



**Cecilware®**

# Operator Manual

## Water Boilers ME10EN, ME15EN



**Model ME15EN**



**Model ME10EN**



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Thank you for purchasing this quality boiler. For your safety and the safety of others, read all warnings and the operator manual before installing or using the product. Properly instruct all operators. Keep training records. For future reference, record serial number here:

#### Grindmaster-Cecilware

4003 Collins Lane, Louisville, KY 40245 USA  
Phone: 502.425.4776 Toll Free: 800.695.4500  
Fax: 502.425.4664  
Web: gmcw.com Email: info@gmcw.com

Grindmaster-Cecilware provides the industry's BEST warranty. Visit gmcw.com for warranty terms and conditions.



## Safety Information

### Important Safety Information



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

For your safety and the safety of others, read all warnings and the operator manual before installing or using the product.

**DANGER:** This term warns the user of imminent hazard that will result in serious injury or death.

**WARNING:** This term refers to a potential hazard or unsafe practice, which could result in serious injury or death.

**CAUTION:** This term refers to a potential hazard or unsafe practice, which could result in minor or moderate injury.

**NOTICE:** This term refers to information that needs special attention or must be fully understood.

### **WARNING**

To reduce risk of electrical shock, do not remove or open cover. No user-serviceable parts inside. Repair should be done by authorized service personnel only.

The appliance is not intended for outdoor use.

Do not clean with a water jet or use in an area where a water jet may be used.

Cleaning and maintenance shall be made only by properly trained persons with supervision.

This appliance is not intended for use by persons with reduced physical, sensory, or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.

Children should be supervised to ensure that they do not play with the appliance.

Do not alter or deform the power cord or plug in any way! Altering or deforming the plug may cause electrical shock, damage unit and will void warranty.

To reduce risk of explosion or fire, do not use near combustibles.

### **CAUTION**

For safe and proper operation, the appliance must be placed in a stable, vertical position.

To reduce risk of serious burns or scalding do not place hand or other body parts under dispenser or container while product is brewing.

Always unplug unit from power supply before servicing.

Surfaces are hot and can cause burns.

### **NOTICE**

Use only on a circuit that is properly protected and capable of the rated load.

Electronically ground the chassis.

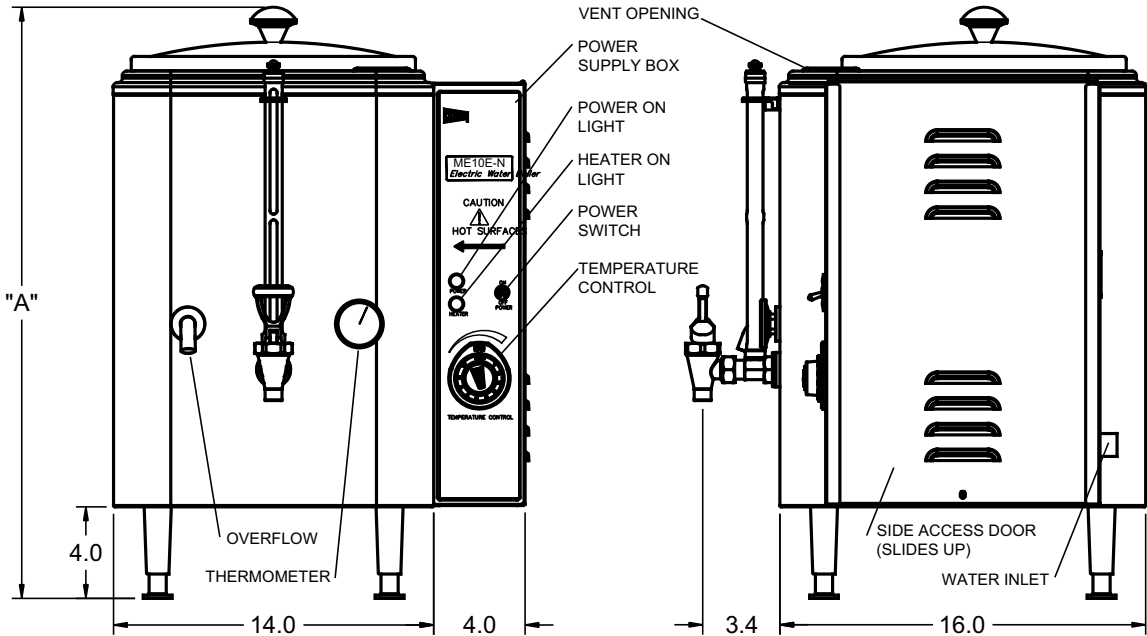
Follow national and local electrical codes.

Do not use extension cord.

This equipment must be installed in compliance with applicable Federal, State and/or Local plumbing codes having jurisdiction. This product requires an approved backflow prevention water device, such as a double check valve, that must be installed between the machine and the water supply.

# Rough-In Drawing

GENERAL SPECIFICATIONS			
MODEL NO	WATER CAP. (GAL)	DIMENSION "A" (INCHES)	SHIPPING WT. (LB)
ME10E-N CME10E-N	10.0	26.0	45
ME15E-N CME15E-N	15.0	30.5	50



ELECTRICAL SPECIFICATIONS					
MODEL NO	VOLTS	WATTS	AMPS	PHASE	FIELD WIRING SIZE
ME10E-N CME10E-N ME15E-N CME15E-N	120	1,800	15	1	14 AWG
	240	7,000	29.2	1	10 AWG
	208	5,300	25.5	1	10 AWG
	240	10,500	25	3	10 AWG
	208	7,900	22	3	10 AWG

**NOTE:**

1. FIELD WIRING MUST BE SUITABLE FOR 75 DEGREES CELSIUS.
2. USE COPPER WIRE ONLY FOR POWER SUPPLY CONNECTION.
3. 120 VOLT UNITS SUPPLIED WITH A GROUNDED 120V-15A LINE CORD AND PLUG.

# Installation

## Unpacking Instructions

Carefully unpack the machine and inspect immediately for shipping damage. The packaging may contain unattached parts. Your machine was shipped in a carton designed to give it maximum protection in normal handling. It was thoroughly inspected before leaving the factory. In case of damage, contact the shipper, not Grindmaster-Cecilware.

**NOTICE:** The person installing this appliance is responsible for ensuring that electric and water connections meet the requirements of the national electric code, national plumbing code, and any local ordinances.

See **Rough-in Drawing** for approximate dimensions and location of water input.

**NOTE:** When positioning the unit, leave a minimum 6 inch (15 cm) clearance on the right side of the water boiler for ease of service.

Water boilers are shipped with the thermostats in the OFF position. Do not turn the thermostat ON before filling the water boiler with water.

### **▲ CAUTION**

These urns are heavy pieces of equipment. It is recommended that moving or lifting the unit be done by two people to avoid injury.

## Mechanical Installation

**NOTICE:** Do not turn thermostat on until all installation instructions have been followed.

1. Inspect unit to see if any damage occurred in shipment.
2. Remove the boiler from the packing material. The four legs, faucets, and vent cap drain are packed separately with water boiler.
3. Install legs by tilting boiler on its side and screwing legs into leg supports until hand tight.
4. Carefully right unit and install in its permanent location, being sure to leave at least 6" (15 cm) on right side of boiler for access to controls. Position boiler so that the faucet drips into a drip trough or drain receptacle of some type.
5. Level the boiler by adjusting the bottom pad of the legs.
6. Place the vent cap into the recess in the top of the unit.
7. Mount the faucet assembly onto the shank.

## Water Hook-up

**NOTICE:** This equipment must be installed in compliance with applicable Federal, State and/or Local plumbing codes having jurisdiction. This product requires an approved backflow prevention water device, such as a double check valve, to be installed between the machine and the water supply. Incoming pressure should be greater than 30 psi and not more than 70 psi.

**NOTICE:** Connecting the water boiler to a warm water supply will speed up heating and recovery times.

1. The boiler is equipped with a ¼" Flare water inlet fitting, which is located on the back of the unit.
2. Provide shut-off valve and union in supply line near boiler.
3. Minimum inlet pressure at boiler should be 30 PSI.
4. Maximum inlet pressure recommended at 70 PSI.
5. Copper flex tubing should be used for valve connections.
6. Turn on the water supply line and check for leaks.

**NOTE:** A filtering system is recommended to remove odors and inhibit lime and scale build up in the unit.

**NOTE:** In areas with extremely hard water, a water softener must be installed in order to prevent mineral deposits that will cause malfunctioning of the equipment.

## Electrical Hook-up

### **▲ WARNING: ELECTRIC SHOCK HAZARD!**

Installation of this appliance should be performed by qualified service personnel only. Improper installation could result in electrocution.

**NOTICE:** This equipment must be installed in compliance with applicable Federal, State and/or Local electrical codes having jurisdiction. Do not use extension cords. Make sure that the outlet is properly grounded.

1. Check rating marking on boiler nameplate to be sure electric lines match voltage, phase, and amperage requirements of boiler. Select the proper cord and cord grip for electrical rating of the boiler.
2. 120V water boilers are provided with 120V/15A grounding plug. Units must have a separate 120V/15A outlet.
3. 208/240V water boilers are provided with a terminal block inside the control box. **Field wiring must be performed by a qualified serviceman.** 1 and 3 phase hook-up for units with terminal blocks. To access terminal block, remove the fastener on the cover and slide off cover. Install a suitable conduit and connect copper wires to terminal L1 and L2 (and L3 for 3 phase unit only) and a #14 AWG ground wire to the ground lug.

## Priming

**NOTE: THERMOSTAT MUST BE IN THE "OFF" POSITION.**

1. Open water supply line valve to boiler.
2. Turn on or plug in the power supply to the boiler. The unit fills at the rate of 1 gallon (3.8 L) per minute. Do not power up the boiler when the water line is off.
3. When the water level becomes visible in the sight gage, turn the thermostat clockwise to maximum position. The unit will now automatically fill to capacity and heat the water.
4. In high altitude locations (over 5000 ft. or 1500 m above sea level), thermostat may have to be lowered to prevent boiling. See the **Adjustments** section if changes are needed.
5. Heat and discard at least one batch of water.

### ▲ CAUTION: BURN HAZARD

Water from boiler is very hot. Use caution when pouring or transporting hot water. Accidental spills may result in severe burns.

## Cleaning

### ▲ CAUTION: BURN HAZARD

Boiler surfaces and water inside boiler are very hot. Use caution when cleaning unit to prevent burns.

**NOTICE:** All sanitizing agents in the food zone must comply with 21 CFR 178.1010. Sanitize all food dispensing units periodically. All parts to be sanitized must be cleaned first. Cleaning and sanitizing frequency must follow state and local health department regulations.

**NOTICE:** Do not use cleansers, bleach liquids, powders, or any other substance containing chlorine. These products promote corrosion and will pit the stainless steel. USE OF THESE PRODUCTS WILL VOID THE WARRANTY.

### Daily

Wipe the outside of the unit with a damp cloth, using soap solution or a non-abrasive compound when required.

### Sanitizing

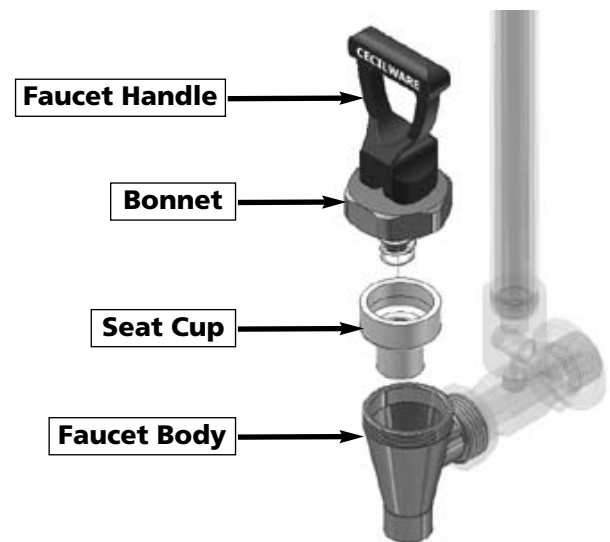
### ▲ CAUTION: BURN HAZARD

Never remove faucet when the liner has water in it. Switch OFF the power to the unit at the circuit breaker. Turn off the water line running to the boiler.

1. With power to the unit disconnected, fill unit to capacity.
2. Prepare a sanitizing solution in accordance with

local health department regulations. You may also refer to the US Food and Drug Administration regulation 21 CFR 178.1010 "Sanitizing Solutions" and US Environmental Protection Agency 40 CFR 18.940 "Tolerance exemptions for active and inert ingredients for use in antimicrobial formulations (Food-contact surface sanitizing solutions)".

3. Follow the instructions provided with the sanitizing agent.
4. Drain all water from the unit slowly.
5. Let all sanitized parts drain and air dry. **DO NOT WIPE THEM DRY.**
6. If the unit is not to be used again immediately after sanitizing - do not rinse with water. If the unit is to be used immediately after sanitizing - rinse with water before refilling the unit for further use.

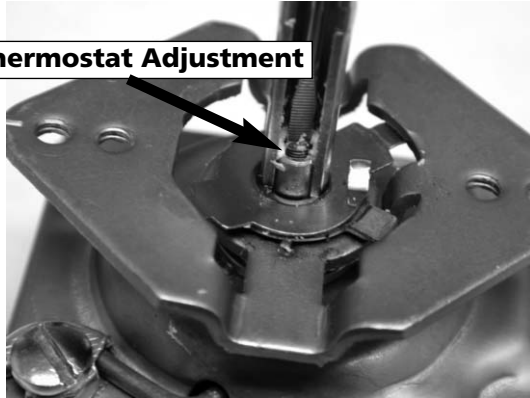


## Adjustments

### Thermostat Adjustment

The Thermostat is factory set for proper dispense temperature of 200°F ± 3°F (93°C ± 16°C) with the control knob set to the maximum clockwise position. If field adjustments are needed proceed as follows:

- To **DECREASE** temperature, turn the control knob slightly in the COUNTERCLOCKWISE direction.



- To **INCREASE** the water temperature -

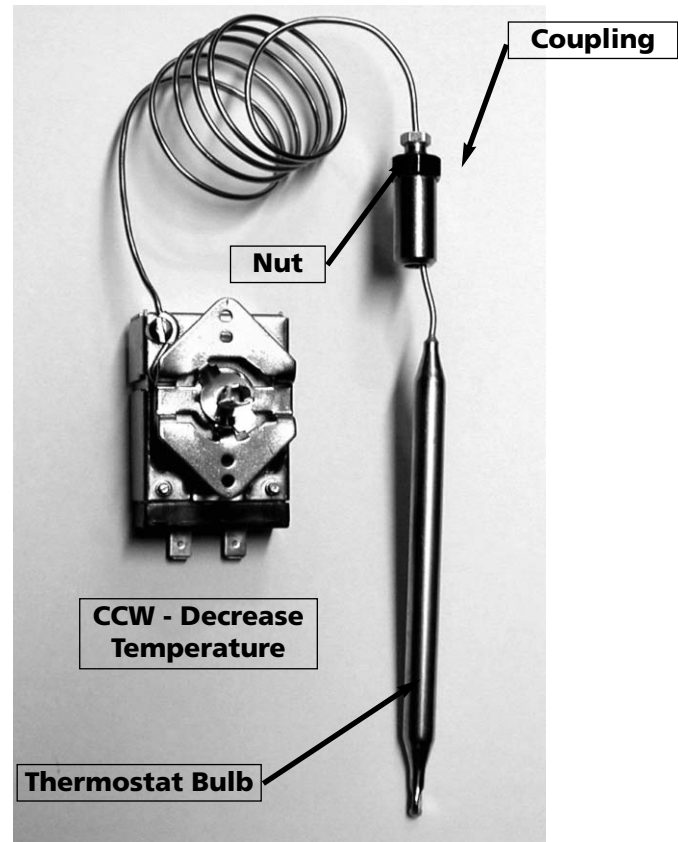
#### **⚠ WARNING: SHOCK AND BURN HAZARD**

To prevent electric shock and burn hazard this procedure must be performed by a trained and qualified service technician.

#### **WARNING: SHOCK HAZARD**

Disconnect power before attempting any electrical repairs.

1. With the Thermostat Knob to its maximum clockwise position, remove the knob and locate the slotted adjustment screw inside the hollow thermostat shaft.
2. Using a narrow-bladed screwdriver, engage slotted adjustment screw and turn it 1/4 turn slowly counter-clockwise.
3. Allow a few minutes for the temperature to reach set level. The Heater Light will go ON, indicating the heating element is activated, wait for it to go OFF, indicating that the water has reached new set temperature.
4. Take a temperature reading and repeat if necessary.



## Maintenance

### **▲ WARNING: SHOCK AND BURN HAZARD**

To prevent electric shock and burn hazard all tasks described in this section are to be performed by a trained and qualified service technician.

### **▲ WARNING: SHOCK HAZARD**

Disconnect power before attempting any electrical repairs.

The rest of this manual contains information to aid the service technician who is maintaining this equipment. This section has information on performing common service tasks.

#### **SERVICE TECHNICIAN:**

If you still need help after reading this section, call Grindmaster-Cecilware Technical Service Department, (502) 425-4776 or (800) 695-4500 (USA & Canada only) (Monday through Friday 8 AM - 6 PM EST). Please have the model and serial number ready so that accurate information can be given.

Prior authorization must be obtained from Grindmaster-Cecilware for all warranty claims.

**Grindmaster-Cecilware provides the industry's BEST warranty. Visit our website at [gmcw.com](http://gmcw.com) for warranty terms and conditions.**

#### **To Move the Boiler**

The boiler must be completely drained (tank and liner) and allowed to cool prior to moving.

#### **If Water Fails To Heat**

1. Check line fuse or circuit breaker. Replace or reset if necessary.
2. Make sure thermostat is in ON position. If thermostat pilot light does not come on, replace thermostat. (Refer to instructions below.) If pilot light is on, measure continuity between terminals 1 and 2 of thermostat, and between terminals 3 and 4. If a resistance is measured, replace thermostat.
3. If thermostat is okay, check wiring and repair if necessary: if wiring is okay, check heater resistance; if high or infinite, replace as follows:

#### **Replacing Heater**

1. Shut off power and disconnect water supply at elbow. Drain boiler.
2. Tilt boiler and disconnect wires to heater.
3. Remove socket head screw and heater flange and lift heater out.
4. Install new heater and reassemble boiler.
5. Repeat **Priming** instructions on page 5. **NOTE: DO NOT TURN ON THERMOSTAT UNTIL BOILER IS PRIMED.**

#### **Replacing Thermostat**

Thermostat is located in side box of boiler. Lift off side box door to gain access to thermostat; then follow instructions below.

1. Shut off power, disconnect water supply, and drain boiler by opening hot water faucet. When faucet stops running, you are ready to remove the thermostat bulb.
2. Remove thermostat knob and two screws holding thermostat in place.
3. Disconnect wires from thermostat.
4. Pull out thermostat bulb.
5. Install new thermostat, push in the new thermostat bulb. Tighten compression nut on thermostat fitting to prevent leaking.
6. Repeat **Priming** instructions on page 5. **NOTE: DO NOT TURN ON THERMOSTAT UNTIL BOILER IS PRIMED.**

#### **If Water from Cold Water Supply Line Does Not Enter Boiler**

1. Check water supply to external shut-off valve.
2. Check fuse on rear of side box and replace if necessary.
3. If water supply and fuse are okay, remove fuse and lift off side box door exposing terminal block and electrical wiring.
4. Check dual probe liquid level controller. (See **Component Tests**)

#### **If Water Runs Out At Overflow Drain**

1. Make sure boiler is level and overflow tube is vertical.
2. Remove fuse from rear of side box.
3. If water continues to flow, solenoid valve is dirty or not seating properly. Replace solenoid as described below.

#### **Replacing Solenoid**

1. Shut off water supply, remove fuse, and lift off side box door.
2. Disconnect wires from solenoid: then remove flare nut and unscrew solenoid valve from bracket.
3. Install new solenoid and reinstall fuse and side box door.
4. If necessary, follow **Priming** instructions on page 5.

## Maintenance (continued)

### ⚠ WARNING: SHOCK AND BURN HAZARD

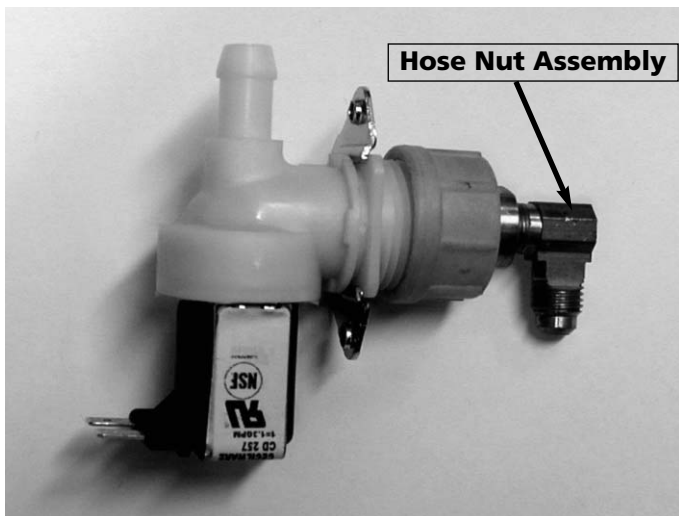
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### ⚠ WARNING: SHOCK HAZARD

Disconnect power before attempting any electrical repairs.

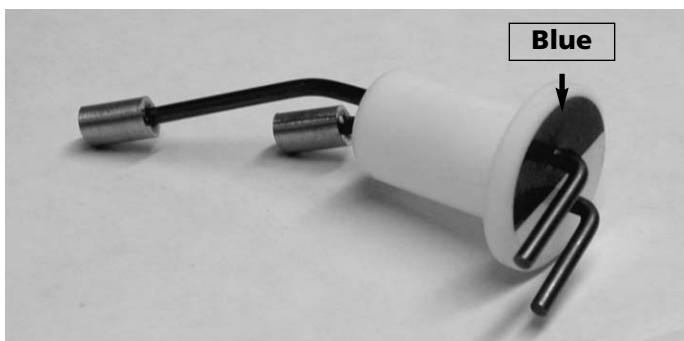
## Component Tests

### Water Inlet Valve Test



1. Turn power OFF. If the water level rises inside a partially filled tank, the Water Inlet Valve is leaking.
2. Disconnect wires from the Water Inlet Valve coil and connect a 2 wire line cord to the terminals. Plug it into a 120V outlet. If water flows in and stops when you pull it out, the Valve is working fine. Repeat this test a few times. The problem may be in the Probe or Water Level Control Board.
3. If the water does not flow in when the cord is plugged into an electrical outlet, the Solenoid coil may be damaged, opened, or the valve may have an obstruction preventing the water from flowing in. Clean or replace it.

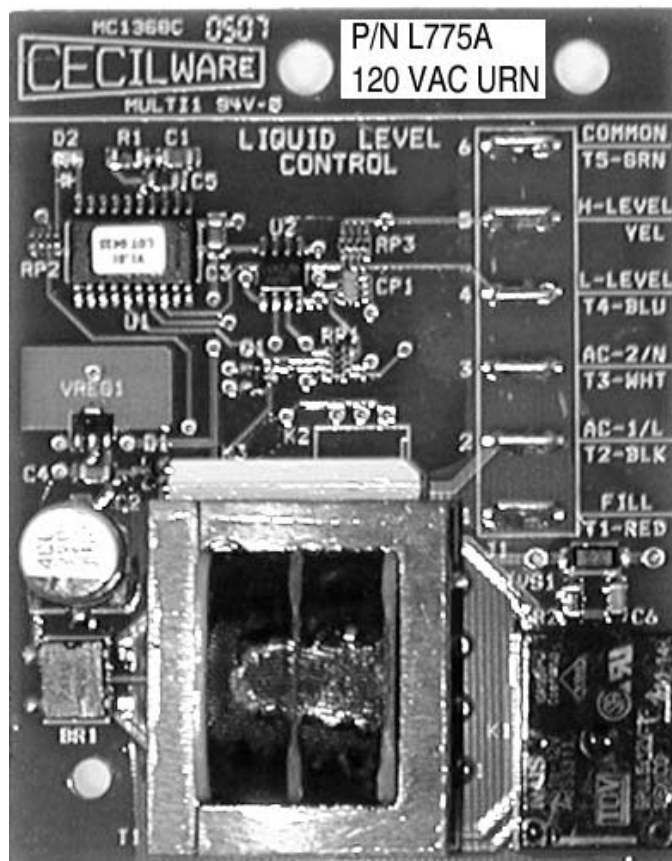
### Dual Probe Test



If lack of water persists, check the probe as follows:

1. Turn on the power and water supply. Check inside the tank to make sure the water is below the Probe. Pull the BLUE wire and terminal OFF the Probe rod.
2. If water still does not flow after the wire is disconnected from the Probe, the problem may be in the Solid State Dual Level Control Board.
3. If water starts flowing into the tank, the Probe may be grounded, due to excessive liming. Check with Ohm meter.
4. Clean or replace probe.

### Dual Probe Liquid Level Controller Test

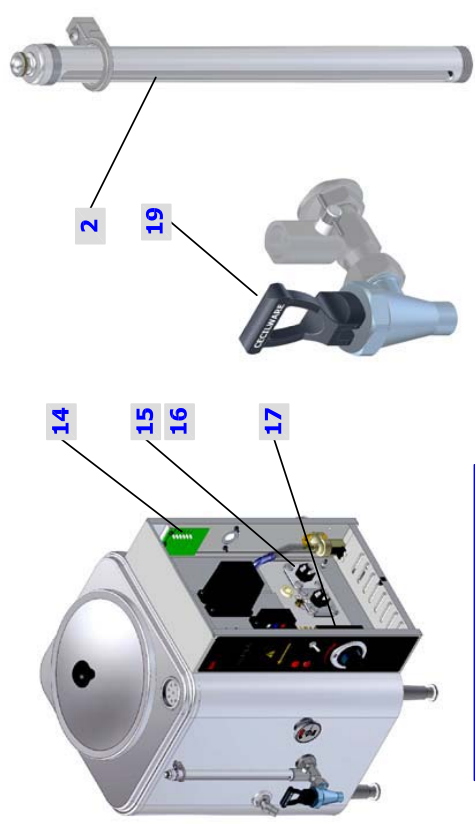
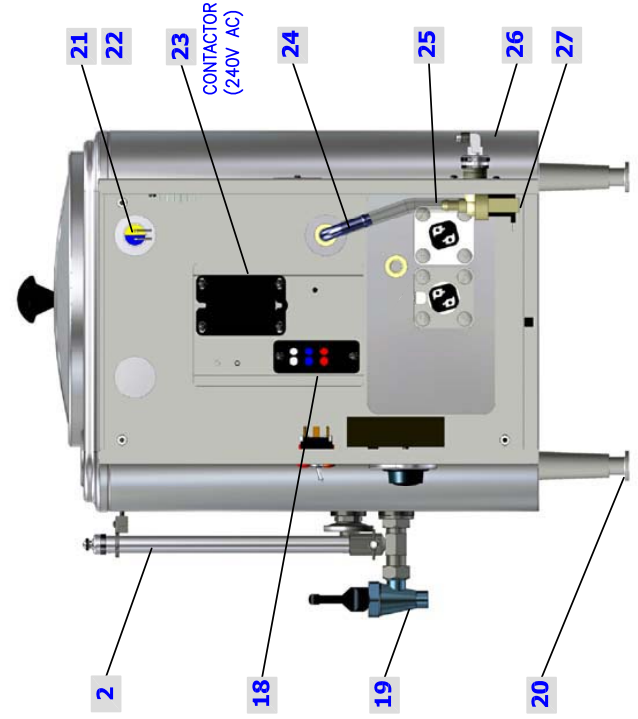
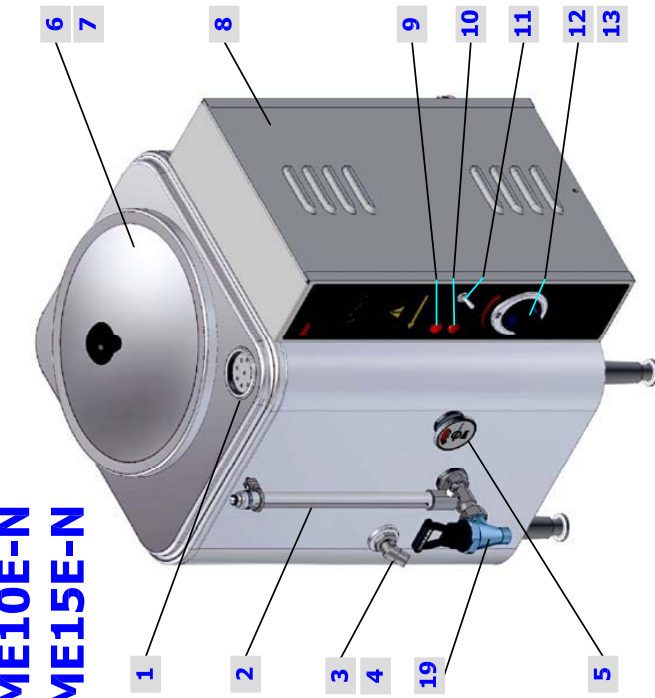


Check the Controller as follows:

1. Make sure there is power input to the Controller at the terminals AC1 & AC2. Your voltmeter should read 115 Volts. It should read the same at terminals AC1 & FILL when the water level is low. This is the output power to actuate the coil of the Solenoid Valve to open it.
2. The lack of voltage at terminals AC1 & L-LEVEL or H-LEVEL indicates that the Controller is not working properly.
3. Make sure all wire connections are tight, including ground.
4. If after this, the Controller is still failing to open the Water Inlet Valve, replace it.

# Parts Diagram

## ME10E-N ME15E-N



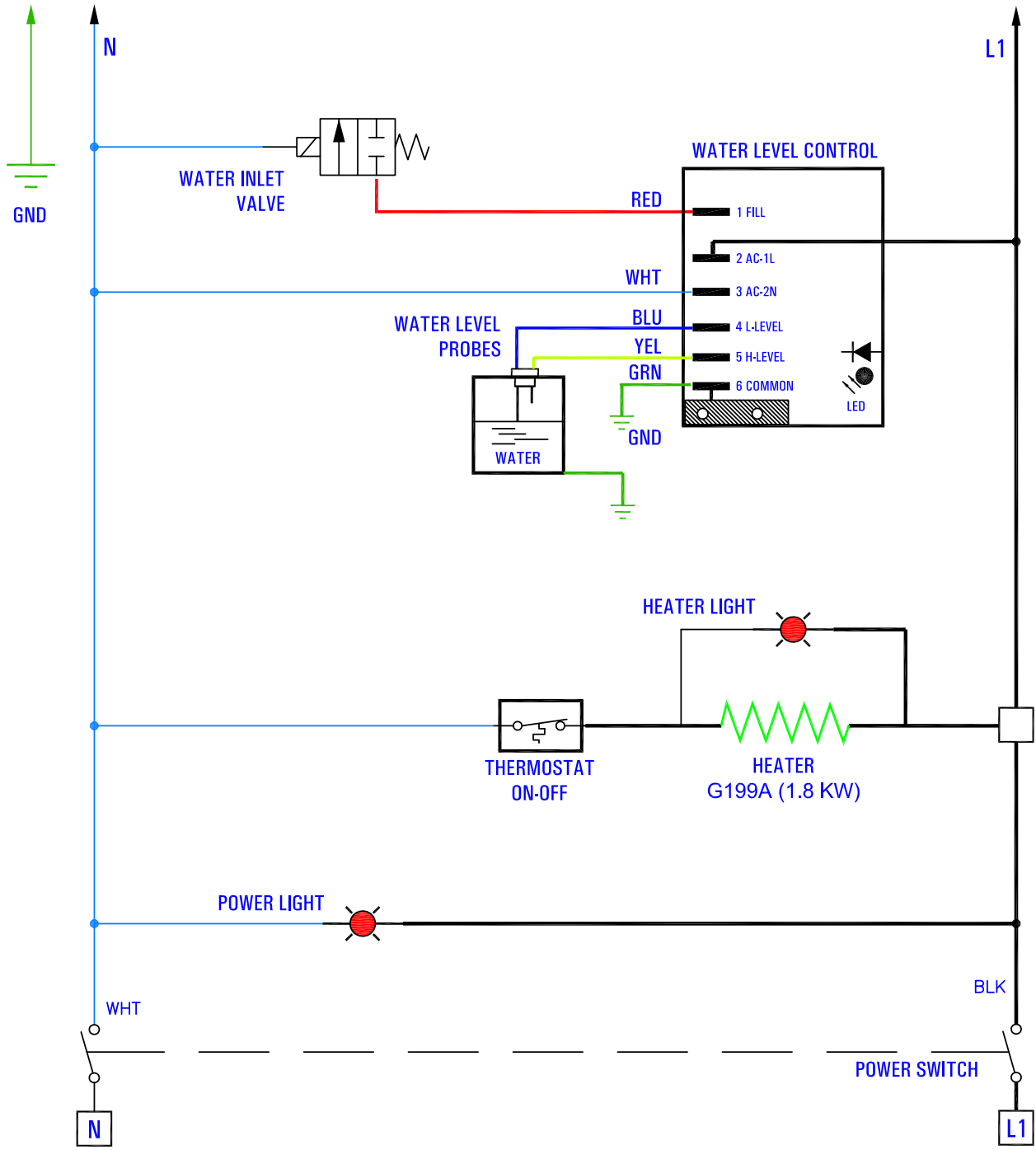
### PARTS LIST

ITEM	DESCRIPTION	ME10E-N	ME15E-N	QTY
1	VENT CAP DRAIN	U019A	U019A	1
2	GAUGE ASSEMBLY	D020B	D018A	1
3	OVERFLOW DRAIN ASSEMBLY	H429Q	H433Q	1
4	OVERFLOW SPOUT W/ NUT	E009A	E009A	1
5	DIAL THERMOMETER	L007A	L007A	1
6	COVER W/ KNOB	Q102Q	Q102Q	1
7	SILICONE GASKET	M607A	M607A	1
8	SIDE BOX COVER	SZ09A	SZ12A	1
9	PILOT LIGHT - RED	C165A	C165A	1
10	PILOT LIGHT - AMBER	C002A	C002A	1
11	ON - OFF SWITCH 20 AMP	L299A	L299A	1
12	THERMOSTAT KNOB	M008A	M008A	1
13	THERMOSTAT BEZEL	M016A	M016A	1
14	DUAL LEVEL CONTROL BOARD 120V	L775A	L775A	1
14	DUAL LEVEL CONTROL BOARD 240V	L776A	L776A	1
15	HEATER ELEMENT 120V	G199A	G199A	1
15	HEATER ELEMENT 240V	G197A	G197A	2
15	HEATER ELEMENT 240V 3 PH	G197A	G197A	3
16	HEATER GASKET	M018A	M018A	1
17	THERMOSTAT	L780A	L780A	1
18	TERMINAL BLOCK 3 POSITION	B000A	B000A	1
18	TERMINAL BLOCK 4 POSITION	B157A	B157A	1
19	FAUCET, SHANK W/ VALVE	D022Q	D022Q	1
20	4 INCH LEGS S.S. - SET OF 4	M005S	M005S	1
21	SILICONE SEAL 15mm	M462A	M462A	1
22	LEVEL SENSOR - DUAL PROBE	K810Q	K810Q	1
23	CONTACTOR 2 POLE, 30-40 AMP 220V	B178A	B178A	1
23	CONTACTOR 3 POLE, 50 AMP 240V	C036A	C036A	1
24	SILICONE SEAL 12mm	M461A	M461A	2
25	HOSE WATER INLET 5" LONG	M326A	M326A	1
26	HOSE NUT ASSEMBLY	K491B	K491B	1
27	WATER INLET VALVE 120V	C0257	C0257	1
27	WATER INLET VALVE 220V	C0258	C0258	1

# Wiring Diagram

NE267

## ELECTRICAL DIAGRAM ME10E-N, ME15E-N 120 VOLTS

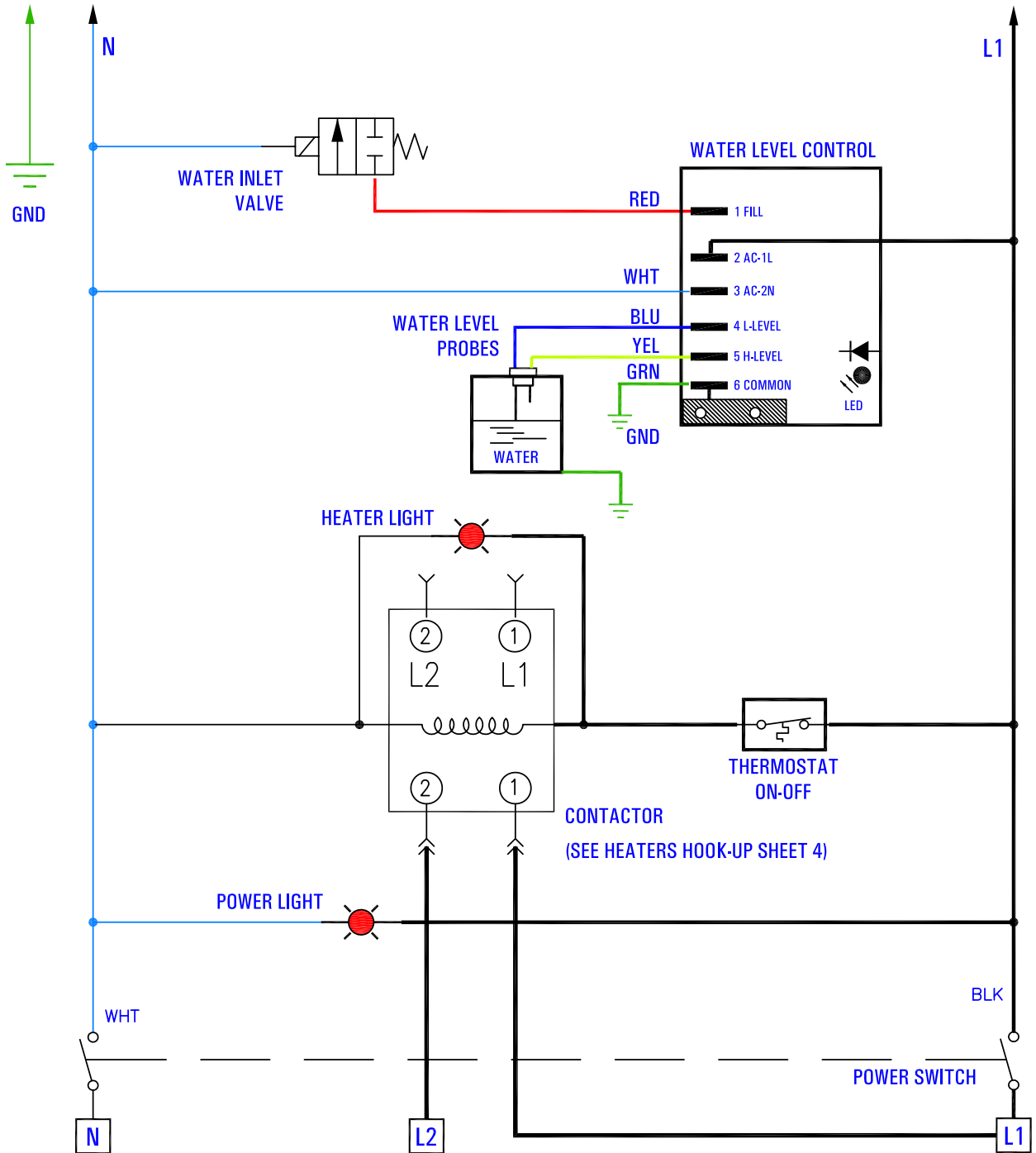


SHEET 1 of 4

# Wiring Diagram (continued)

NE267

## ELECTRICAL DIAGRAM ME10E-N, ME15E-N 120/ 240 VOLTS

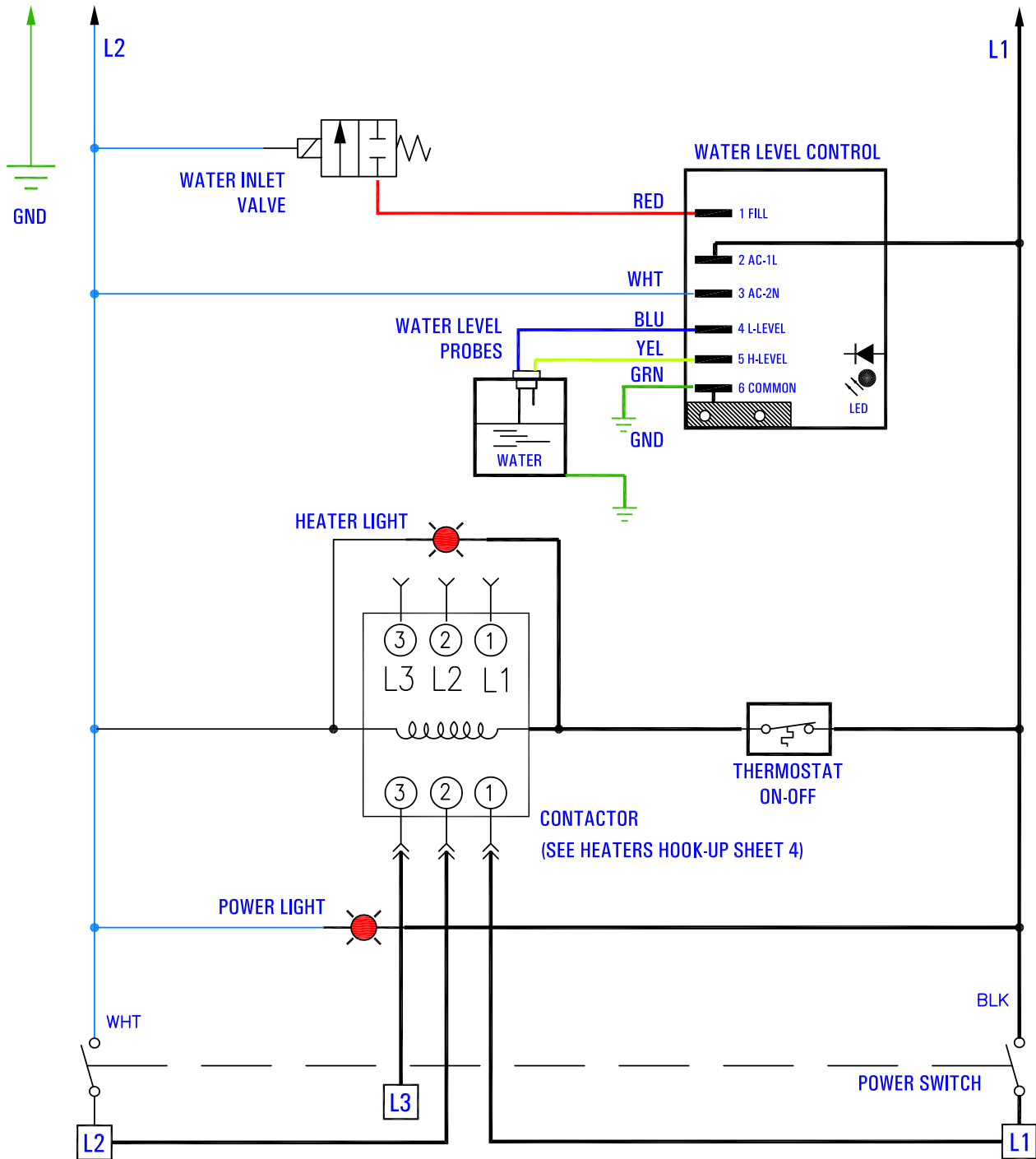


SHEET 2 of 4

# Wiring Diagram (continued)

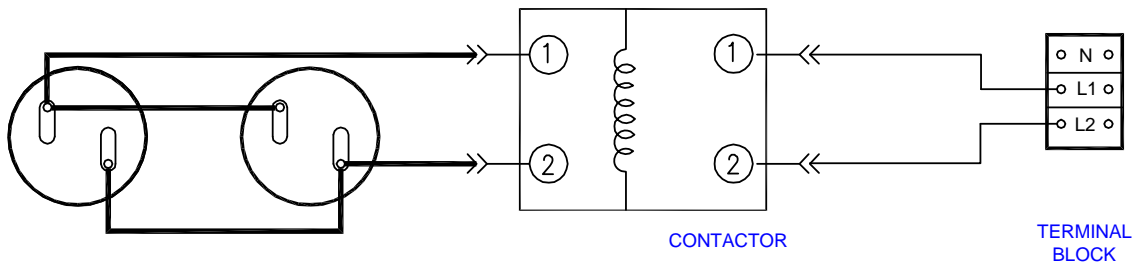
NE267

## ELECTRICAL DIAGRAM ME10E-N, ME15E-N 240 VOLTS

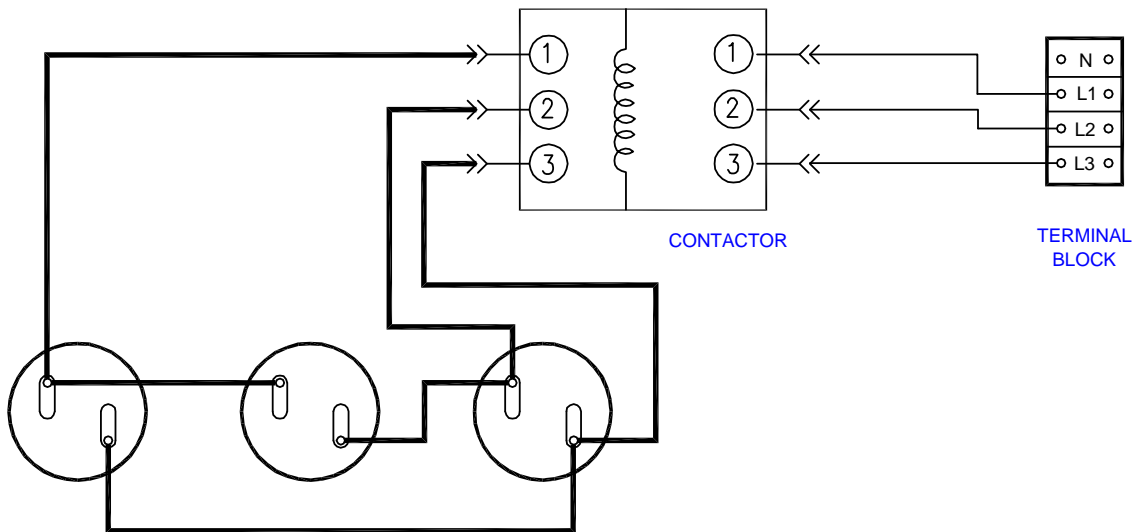


SHEET 3 of 4

ELECTRICAL DIAGRAM ME10E-N, ME15E-N  
240 VOLTS  
HEATERS HOOK-UP



1 PHASE 240 VOLTS  
G197A (2 x 3.5 KW)  
TOTAL: 7 KW



3 PHASE 240 VOLTS  
G197A (3 x 3.5 KW)  
TOTAL: 10.5 KW





**Grindmaster-Cecilware**

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