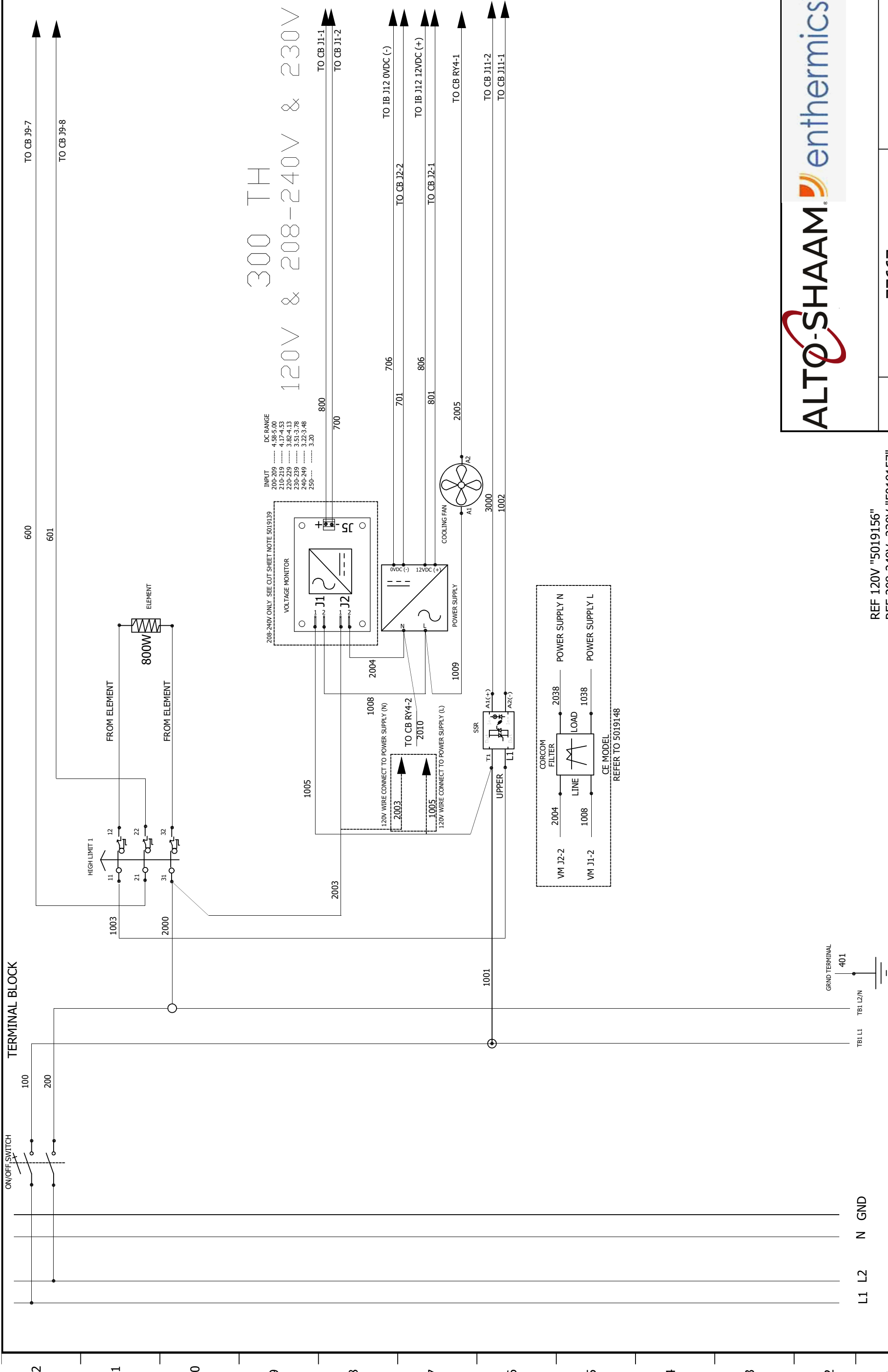
77667

TABLE OF CONTENTS

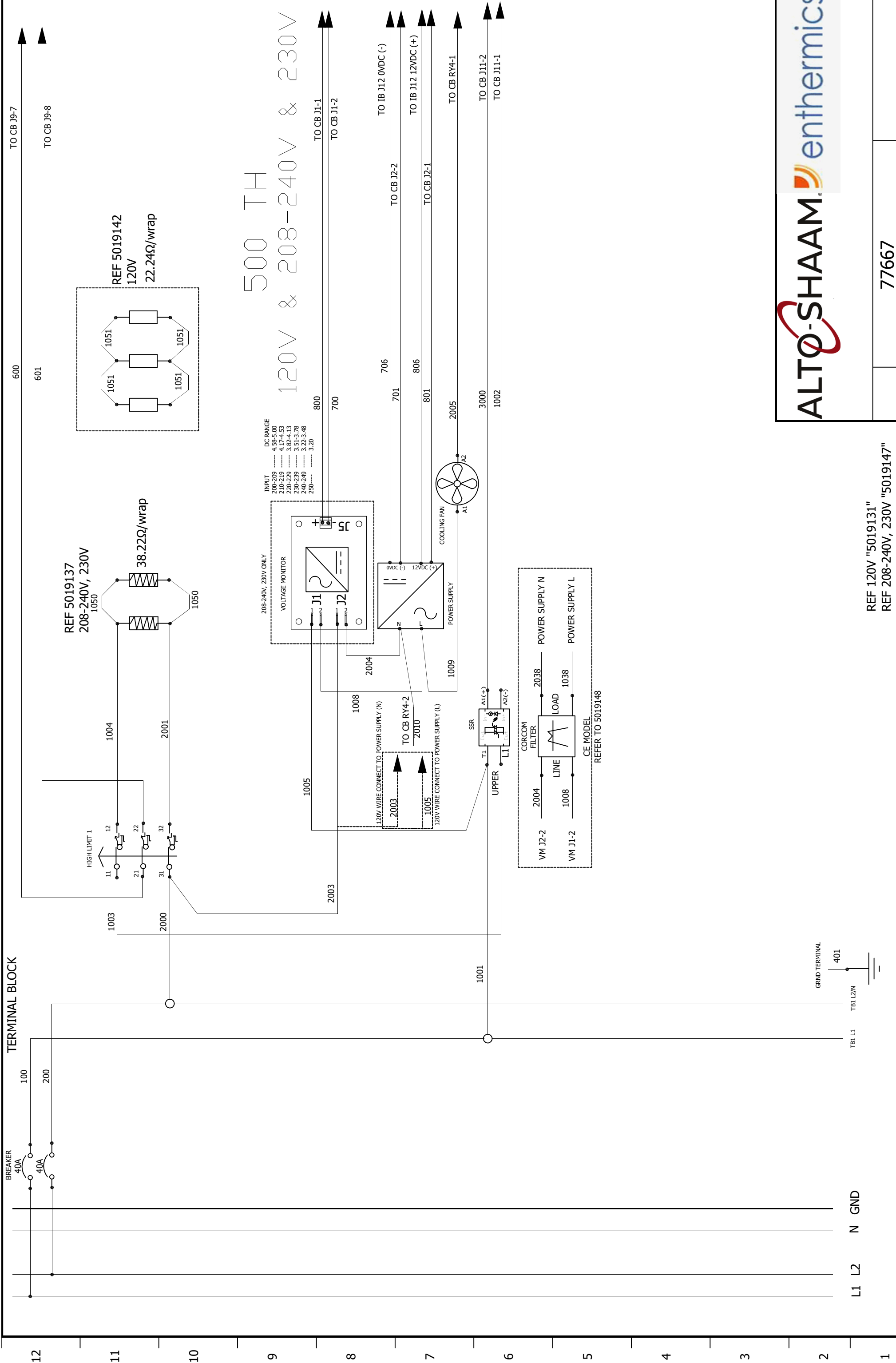
300 TH	PG 02
500 TH	PG 03
750 TH	PG 04
1000 TH	PG 05
1200 TH	PG 06
1750 TH	PG 07
1750/1200 TH 380V	PG 08
CONTROL CB	PG 09
DELUXE CONTROL	PG 10
SIMPLE CONTROL	PG 11

8	1/20/2021	montev	182095	Switch 2006 and 2007 location on high limit
7	11/11/2020	montev	182040	Adding two wrap 750 & 1000 SK
6	10/3/2020	montev	181497	Ethernet option
5	3/16/2020	montev	181489	Remove page 2 and 8 adding EMI filter for CE units, add gnd simple control
4	1/10/2020	montev		Change Dip Switch 6 to LED,
REV.	DATE	NAME	ECO	CHANGES
		77667		ASI
		ALL COOK & HOLD		
			REVISION	8
			PAGE	1/11

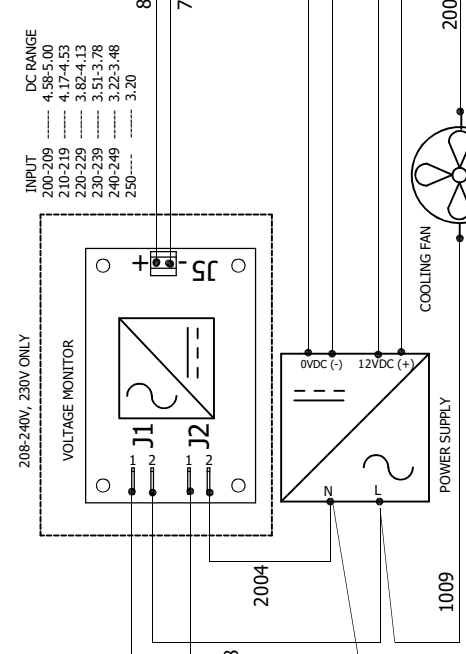
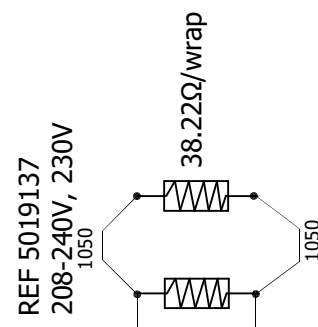
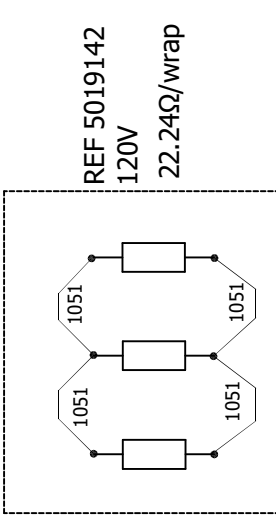




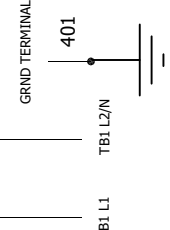
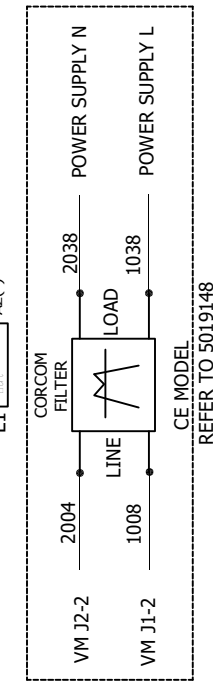
TERMINAL BLOCK



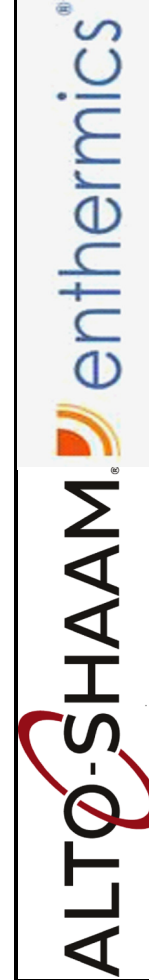
500 TH
120V & 208-240V & 230V



INPUT	DC RANGE
200-209	4.58-5.00
210-219	4.17-4.53
220-229	3.62-4.13
230-239	3.51-3.78
240-249	3.22-3.48
250	3.20



L1 L2 N GND



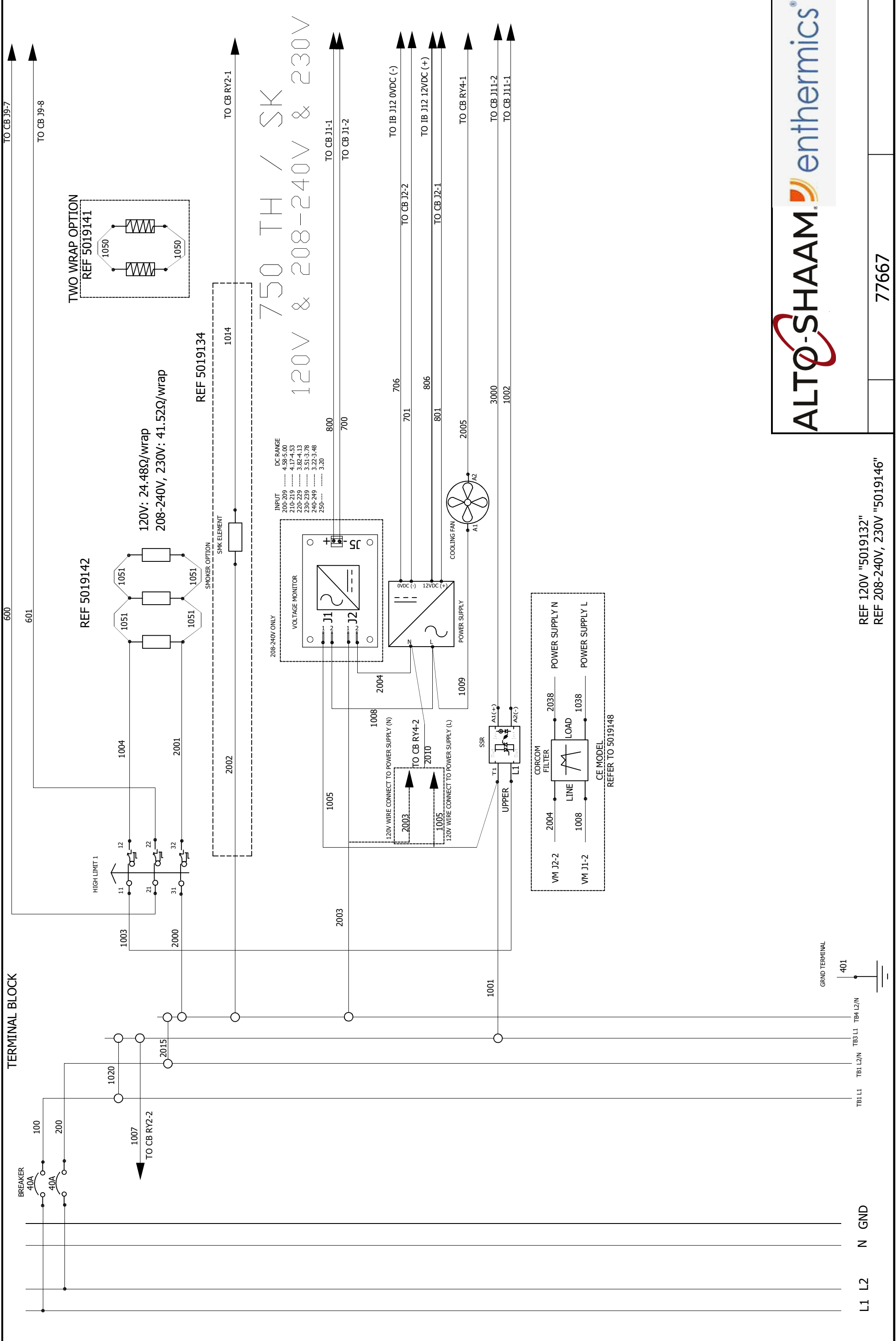
REVISION 8

SCHEME 3/11

REF 120V "5019131"
REF 208-240V, 230V "5019147"

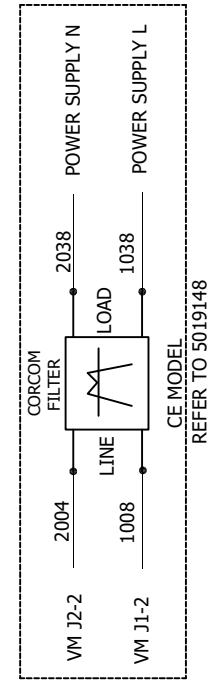
77667

TERMINAL BLOCK



750 TH / SK
120V & 208-240V & 230V

INPUT	DC RANGE
200-209	4.58-5.00
210-219	4.17-4.53
220-229	3.82-4.13
230-239	3.51-3.78
240-249	3.22-3.48
250---	3.20



ALTO-SHAAM

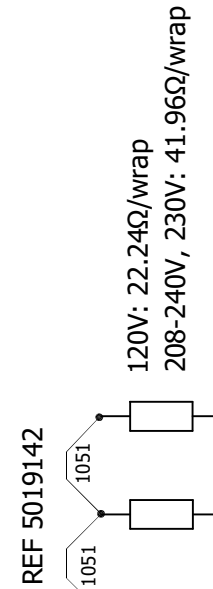
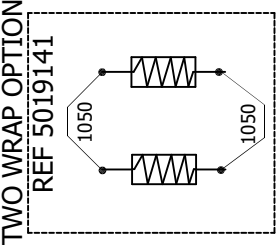
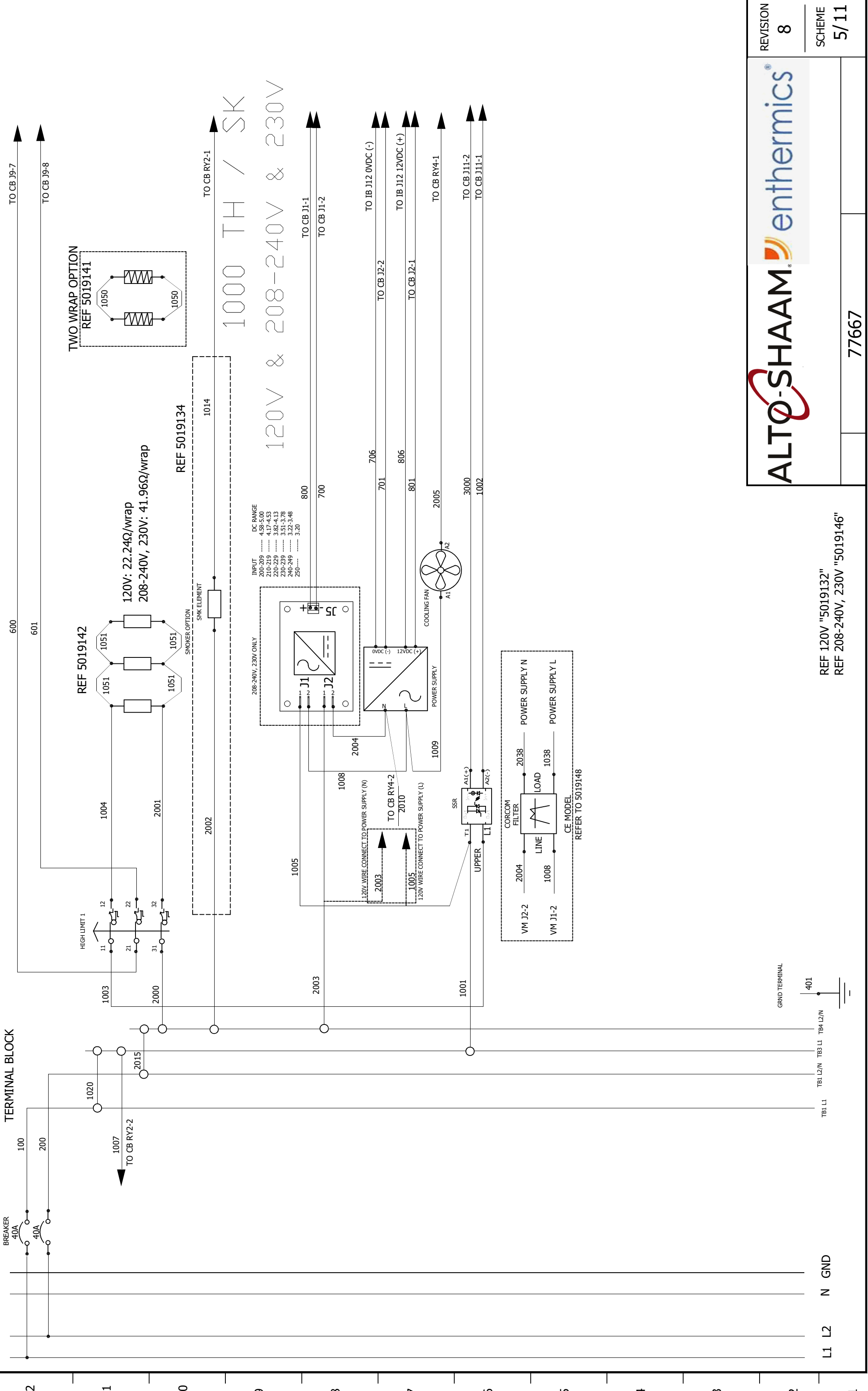
REVISION 8
SCHEME 4/11

77667

REF 120V "5019132"
REF 208-240V, 230V "5019146"

L1 L2 N GND

TERMINAL BLOCK



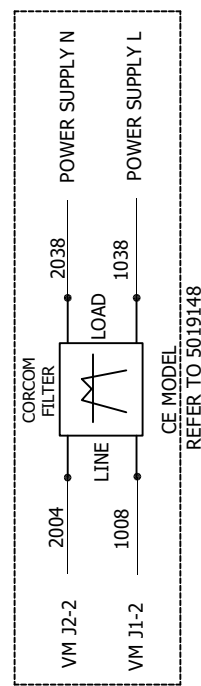
REF 5019134

1000 TH / SK
120V & 208-240V & 230V

INPUT DC RANGE

200-209	4.58-5.00
210-219	4.17-4.53
220-229	3.82-4.13
230-239	3.51-3.78
240-249	3.22-3.48
250	3.20

208-240V, 230V ONLY



L1 L2 N GND

TB1 L1 TB1 L2/N TB3 L1 TB4 L2/N

GRND TERMINAL



REF 120V "5019132"
REF 208-240V, 230V "5019146"

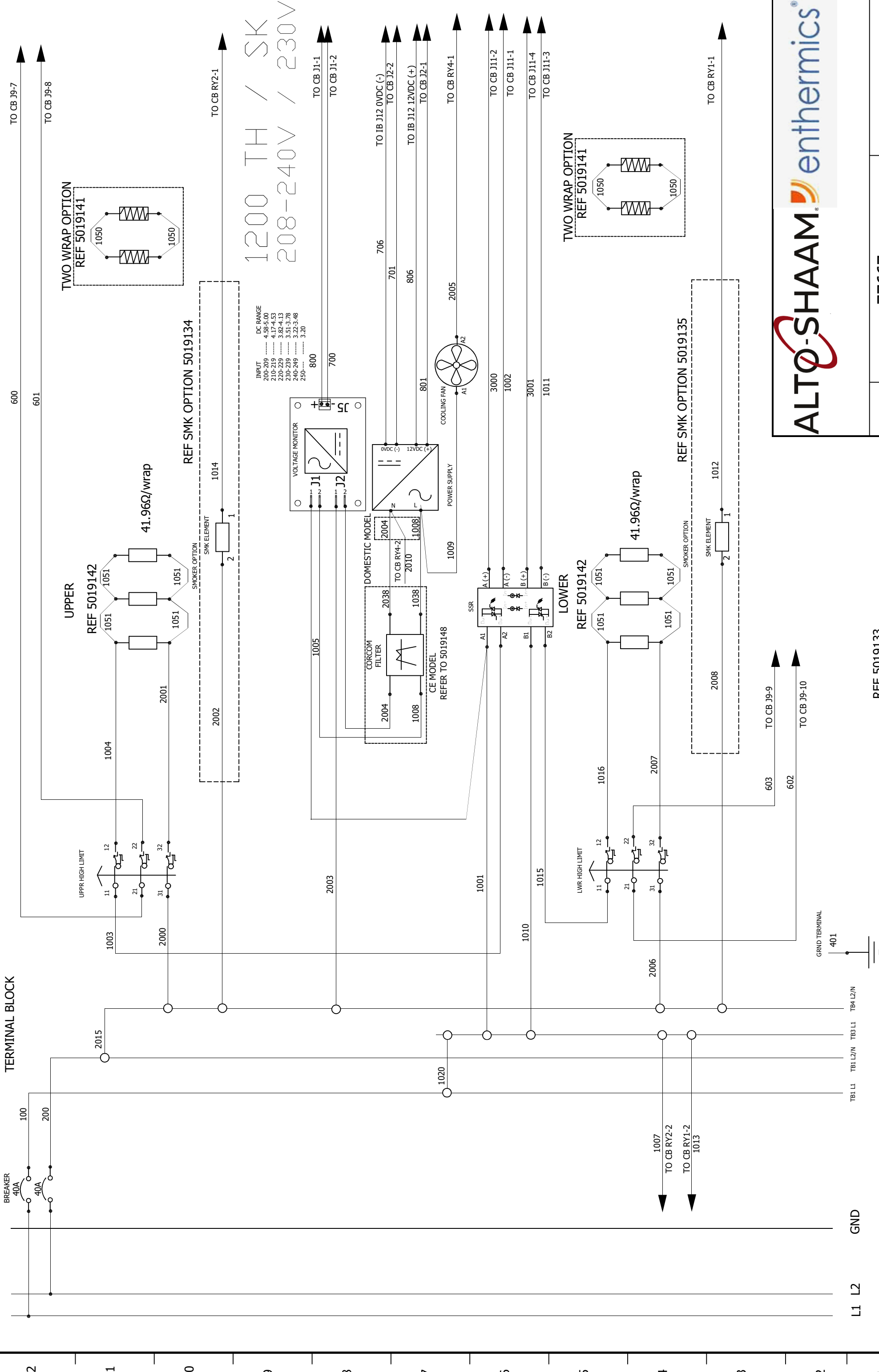
ALTO-SHAAM® enthermics®

REVISION 8

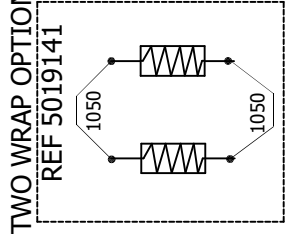
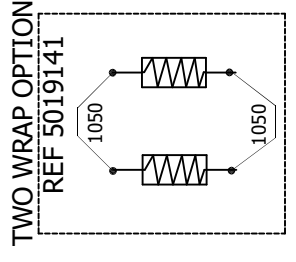
SCHEME 5/11

77667

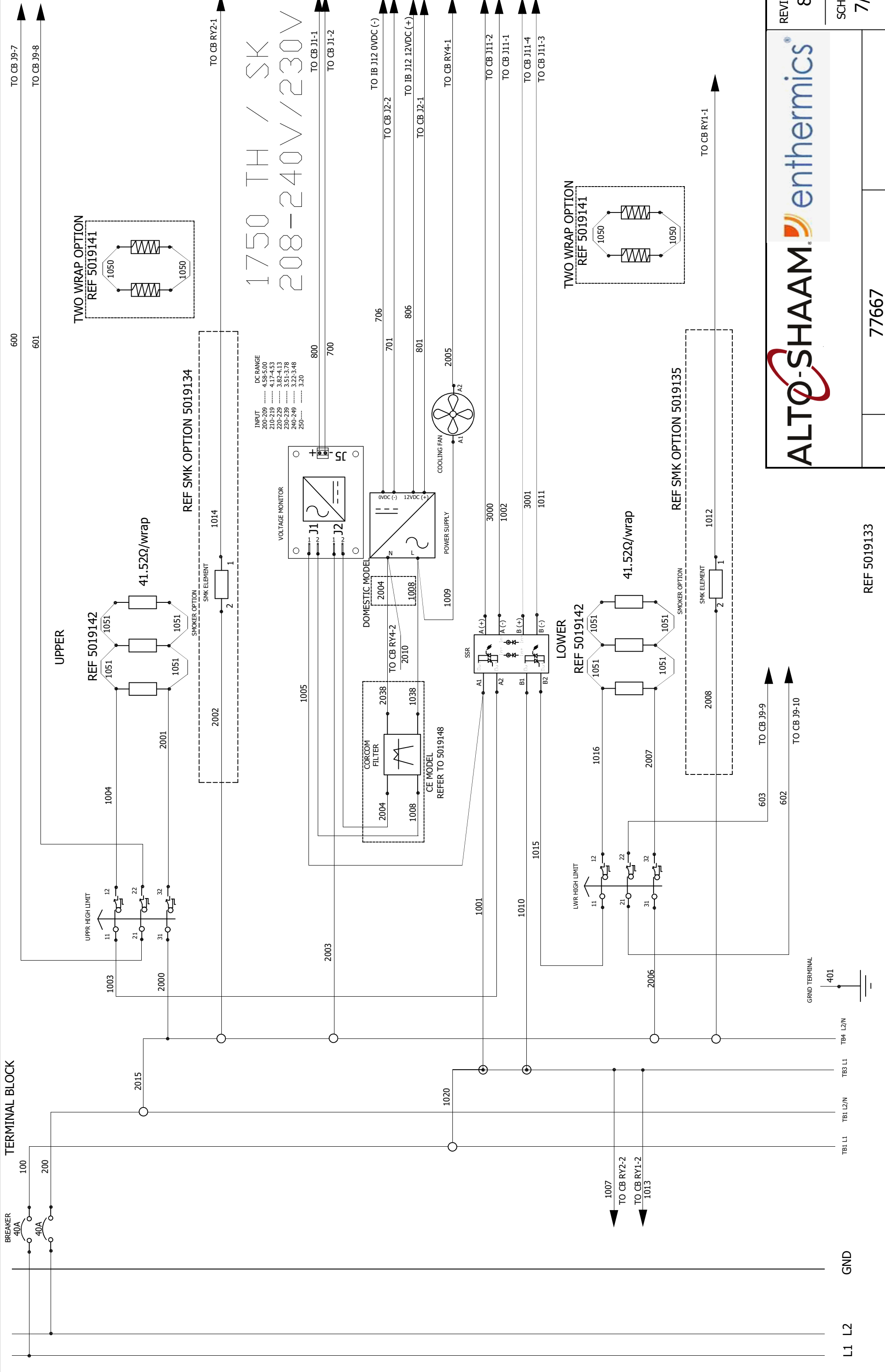
TERMINAL BLOCK



1200 TH / SK
208-240V / 230V



TERMINAL BLOCK



600
601

TO CB J9-7
TO CB J9-8

TO CB RY2-1
TO CB J1-1
TO CB J1-2

TO IB J12 0VDC (-)
TO IB J12 12VDC (+)
TO CB J2-1
TO CB J2-2

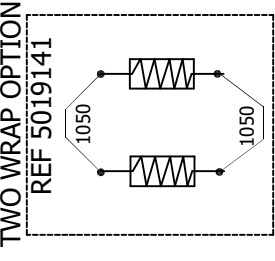
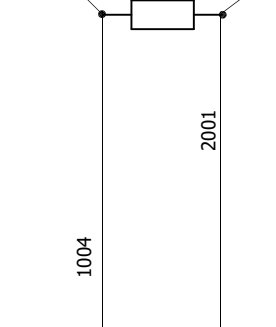
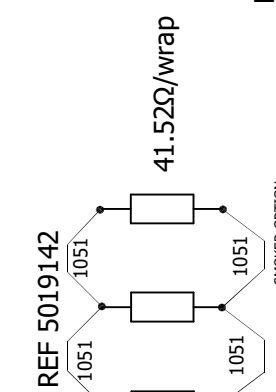
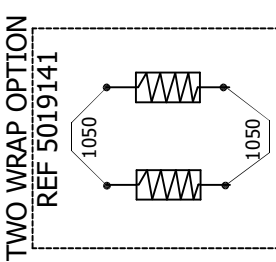
TO CB RY4-1
TO CB J11-2
TO CB J11-1
TO CB J11-4
TO CB J11-3

TO CB RY1-1

TO CB J9-9
TO CB J9-10

L1 L2
GND

12
11
10
9
8
7
6
5
4
3
2
1



1750 TH / SK
208-240V/230V

DC RANGE

200-209	4.58-5.00
210-219	4.17-4.53
220-229	3.82-4.13
230-239	3.51-3.78
240-249	3.22-3.48
250----	3.20

REF SMK OPTION 5019134

REF SMK OPTION 5019135

SMOKER OPTION
SMK ELEMENT

SMOKER OPTION
SMK ELEMENT

DOMESTIC MODEL
CORCOM FILTER
CE MODEL
REFER TO 5019148

VOLTAGE MONITOR
POWER SUPPLY
COOLING FAN

UPPER HIGH LIMIT
LWR HIGH LIMIT

GRND TERMINAL

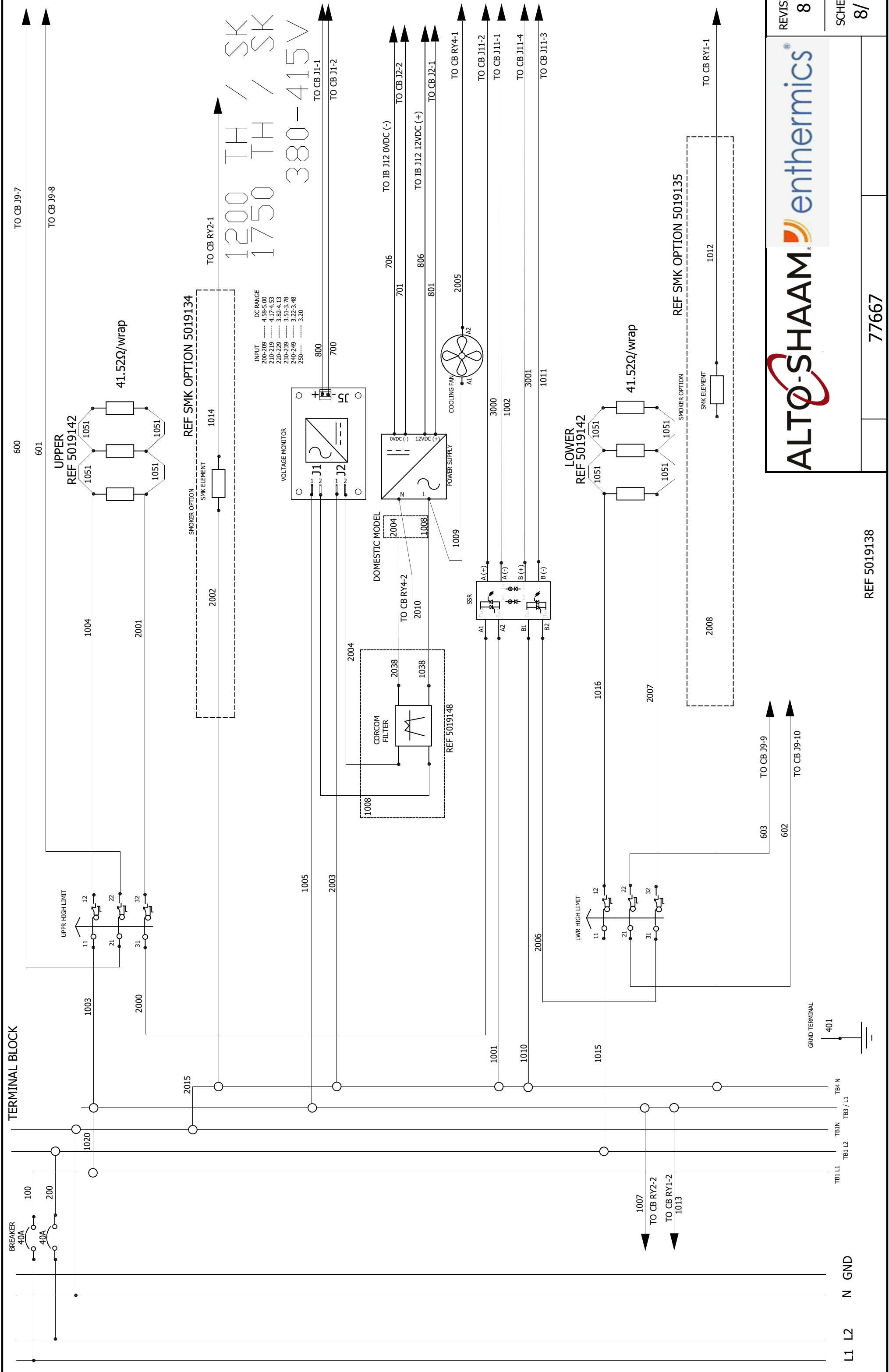


REVISION 8

SCHEME 7/11

REF 5019133

77667



TERMINAL BLOCK

12 11 10 9 8 7 6 5 4 3 2 1

12 11 10 9 8 7 6 5 4 3 2 1

L1 L2 N GND

TB1 L1 TB1 L2 TBIN TBIN TB4 N

TO CB J9-7 TO CB J9-8

TO CB RY2-1 1200 TH / SK 1750 TH / SK 380-415V

TO CB J1-1 TO CB J1-2

TO CB J2-2 TO CB J2-1

TO IB J12 0VDC (-) TO IB J12 12VDC (+)

TO CB RY4-1 TO CB J11-2 TO CB J11-1 TO CB J11-4 TO CB J11-3

TO CB RY1-2 TO CB RY1-1 TO CB RY1-3

TO CB RY1-1

TO CB J9-9 TO CB J9-10

TO CB RY2-2 TO CB RY1-2

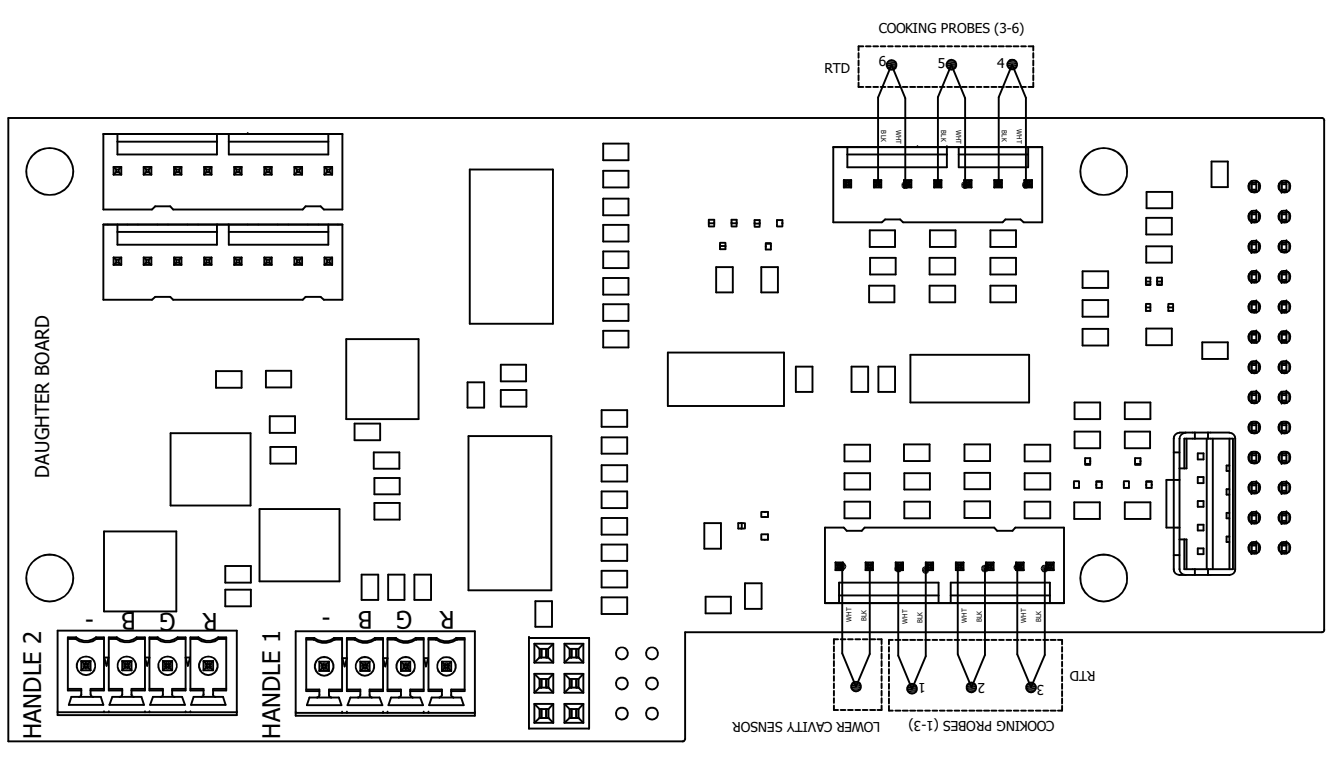
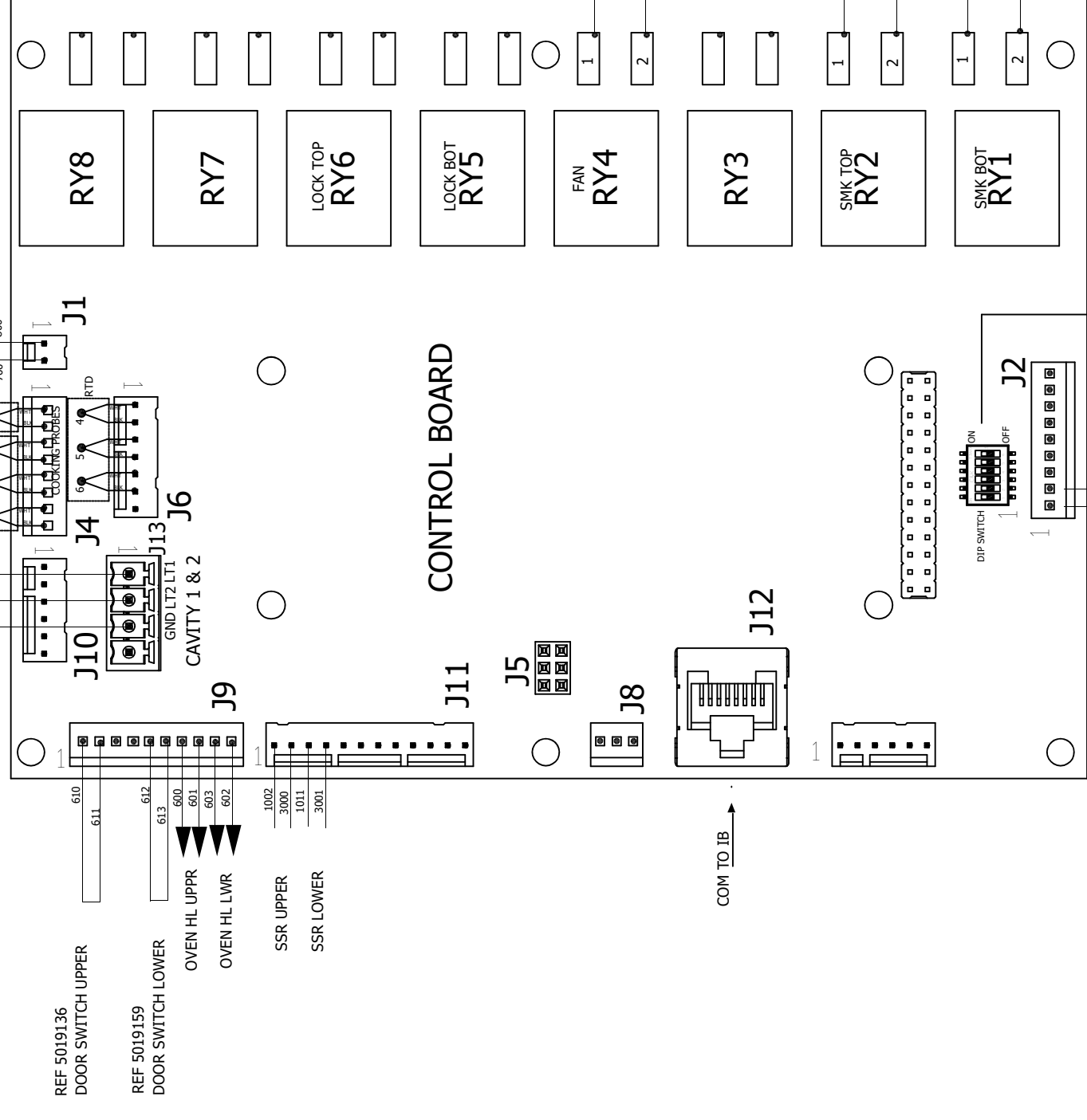
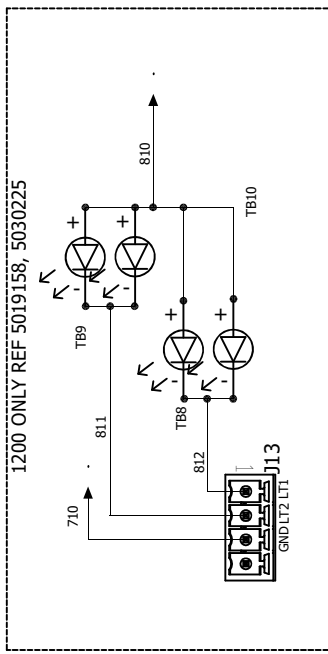
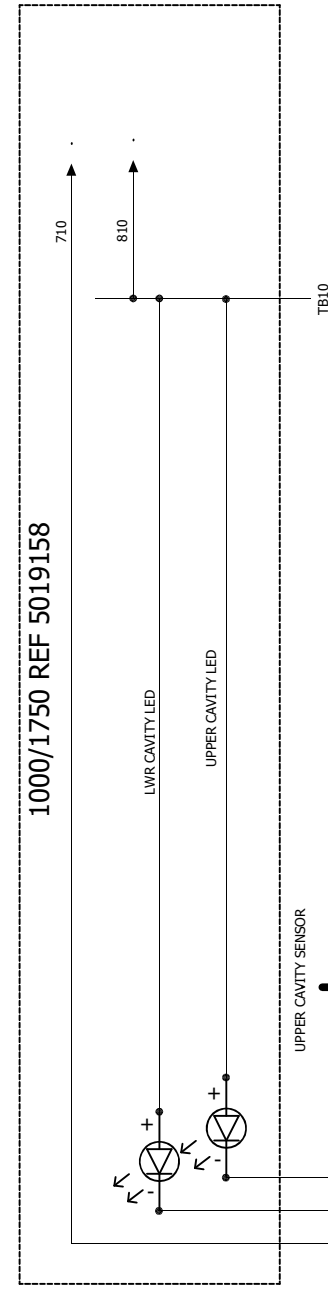
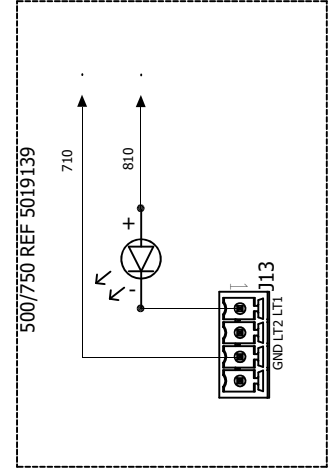


REVISION 8

SCHEME 8/11

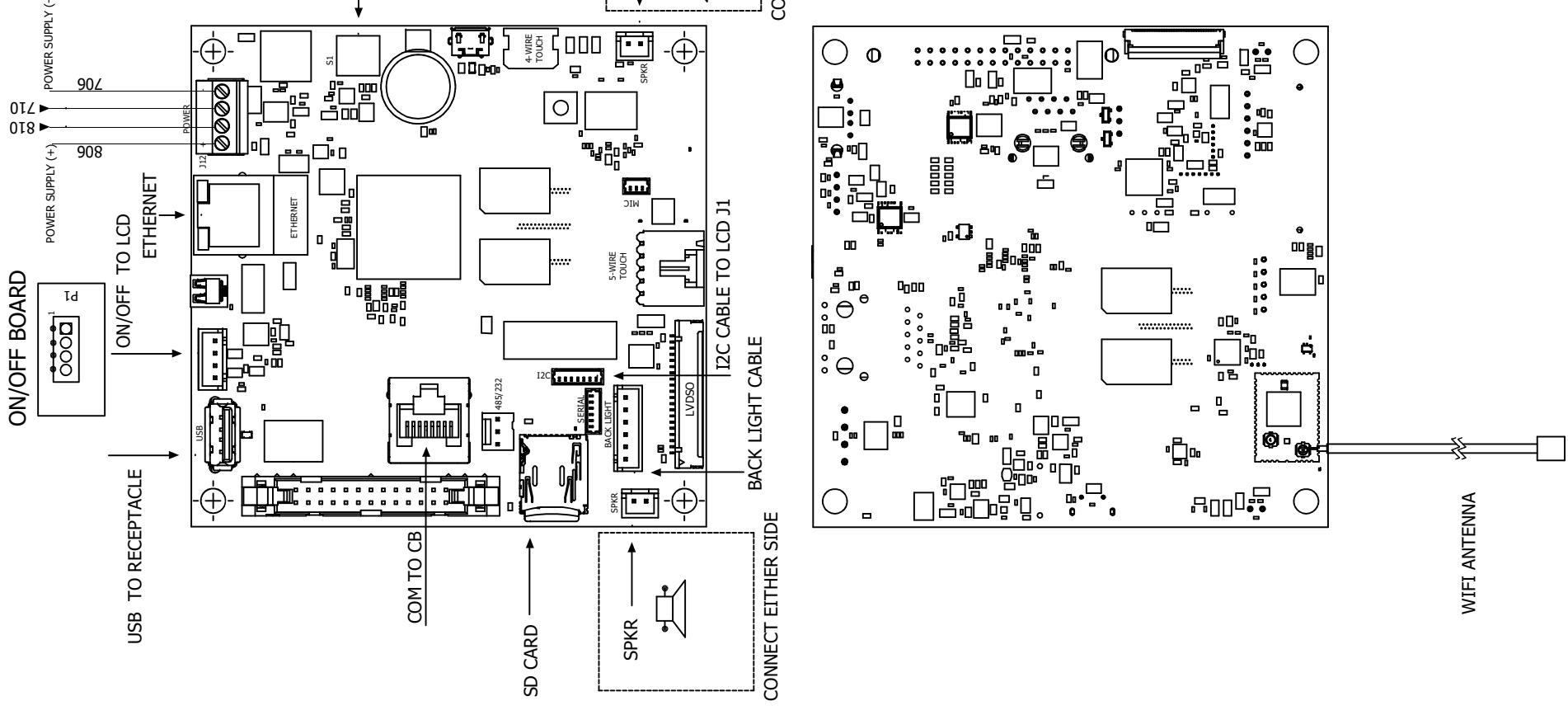
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77667



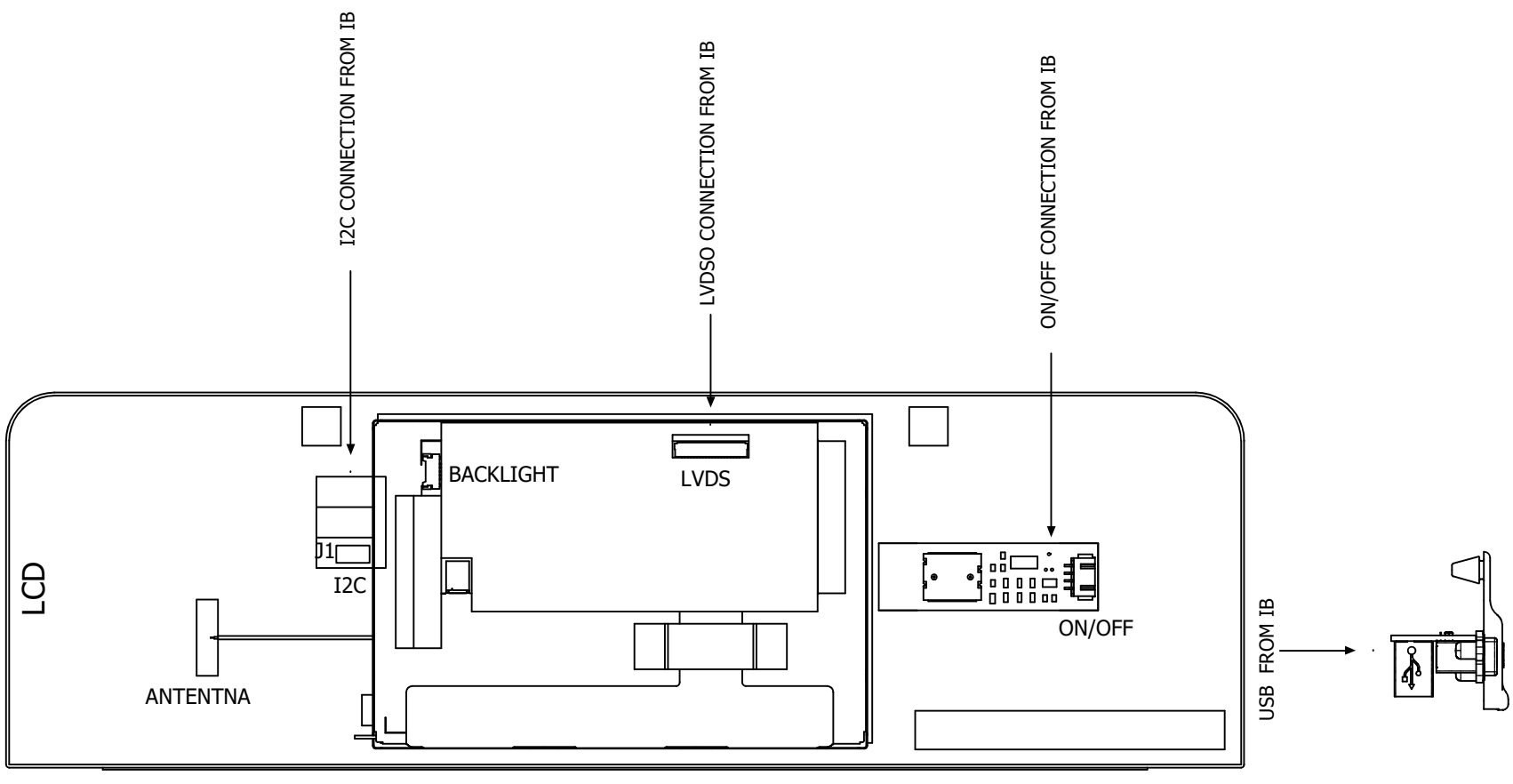
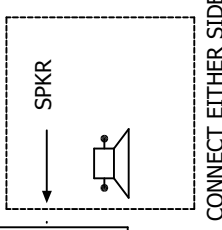
- ON
- Pin 1 = No Probe
 - Pin 2 = Dual Cavity
 - Pin 3 = 208-240V
 - Pin 4 = Smoker
 - Pin 5 = Latch
 - Pin 6 = Cavity LED

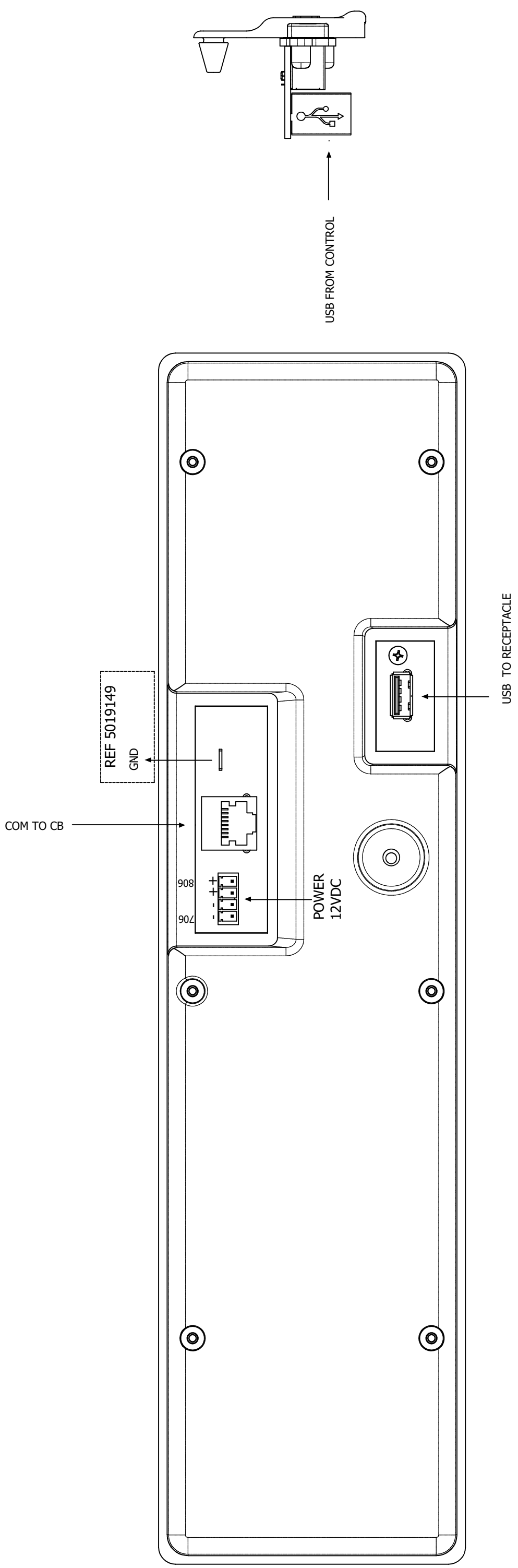
12
11
10
9
8
7
6
5
4
3
2
1



DIP SWITCH TABLE

PRODUCT	SCREEN ORIENTATION	SW6	SW5	SW4	SW3	SW2	SW1
COOK & HOLD	LANDSCAPE	OFF	OFF	ON	OFF	OFF	OFF
ARRY'S	LANDSCAPE	ON	OFF	ON	OFF	ON	OFF







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