

# FETCO® User's Guide and Operator Instructions

## FETCO ZURICH™ TS Automatic Touchscreen Coffee Brewer with Pourover Feature



FETCO CBS-2121 ZURICH TS with decanter warmers



FETCO CBS-2121 ZURICH TS for thermal decanters

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 CBS-2121 ZURICH™ Touch Screen Brewer

P169 NOVEMBER 2018




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## SAFETY & HYGIENE DIRECTIONS- CE EQUIPMENT

1. This appliance is only intended for brewing coffee or tea only.
2. Except for the descaling procedure: do not pour liquid other than water into the appliance, this may damage the heater. Do not run appliance dry, always pour in water to top off tank after long periods of non-use.
3. Appliances connected to the water mains by detachable must use the new hose-sets supplied with the appliance that old hose-sets should not be reused. Use a hose set compliant to IEC 61770 for this connection.
4. Access to the service area is restricted to persons having safety/hygiene knowledge and practical experience of the coffee brewer. This appliance must be installed in locations where it can be overseen by trained personnel.
5. For proper operation, **install this appliance only indoors where the temperature is between 10°-35°C or 50-95°F**. Drain and remove all liquid from equipment and lines if exposed to freezing temperatures.
6. All commercial cooking equipment, including this unit, is not intended for use by children or persons with reduced physical, sensory, or mental capabilities. Ensure proper supervision of children and keep them away from the unit. Children should be supervised to ensure that they do not play hot beverage equipment.
7. **This unit must be installed and serviced by qualified personnel only.**
8. Installation must conform to all local electrical and plumbing codes. Installation by unqualified personnel will void the unit warranty and may lead to electric shock or burn, as well as damage to unit and/or its surroundings.
9. If the power cord requires repair or replacement-it must be performed by the manufacturer or authorized service personnel with the specified cord only from the manufacturer in order to avoid a hazard.
10. **The appliance must be disconnected from its power source during service and when replacing parts.** During service an operator must be able to check from any position that the plug remains removed. If this is not possible, an electrical disconnection with a locking system in the isolated position shall be provided.
11. Review the dimensions for the unit and verify that it will fit properly in the space intended for it. Verify that the counter or table will support the total weight of the brewer and dispensers when filled (See: Technical Data). Brewers require a sturdy supported surface for operation. Locate operating brewer in a horizontal position only. When the brewer is in position-level it front to back as well as side-to-side. Brewer must be leveled to operate correctly.  
**Do not tilt appliance more than 10° to insure safe operation. Do not move brewers when filled.**
12. The A-weighted sound pressure level is below 70 dB.
13. Unit is for protected indoor use only. **Do not steam clean or use excessive water on unit**
14. This unit is not “jet-proof” construction. **Do not pressure wash or use jet spray to clean this unit and do not install the appliance in an area which water jet could be used.**
15. The unit is not waterproof -**do not submerge or saturate with water.**  
**Equipment exposed to flood and contaminated must not be used due to electrical and food safety.**  
**Do not operate if unit has been submerged or saturated with water.**  
**Do not operate unit if freezing occurred**

LABELS	Labels and Warnings for Hot Beverage Equipment	WARNING																											
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="background-color: #ffcc00; text-align: center;"></td> <td style="background-color: #ffcc00; color: white; font-weight: bold; padding: 2px;">WARNING</td> <td style="padding: 2px;">To reduce the risk of electric shock or fire.</td> </tr> <tr> <td style="text-align: center;"></td> <td colspan="2" style="padding: 2px;">FETCO hot beverage equipment is for commercial use only.</td> </tr> <tr> <td style="text-align: center;"></td> <td colspan="2" style="padding: 2px;">Do not remove or open cover. No user serviceable parts inside. Refer installation, adjustments and service to qualified personnel.</td> </tr> <tr> <td style="text-align: center;"></td> <td colspan="2" style="padding: 2px;">Warning! Disconnect from power supply before servicing. This appliance is always energized when connected to a power source. Locate unit away from source of heat. Do not install or use near combustibles.</td> </tr> <tr> <td style="text-align: center;"></td> <td colspan="2" style="padding: 2px;">Brewer has hot surfaces. Use care when removing brew basket- Allow time for it to drain completely when brew is completed.</td> </tr> <tr> <td style="text-align: center;"></td> <td colspan="2" style="padding: 2px;">Use dedicated circuit with capacity rated by local code or National Electrical Code for the current draw of this equipment. Check the serial number plate for power requirements</td> </tr> <tr> <td style="text-align: center;"></td> <td colspan="2" style="padding: 2px;">Failure to comply with safety warnings risks equipment damage, property damage, fire, burns or shock hazard</td> </tr> <tr> <td style="background-color: #cccccc; text-align: center;"></td> <td colspan="2" style="padding: 2px;">This equipment must be installed with a backflow protection device to comply with federal, state or local municipality codes.</td> </tr> <tr> <td style="background-color: #cccccc; text-align: center;"></td> <td colspan="2" style="padding: 2px;">Read all instructions before installing or operating this unit. Pre-fill unit before first use. Fill with pure water only.</td> </tr> </table> <p style="margin-top: 5px;">1046.00049.00 Back Panel of Equipment</p>		WARNING	To reduce the risk of electric shock or fire.		FETCO hot beverage equipment is for commercial use only.			Do not remove or open cover. No user serviceable parts inside. Refer installation, adjustments and service to qualified personnel.			Warning! Disconnect from power supply before servicing. This appliance is always energized when connected to a power source. Locate unit away from source of heat. Do not install or use near combustibles.			Brewer has hot surfaces. Use care when removing brew basket- Allow time for it to drain completely when brew is completed.			Use dedicated circuit with capacity rated by local code or National Electrical Code for the current draw of this equipment. Check the serial number plate for power requirements			Failure to comply with safety warnings risks equipment damage, property damage, fire, burns or shock hazard			This equipment must be installed with a backflow protection device to comply with federal, state or local municipality codes.			Read all instructions before installing or operating this unit. Pre-fill unit before first use. Fill with pure water only.		<div style="display: flex; justify-content: space-around; align-items: center;"> </div> <p style="margin-top: 10px;">1046.00052.00 Brew Basket Area Warning</p> <div style="display: flex; justify-content: space-around; align-items: center;"> </div> <p style="margin-top: 10px;">1046.00050.00 Optional Carafe Warmers (X2)</p>	<div style="text-align: center; margin-bottom: 10px;"> <p style="margin: 0;"><b>WARNING</b></p> </div> <p style="font-size: small; margin: 0;">All electrical connections must be in accordance with local electrical codes and any other applicable codes. If the supply cord is damaged, it must be replaced by the manufacturer, its service agent, or similarly qualified persons in order to avoid a hazard.</p> <p style="font-size: small; margin: 0;">To prevent an electric shock hazard this device must be bonded to equipment in close proximity with an equipotential bonding conductor. This device is equipped with a bonding lug for this purpose and is marked with the following symbol</p> <div style="text-align: center; margin-top: 10px;"> </div>
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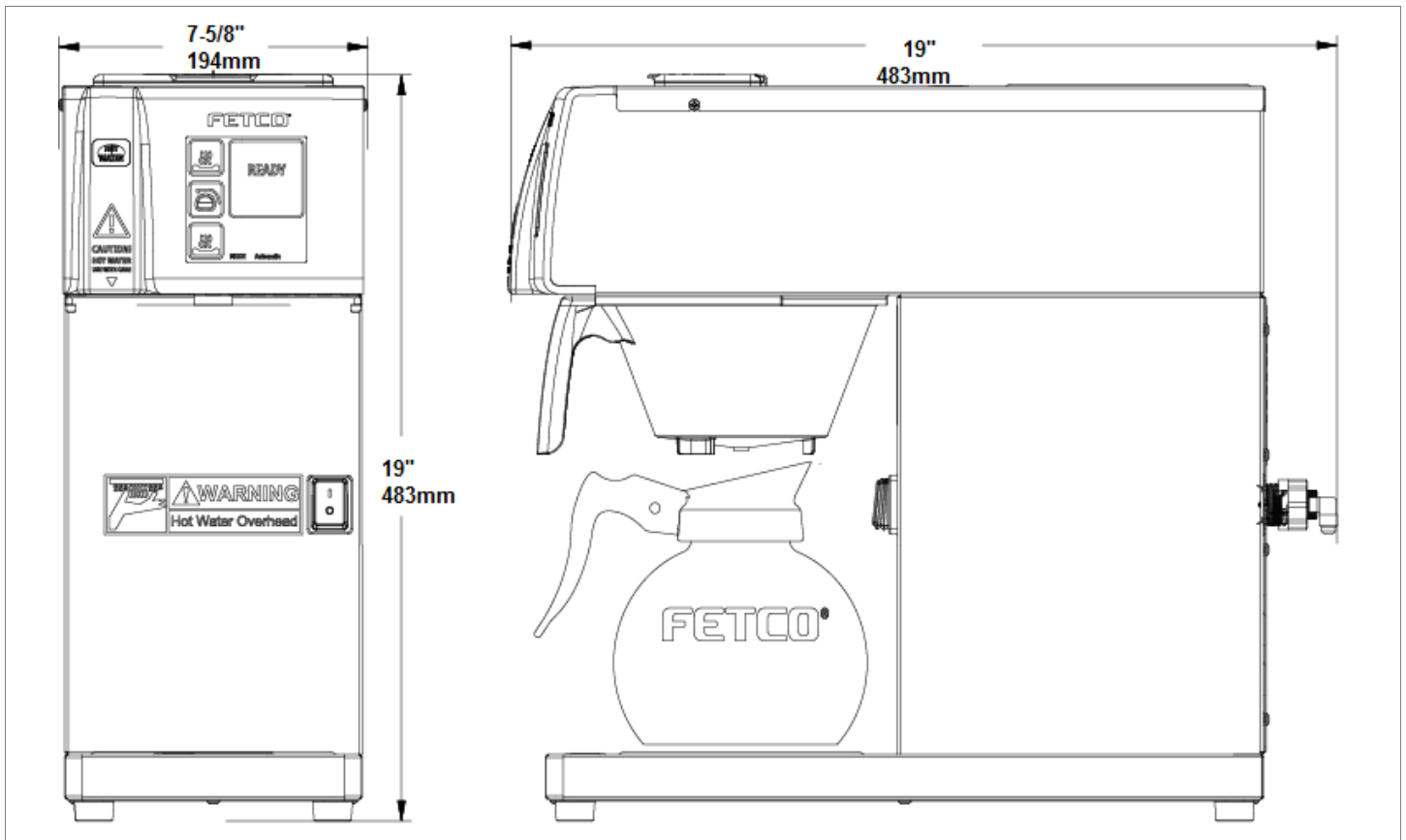
Specifications							
Model: CBS-2121. Specifications for automatic coffee brewer with pourover feature and hot water service							
Description & Features							
<ul style="list-style-type: none"> <li>• Automatic fill coffee brewer-with pourover and hot water service designed for 64 fl. oz. carafes.</li> <li>• Hot water service is available only in Automatic Mode-and is disabled in Manual Mode and during brewing.</li> <li>• Warmer models use self-regulating solid state PTC Semiconductor type heaters</li> <li>• Two fully programmable batch sizes; preset for full and half batch. Each may be set by to any volume</li> <li>• User adjustable drip delay time with screen status display</li> </ul>							
Electrical Configurations							
Configuration Code	Warmer Positions	Voltage	kW	Amps	Electrical Connection	 <p>NEMA 5-15P Plug Configuration</p>  <p>Export Only 250V 16 A "Schuko" CEE 7/7 PLUG</p>  <p>BS 1363A UK</p>	
C212103	None	100-120	1.11-1.60	11.1-13.3	NEMA 5-15P plug		
C212113	Two	100-120	1.11-1.60	11.1-13.3	NEMA 5-15P plug		
C212104	None	230	1.93	8.2	CEE7/7 Schuko		
C212114	Two	230	2.02	8.6	CEE7/7 Schuko		
C212104UK	None	230	1.93	8.2	BS 1363A UK		
C212114UK	Two	230	2.02	8.6	BS 1363A UK		
Weights and Capacities							
Height	Width	Depth	Water tank capacity	Empty Weight	Filled Weight	Shipping Weight	Shipping Dimensions
19 in 483mm	7 5/8 in 194 mm	19 in 470 mm	1.4 gallon 5.2 L	17 lbs. 7.7 kg	28.4 lbs. 12.9 kg	23 lbs. 10.4 kg	20 <sup>3</sup> / <sub>4</sub> " X10 <sup>3</sup> / <sub>4</sub> "X 12 <sup>1</sup> / <sub>4</sub> " 524mmX273X540mm

Brew Time	
<u>Automatic Mode</u> : Approximately five minutes total brew time. Allow time for final drip out-Factory Default	
<u>Manual Mode (Pour Over)</u> : Approximately four minutes pour-in time with brew. Allow time for final drip out	
Volume Factory set for 64 fl.oz	7 Brews per hour
Calibrated for 105g coffee dose	Range: 100-115gram 3.5-4 ounce throw
Coffee Filter	FETCO # F003 or 9 <sup>3</sup> / <sub>4</sub> "X4 <sup>1</sup> / <sub>2</sub>
Water Supply	½ gallon per minute & water pressure is between 20 and 75 psig Optimal water hardness between 125-250TDS
Water connection	¼ in flare

CONTROLS DEFAULT SETTING	DEFAULT VALUE	RANGE
Fill mode	Automatic	Manual (Pour Over)
Tank Temperature	200°F / 93° C	180°F –207°F / 82° C – 97° C (User adjustable) (1° C/ 2° F Hysteresis)
Units	F°(Fahrenheit)/Liters	C° (Celsius)/Ounces (U.S. Fl. Oz.)
Volume Full Batch (BATCH #1)	1.8 L	0.5 L – 2.5 L RANGE (User adjustable)
Volume Half Batch (BATCH #2)	0.9 L	0.5 L – 2.5 L RANGE (User adjustable)
Drip Delay: All Batches	1:30	0:30 – 8:20 MAX (User adjustable-Full and Half batch)
Flow Rate	1300 mlpm	1000 -2000 mlpm (User adjustable)

See pages 8-10 to make adjustments to brewer for temperature, brew volume, units - and all other settings

## Rough-In Drawings



### Setup and Operation (For Qualified Service Technicians Only)

#### General:

- If not installed correctly by qualified personnel, the brewer will not operate properly, and damage may result.
- Utilize only qualified beverage equipment service technicians for service and installation.
- Always have an empty dispenser under spray head of all coffee brewing equipment-including when at idle
- Remove protective vinyl film, if present, from the stainless-steel enclosure.
- Place coffee brewer on a solid, level counter top, near water utility and an electrical outlet.
- Brewer is not portable, use a strong countertop. Full brewer and dispensers weighs 37 pounds
- Level the brewer: Use a bubble level and check side-to-side also front-to-back

#### Plumbers Instructions

- To operate CBS-2121 in Automatic Mode: the brewer must be permanently attached to water supply main
- Beverage equipment requires filtered water and a user installed backflow prevention valve.
- Water flow must be at least ½ gallon per minute. Water pressure: 20 -75 psig (verify before connecting).
- Attach brewer to water supply line with ¼ inch flare fitting.

NOTE: Install a shut off before the water filter. Purge the line before connecting.

Installation of FETCO equipment must comply with all applicable federal, state and local plumbing codes.

#### Electricians Instructions

Commercial kitchen equipment should be provided with a dedicated circuit.

Verify if power switch turned "OFF"

CBS-2121 must be manually filled before plugging it in.

Follow startup directions on the following page before plugging in unit

## **PLEASE READ CAREFULLY**

### **FOLLOW START UP INSTRUCTIONS**

**FILL WATER TANK BEFORE CONNECTING TO POWER SUPPLY**

**DO NOT PLUG IN THIS BREWER UNTIL IT IS FILLED WITH WATER**

**Always have an empty dispenser under spray head of all coffee brewing equipment-including when at idle**

### **STARTUP INSTRUCTIONS**

#### **FETCO® CBS-2121 Coffee Brewer**

**CAUTION – This brewer must be manually filled the first-time before startup.**

Pour in 3 pots or 192 oz./5.7 Liter of water into the opening until brewer is full before plugging it in  
Damage to the heating element or brewer will result if started when dry.

To start up this new unit:

REMOVE ALL PROTECTIVE VINYL LINER FILM FROM METAL ENCLOSURE

1. Place coffee brewer on a solid, level counter top, near the electrical outlet.

The full brewer and two filled dispensers weigh 37 pounds

2. Carefully level brewer by adjusting the feet. Use a bubble level to check both side-to-side & front-to-back

3. Install the water connection if CBS-2121 is to be used in “AUTOMATIC MODE”

**NOTE: CBS-2121 is factory preset in “AUTOMATIC MODE”-See User Guide.**

Do not plug in the power cord at this time.

To prime the new unit: (required for brewers in either Automatic Mode or in Manual Mode)

3. Place an empty glass decanter on the lower warmer deck, under the brew basket.

4. Insert the empty brew basket into the brew rails of the brewer.

5. Slowly pour room temperature water through the opening on top to fill the tank until water starts running in a steady stream from the brew basket (approximately 3 pots). Stop filling when a slight excess indicates that the tank is full. Always have an empty container under the brew head.

6. Plug the power cord into an electrical outlet and turn power switch “ON”.

7. Allow the brewer to heat up to full temperature, indicated by the READY icon. This may take up to 30 minutes the first time the coffee brewer is plugged in. Slight dripping from the brew basket is normal as the tank heats up. Purging during startup may be up to 1 cup/250ml

-Always have an empty dispenser under spray head of all coffee brewing equipment-including when at idle

Brewer is ready to operate when the READY icon reappears”

#### **COFFEE BREWING—(Automatic Fill)**

1. Insert a filter into the brew basket

2. Pour fresh ground coffee into the filter-distributing it evenly.

-Start with using 1-4 ounces of ground coffee, for a full brew.

-(3.5-4.0 ounces regular ground coffee was used for factory calibration)

3. Slide the brew basket completely into the upper rails.

4. Place an empty dispenser beneath the prepared brew basket prior to brewing.

5. Brewer is prepared to brew when “READY” icon displays

6. AUTOMATIC FILL: Press “START”

7. After brewing is finished: dispose of the used filter and grounds and rinse the brew basket

The AUTOMATIC brew time is 6:00 minutes (This includes default 4:30 brew time and 1:30 drip out)

## Preparation For First Brew-Manual Mode–(Pour Over)

CBS-2121 is shipped in Automatic Mode.

Instructions for brewing in Manual mode-are below

NOTE: Never use the manual “Pour-Over: feature if CBS-2121 is in Automatic Mode.

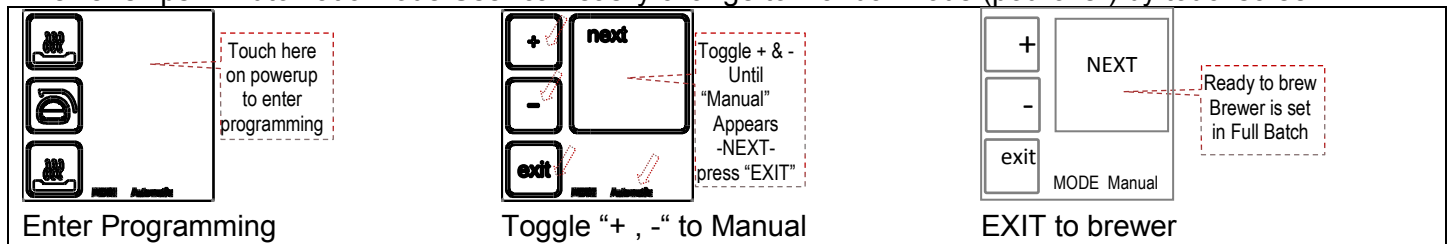
If Manual operation is desired: brewer must be switched into MANUAL MODE through programming.

### SET UP TO CHANGE BREWER FOR BREWING IN MANUAL MODE

Fill and prime CBS-2121 brewer if new, see page 5 Plug in unit with power switch “OFF” .

1. Turn switch to “ON” and quickly touch screen in the upper right
2. Touch next and toggle the + and – keys until MANUAL appears on the bottom of the screen-**press exit**.
3. Brewer is set in “Manual Mode”

Brewer ships in Automatic Mode User can easily change to Manual Mode (pourover) by touchscreen



### SET UP FOR BREWING IN MANUAL (Pour Over) MODE - (OPTIONAL).

Brewer is set, by default, to Mode when shipped from factory.

1. Place an empty glass decanter on the lower warmer deck, under the brew basket.
  2. Insert the empty brew basket into the brew rails of the brewer.
  3. Slowly manually fill the tank with room temperature water through the opening on the top cover until water starts running in a steady stream from the brew basket (3 pots or 192 fl.oz.).
    - The slight overflow indicates that the tank is full and is primed for brewing.
  5. Allow the brewer to heat up to full temperature, indicated by the “READY” icon on front panel.
    - Slight dripping from the brew basket is normal as water expands when heated.
    - Keep an empty carafe under the brew head to collect any possible drips.
    - Heat up may take up to 30 minutes for the first time the coffee brewer is plugged in.
- When the “ready” icon displays:
6. Insert the empty brew basket into the brew rails of the brewer.
  7. Place an empty decanter on the lower warmer deck, under the brew basket.
  8. Pour one additional carafe of fresh water to prime the hot water tank'
  9. When “READY” light comes back on-the CBS-2121-A is ready to brew

### MANUAL FILL COFFEE BREWING

1. Insert a filter into the brew basket
  2. Pour fresh ground coffee into the filter-distributing it evenly.
    - Start with using 1-4 ounces of ground coffee, for a full brew.
    - (3.5-4.0 ounces regular ground coffee was used for factory calibration)
  3. Slide the brew basket completely into the upper rails.
  4. Place an empty dispenser beneath the prepared brew basket prior to brewing.
  5. Brewer is prepared to brew when “READY” icon displays
  6. : Pour one container or carafe of fresh water into the screened area on top of the brewer.
    - (Container is the measure of a standard serving carafe = 64 fl.oz/1.9L)
  7. After brewing is finished: dispose of the used filter and grounds and rinse the brew basket
- Typical MANUAL brew time is about 5:00 min.—4:00 min. pour-in time & brew with 1:00 min. drip time

**BREWING IN AUTOMATIC MODE Controls layout and icon definitions**

	<p>Upper warmer icon: "ON"</p> <p>"READY" to brew icon "START" icon in box</p> <p>Full/Half batch: "FULL"</p> <p>Hot water tank temp. in degrees Fahrenheit (customer adjustable)</p> <p>Lower warmer icon: "ON"</p> <p>Brewer in Automatic Mode</p>	<p>Upper warmer icon: "OFF"</p> <p>After touching "START"-carafe icon flashes to show "Brew In Progress" Brewer continues drip-out from brew basket until completed.</p> <p><b>-STOP</b> icon stops brew, Brew Time (customer adjustable) (4:30min+1:30min sec drip) is based upon flow rate and volume selected.</p> <p>Lower warmer icon: "OFF"</p> <p>Touch warmer icons to toggle</p>	
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**BREWER "READY" BREW STARTED...**

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**SCREEN 1)** Brewer is ready to brew, Press "START" icon box  
**2)** Brew started; time is displayed, Full Batch icon flashes. Outer frame for Full Batch icon is hidden

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**3)** Brew is proceeding, STOP icon disappears, carafe flashing to show that brew is in progress  
**4)** Brewer is in drip-delay mode, 1:30min time-out Carafe icon steady. Outer frame flashes to show drip-out

<p><b>Final Screens SCREEN 5)</b> "HEATING" indicates that hot water tank temperature is below setpoint.</p> <p>START icon will reappear when hot water tank temperature reaches setpoint</p>		<p><b>Ready To Brew</b></p> <p>HEATING COMPLETE</p> <p>READY TO BREW</p> <p>START icon is visible</p>	
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## INFORMATION SCREENS AND USER SETTINGS

The CBS-2121-A displays the settings & operation conditions of the brewer.

This is a touch screen which allows the user to **START** or **STOP** a brew and adjust & change brewer settings.

Touching the carafe icon on the left side of the screen toggles batch size between “FULL BREW” (or Brew #1) and “HALF BREW” (or Brew #2). (Screens 4 & 5 on the next pages describe how to configure both batch volumes)  
Touching the two warmer icons on the left side of the screen toggles the carafe warmers ON/OFF.

**MAIN ACCESS** (Input Box on upper right side of screen)

**FILLING:** This brewer is manually filled before putting it into service. In AUTOMATIC mode, the hot water and tank fill system will operate automatically when the tank level probe activates the fill valve based on liquid level.

**HEATING**-Two heating conditions are displayed:

“HEATING”-“START” is enabled when tank temp is within 1°C/2°F of the setpoint of the temperature sensor located in the hot water tank (the “READY-START” box is displayed)

“HEATING”-Only (temp. <1°C/2°F of setpoint). No “READY-START” box indicates heater is ON and heating

**BREWER SETTING INFORMATION** (lower right side of screen)

**TEMPERATURE UNITS:** Hot water tank temperature is user adjustable **UNITS** (Fahrenheit or Celsius) are user selectable.

**FILL MODE:** Shows either AUTOMATIC or MANUAL (Pour Over) (water inlet valve disabled in MANUAL fill Mode).  
Automatic-attached to water supply for self-fill and brew. Brew is timed and selectable for full or half batch.

**ACCESSORIES** (left side of the screen)

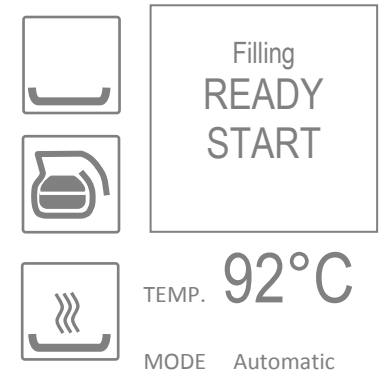
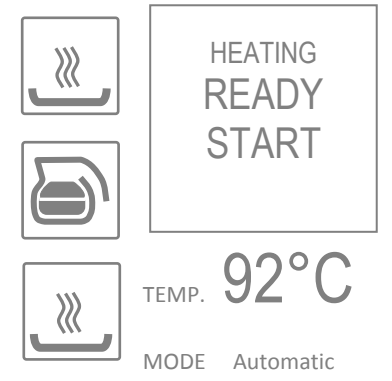
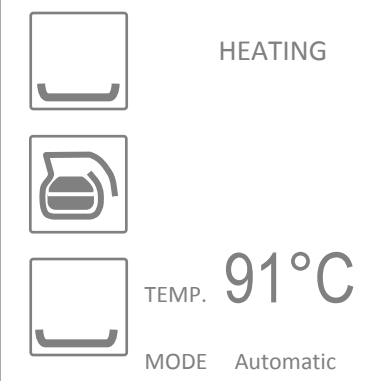

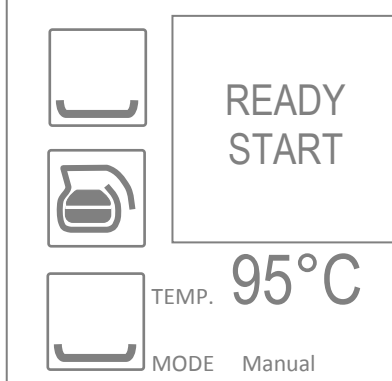
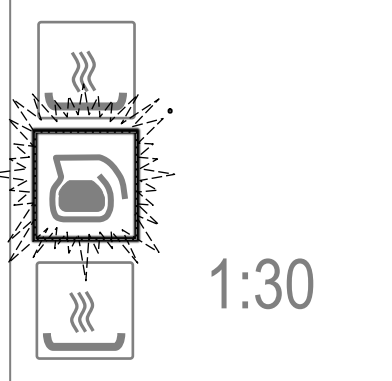
**UPPER & LOWER WARMERS.** Touch icon to turn warmer ON/OFF

**FULL & HALF BATCH BREW:** Touch icon to toggle from full to half batch brew volume in “AUTO” Mode

**HOT WATER SERVICE BUTTON**-Enabled in “AUTO” Mode only when “READY” displayed

Hot Water service will not operate during brew and is disabled when brewer is set in MANUAL Mode

### EXAMPLES OF SCREENS FOR THIS EQUIPMENT-For brewer information and to access brewer START/STOP

 <p>Brewer is ON-set for FULL batch Brewer is filling (in Automatic Mode) Tank temperature low (&lt;95°C) WARMERS: Upper-OFF/Lower-ON</p>	 <p>Brewer is ON-set for FULL batch Fill complete (in Automatic Mode) Tank temperature low (&lt;95°C) WARMERS: Upper-ON/Lower-ON</p>	 <p>Brewer is ON-set for FULL batch START icon disabled Tank temperature low &lt;95°C) WARMERS: Upper-OFF/Lower-OFF</p>
 <p>Brewer is ON-set for HALF batch Brewer in AUTOMATIC mode READY START icon displayed WARMERS: Upper-ON/Lower-ON</p>	 <p>Brewer is ON-set for FULL batch Brewer in MANUAL (Pour Over) mode Brewer is READY for filling Tank temperature at setpoint: 95° WARMERS: Upper-OFF/Lower-OFF</p>	 <p>Brewer completed FULL batch brew Drip out time is preset to 1:30min. In drip out mode: the outer frame is flashing &amp; the STOP icon is hidden</p>



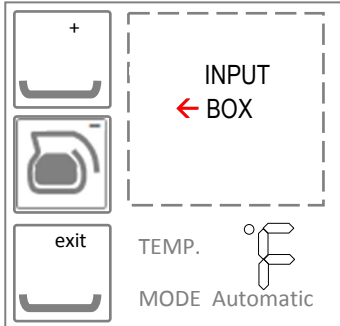
## ADJUSTING THE BREWER VOLUME TEMPERATURE AND UNITS

The CBS-2121-Automatic uses easy & intuitive touch screens to access and adjust brewer internal settings. Brew start, heaters, warmers, fill and hot water valve are disabled when controls are in PROGRAMMING mode

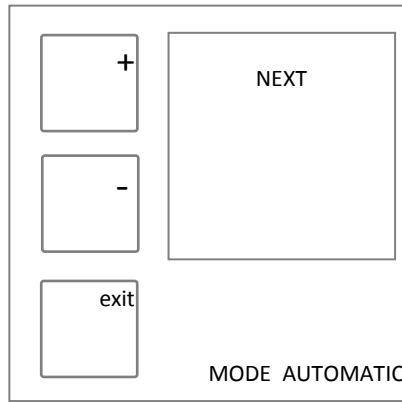
### TO ENTER PROGRAMMING



- TURN POWER SWITCH TO "OFF"
- TURN POWER SWITCH "ON"



- The OPENING SCREEN will display
- IMMEDIATELY— touch & Hold the INPUT BOX on the

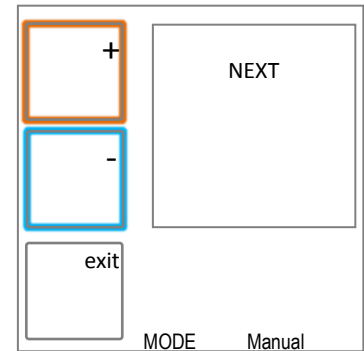
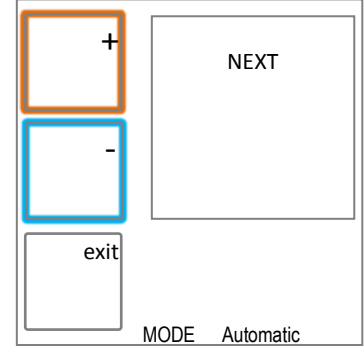


### FIRST SCREEN Manual/Automatic fill mode AUTOMATIC FILL MODE DEFAULT

- the brewer must be attached to water supply for self-fill and brew.
- Brews are timed and are user selectable for full or half batch.
- The (default) 6:00min START timer is set for 2:70min brew and 1:30min drip out

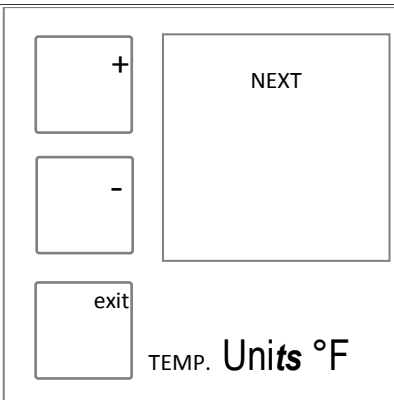
### MANUAL (Pour Over) FILL MODE OPTIONAL

- Water inlet valve disabled.
- This is where a plumbed water supply is not available.'
- Do not press "START" Icon if brewer is in MANUAL Mode



- Pressing the middle [-] tab toggles the brewer to MANUAL (pour-in) mode.
- Touch top-left [+] tab to return controls to AUTOMATIC mode

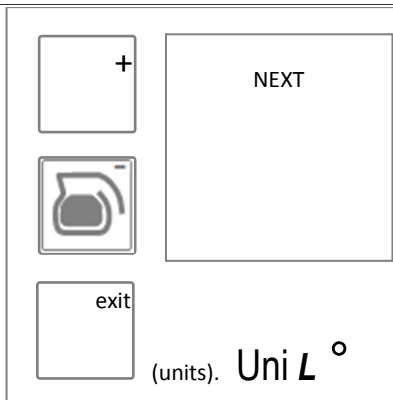
- Press NEXT to go to second programming screen-OR-press exit to save settings & leave



### SECOND SCREEN Tank temperature units.

- Touch the + or – box to toggle from degrees Celsius or Fahrenheit

- Press NEXT to go to third programming screen-OR-press exit to save settings & leave

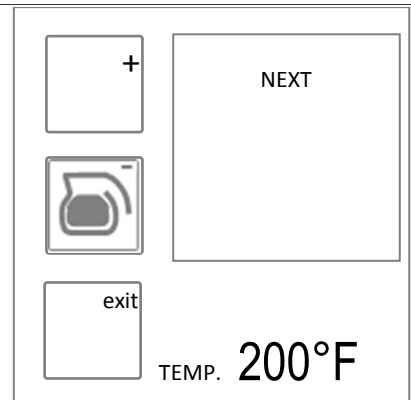


### THIRD SCREEN Set units of measure.

- Touch the + or – box to toggle from ounces to liters

-Default is liters

- Press NEXT to go to fourth programming screen-OR-press exit to save settings & leave



### FOURTH SCREEN

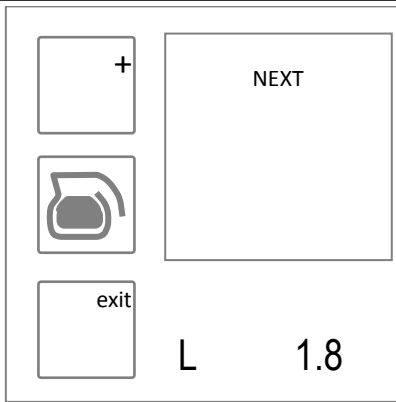
Set hot water tank temperature.

- Touch the + or – box to raise or lower tank temperature

-Default is 200°F / 93° C

-Range is 180°F-207°F/82 C-97°C

- Press NEXT to go to fifth programming screen-OR-press exit to save settings & leave



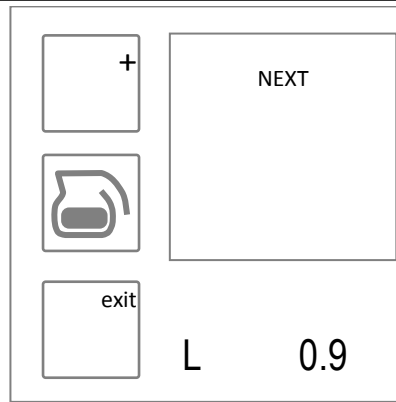
**FIFTH SCREEN**

Set Full Batch (Batch #1) Volume.

Touch the + or – box to set  
FULL BATCH volume  
Default is 1.8 liter.

Volume range is 0.5 to 2.5 liters

**Press NEXT** to go to sixth  
programming screen-OR-press **exit**  
to **save settings & leave**



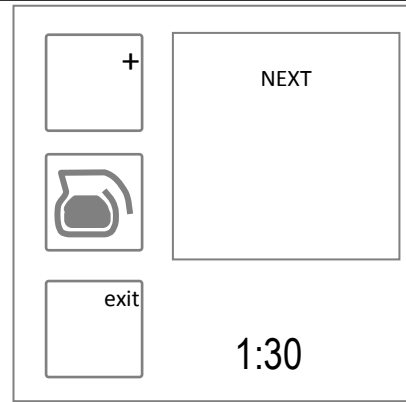
**SIXTH SCREEN**

Set Half-Batch (Batch #2) Volume.

Touch the + or – box to set  
HALF- BATCH volume  
Default is 0.9 liter.

Volume range is 0.5 to 2.5 liters

**Press NEXT** to go to the seventh  
programming screen-OR-press **exit**  
to **save settings & leave**



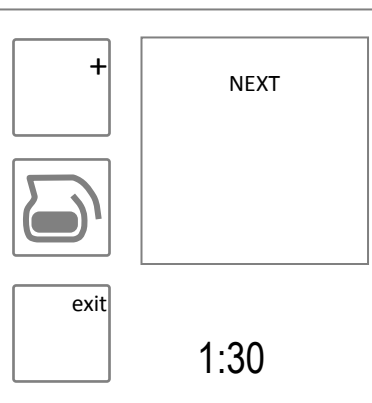
**SEVENTH SCREEN**

Set Drip-Delay: Full Batch (Batch #1)

Touch the + or – box to set  
drip-delay for full batch timing  
Default is 1:30min.

Drip-Delay range is 0:30min to 8:20min

**Press NEXT** to go to the eighth  
programming screen-OR-press **exit** to  
**save settings & leave**



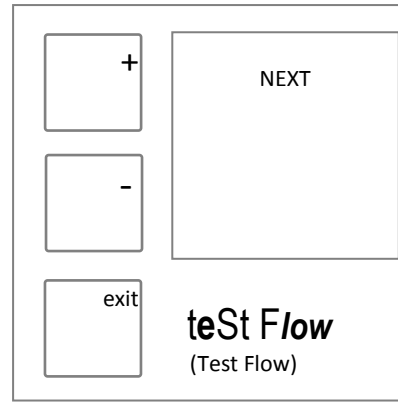
**EIGHTH SCREEN**

Set Drip-Delay: Half Batch (Batch #2)

Touch the + or – box to set  
drip-delay for half-batch timing  
Default is 90 seconds.

Drip-Delay range is 30 sec to 500 sec

**Press NEXT** to go to the ninth  
programming screen-OR-press **exit**  
to **save settings & leave**



**NINTH SCREEN**

1-minute flow test

**NOTE:** For best results hot water tank  
should be heated with “READY” icon  
displayed and tested after at least two  
full brews.

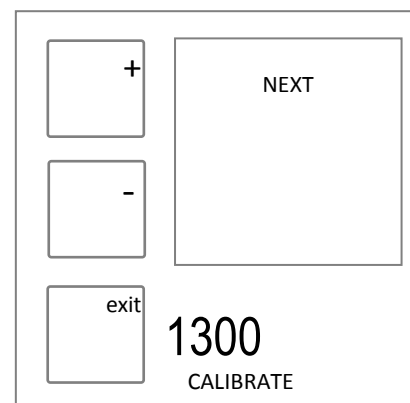
**Have container under spray head**  
→Use empty container for accuracy

Hold top-left + box down- Do not  
release finger during flow test  
Flow automatically ends in 1-minute  
Release immediately after 1 min test

.Carefully & accurately measure the  
contents in receiving container.

→**Note: If “ERROR” displays:**  
**restart brewer to clear error**

**Press NEXT** to go to the tenth  
programming screen to enter this  
amount -OR-press **EXIT** to **save**  
**settings & leave**



**TENTH SCREEN**

Flow Rate & Input calibration setting  
Brewer flow rate displayed in cc/minute  
**ENTER** Volume from test in #9 screen  
Flow rate is automatically adjusts the fill  
valve “ON” time based upon the volume  
selected and entered

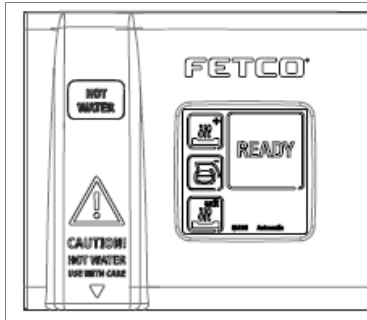
If number entered >1300, rate adjusts to  
LOWER flow rate  
If number entered <1300 rate adjusts  
HIGHER flow rate

**NOTE:**

Brew time is not directly changed by  
operator. The time is calculated and set  
by the software from the volume  
programmed into the CALIBRATION  
function. The algorithms in the  
programming routine calculate and  
update the brew time that show on the  
CBS-2121 touch screen.

**NOTE:**

**Calibration is recommended**



## HOT WATER SERVICE VALVE

- The hot water service tap is intended for individual serving use.
- Operates ONLY in Automatic Mode when brewer is in READY state.
- Hot Water Service tap will not operate during brew

### -FOR OPERATOR SAFETY

- This appliance is for commercial use only. Commercial cooking equipment may be unsafe for household use
- This appliance is intended for stationary indoor use. Install and service by professional personnel only.
- Change brewer to Manual Mode if in Automatic Mode to use the Pourover option
- Pour in water only. Brewer is designed for brewing 64 fl. oz/1.8 L of coffee or tea.
- Do not press START if in Manual Mode
- Brewer exterior and carafe warmers are hot- keep hands and other items away.
- Hot water in tank is 200°F do not move commercial coffee brewers once installed due to spillage.
- Allow brew to complete, usually five minutes, before removing brew basket from the brewer.
- WARNING-brew basket contents are hot-use care!
- WARNING-Hot Water Service Tap delivers very hot water. It is intended for individual serving use.
- Do not immerse the brewer in water or any other liquid

### CLEANING AND BREWER CARE

#### Cleaning the Brewer:

Always empty brew basket and rinse after brewing, rinse decanter, inside and out.

Wipe down both warmer plates and surrounding area with a wet clean cloth as required and whenever spills are present.

Heat transfer from warmer plates is most efficient when decanter and warmer plate surface are clean—use only soap and water.

Never clean brewer or glass surfaces with scouring powders or harsh implements.

Always use a non-abrasive pad, or a wet clean cloth

Never use solvents on plastic components—especially cleaners formulated with the solvent diethylene glycol butyl ether (DGBE)

#### Cleaning the Spray Head:

Remove spray head, [DANGER SPRAY HEAD MAY BE HOT] use a towel or heavy gloves to prevent burning and cleaned with a brush.

When cleaning the spray head, make sure that each hole is completely free of mineral deposits.

Weekly spray head cleaning may be necessary in areas with extremely hard water.

Monthly may be sufficient in areas which do not have excessive water hardness.


**Do not insert descaling spring or any sharp objects into brew tube—this will damage the brewer and cause leaks.**

### WATER QUALITY

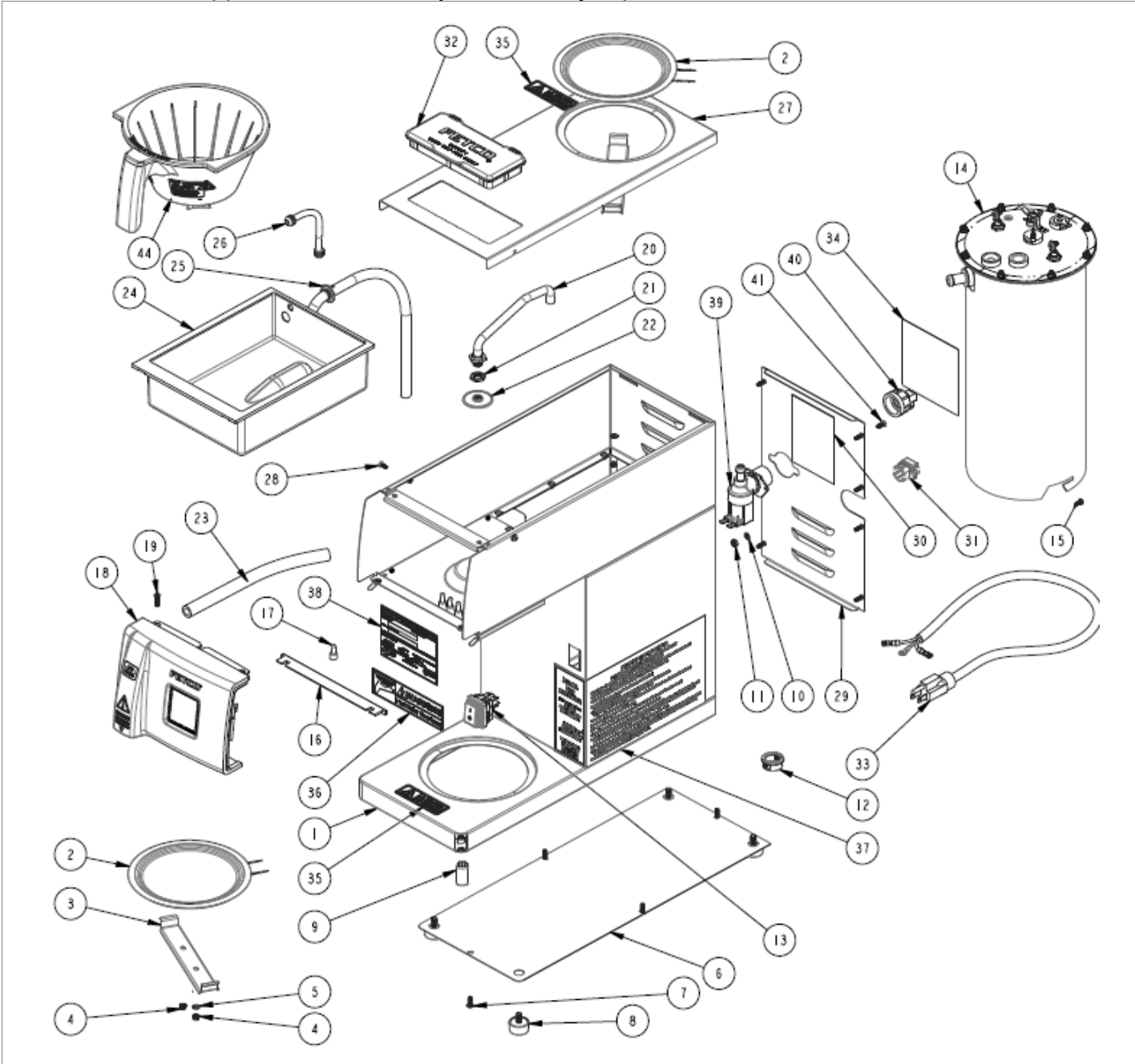
Optimal water quality brews the best coffee. The brewer also operates with less maintenance by using low mineral water. Optimal water hardness between 125-250tds

Always use a water filter or a reverse osmosis system for all beverage service

For Automatic Mode brewer water connection: inlet water pressure 25-50 psi/0.25-0.35MPa.

ERROR CODES			Error codes must be corrected! Diagnose the cause and repair. To clear: reboot the brewer by toggling power switch: "OFF/ON"
#	Error	Description	
2	Internal Error (software)	Improper startup or shutdown	
3	CRC Error	Internal data memory malfunction	
50	Shorted temperature probe	Probe failure	
51	Open temperature probe or circuit	Probe failure, bad connection	
100	Initial fill error when >10 minutes fill time	Water supply rate too low-(Toggle Off/On)	
101	Refill error-if not filled in>5 minutes time	Water supply rate too low or is off	
102	Unwanted fill error	Possible leak in tank or water connection	
201	Heater open (temp.rise<2° in 10 minutes)	Bad heater, open one-shot fuse	
201	Heater short (temp.rise>5° with heat "off")	Bad Thermostat or heating element	
255	Keyboard Error-pressed>2 minutes	Touch pad or connection bad	
9.11	FIRMWARE VERSION, Used for service	Displays on bottom of touchscreen when powered up	

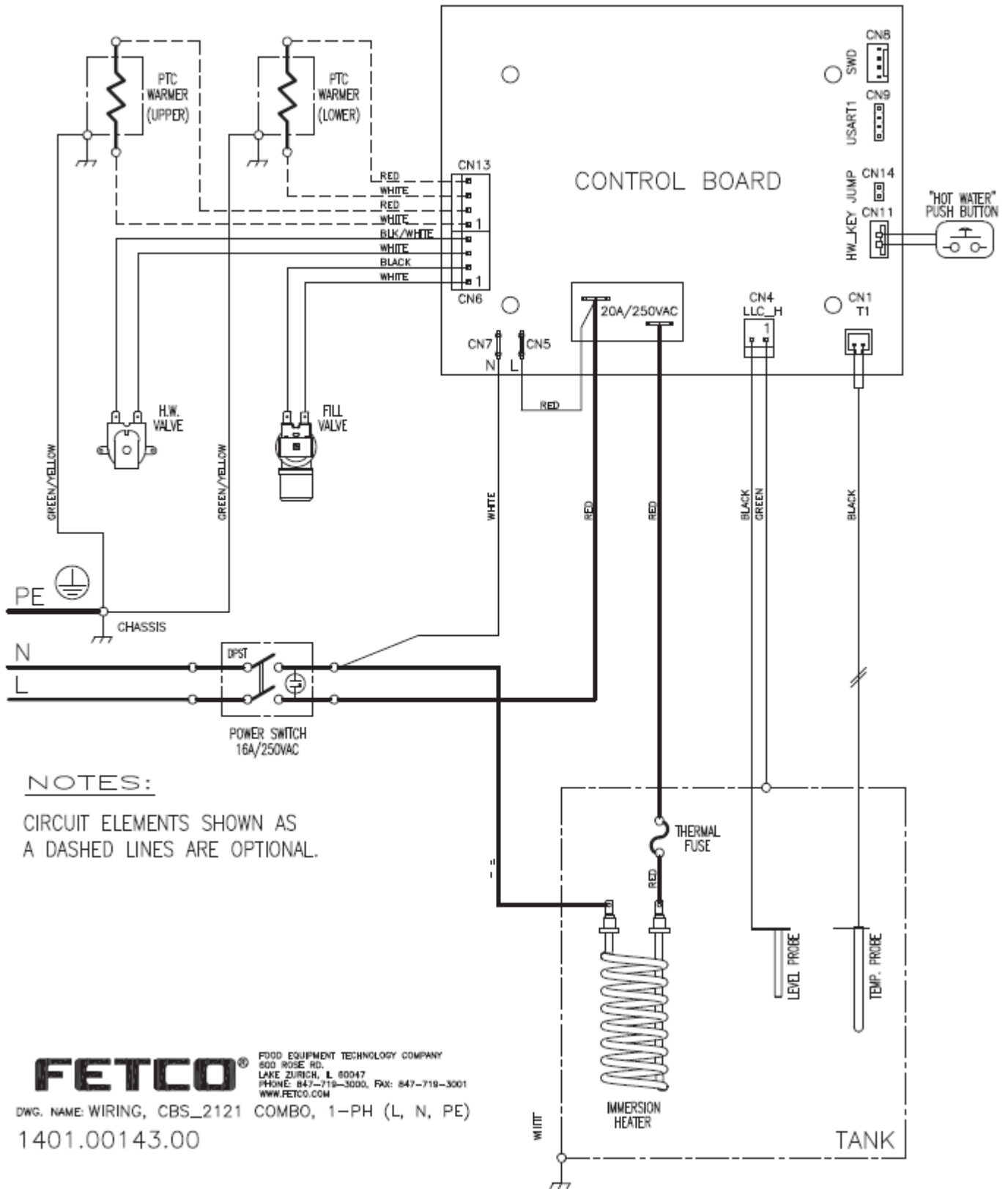
**WARMERS:** Warmers are enabled only when jumper on control board position C14 is in place. Warmer circuit is disabled when jumper on control board position C14 is removed. See page 15 →Warmer icons appear on screen only when C14 jumper is installed to enable warmer circuit. ←



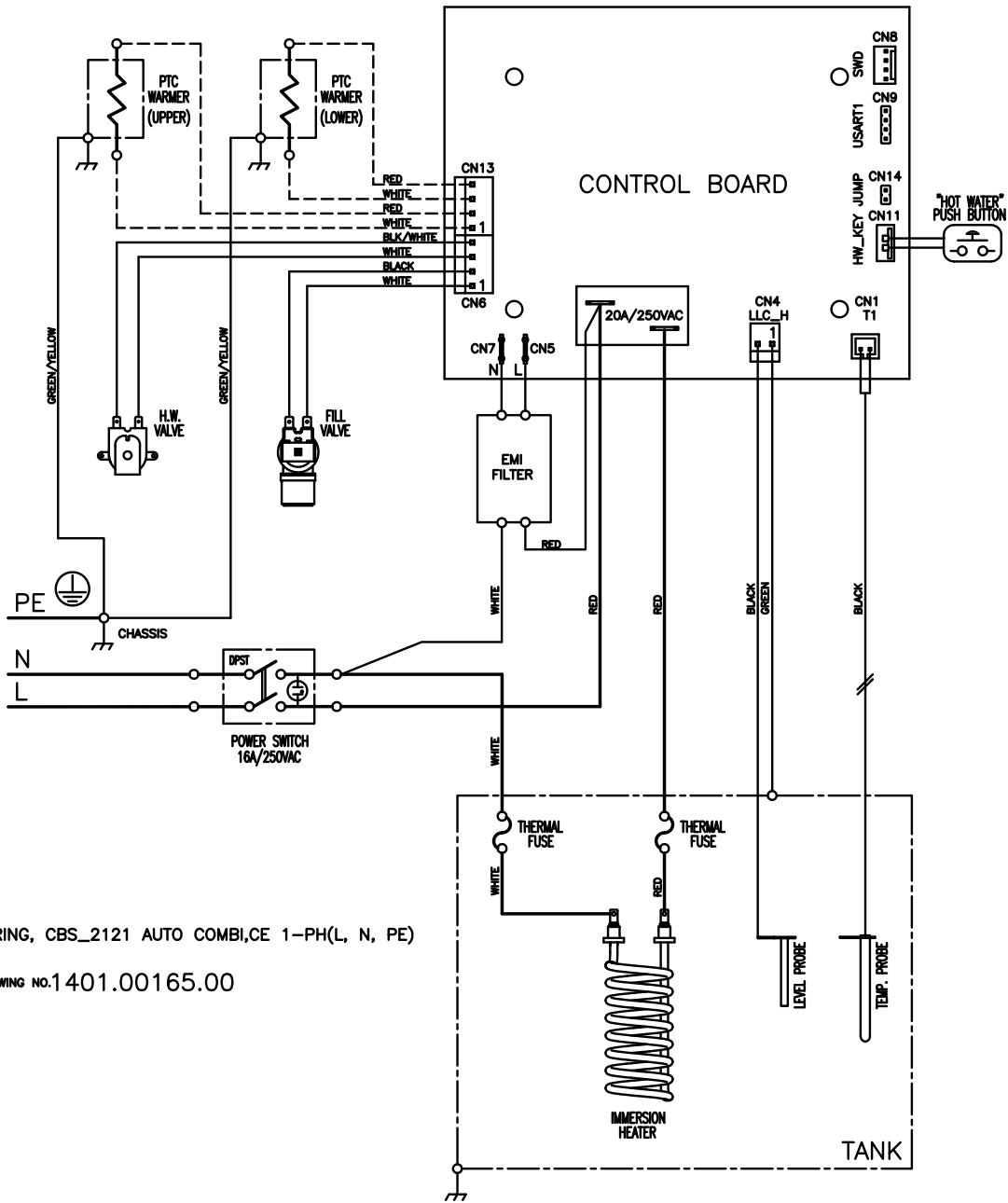
## SERVICE PARTS

SERVICE PART LISTING FOR ALL MODELS. Note differences in brewer voltages in BOLD listing numbers			
Ref	Qty	Part Number	DESCRIPTION
1	1	1111.00075.00	WELDMENT BODY COMPLETE, CBS-2121 POUROVER
<b>2</b>	<b>2</b>	1102.00322.00	ASSY, WARMER PLATE, CBS-2121 <b><u>100-120VAC</u></b>
<b>2</b>	<b>2</b>	1102.00355.00	ASSY, WARMER PLATE, CBS-2121, <b><u>220-240VAC</u></b>
3	2	1003.00312.00	BRACKET, WARMER TRAY HOLDER, CBS-2121
4	4	1084.00049.00	NUT, HEX LOCKWASHER, M4x0,7, 18-8 ST. STL.
5	2	1083.00004.00	WASHER, M4, 18-8 SS FLAT
6	1	1001.00307.00	COVER BASE, CBS-2121
7	11	1082.00017.00	SCREW, TRUSS HD. PHIL. MACHINE, # 6-32 X 1/2 LG.
8	4	1073.00021.00	FOOT, RUBBER, 1/4-20
9	2	1023.00263.00	CORNER INSERT FOR BASE, CBS-2121
10	1	1083.00011.00	WASHER, #8 SCREW SIZE, INTERNAL TOOTH LOCK
11	1	1084.00006.00	NUT, 8-32 18-8 HEX MACHINE SCREW
12	2	1086.00004.00	BUSHING, SNAP, 1" MOUNTING HOLE
13	1	1058.00045.00	POWER SWITCH, DP, 16A, 125/250VAC, WATERPROOF
14	1	1104.00140.00	TANK ASS'Y., CBS-2121, AUTO. POUROVER <b><u>1370W/120VAC ONLY</u></b>
<b>14</b>	<b>1</b>	1104.00147.00	TANK ASS'Y., CBS-2121, AUTO. POUROVER <b><u>2100W/230VAC ONLY</u></b>
<b>15</b>	<b>1</b>	1082.00024.00	SCREW, PAN HEAD, PHILLIPS
16	1	1024.00080.00	GASKET, FRONT CBS-2121
17	6	1064.00030.00	CRIMP CONNECTOR, PRE-INSULATED, 22-14 AWG WIRE RANGE
<b>18</b>	<b>1</b>	1102.00327.00	ASSEMBLY FRONT PANEL, CBS-2121 AUTO/POUROVER <b><u>100-120VAC ONLY</u></b>
<b>18</b>	<b>1</b>	1102.00386.00	ASSEMBLY FRONT PANEL, CBS-2121 AUTO/POUROVER <b><u>220-240VAC ONLY</u></b>
19	4	1082.00058.00	SCREW, # 8-32 X 5/8, FLAT HD, PH, 18-8 SS
20	1	1112.00420.00	WELDMENT, SPRAY CUTTER TUBE FITTING, CBS-2121
21	1	1084.00041.00	HEX NUT, 7/16-20 x 1/8" THK.
22	1	1005.00028.00	WELDING, DOME SPRAY CUTTER, 6-HOLES, CBS-2121
23	1	1025.00125.00	TUBE, 1/2"OD X 3/8"ID X 9.375"LG
24	1	1023.00260.00	BODY, FILL TOP TANK, CBS-2121
25	1	1024.00097.00	FILL TUBE, CBS-2121, AUTOMATIC
26	1	1024.00091.00	VENT TUBE, CBS-2121
27	1	1001.00308.00	COVER TOP, CBS-2121
28	2	1082.00073.00	SCREW # 6-32 X 3/8", PAN HD PH, MACHINE, 18-8 SS
29	1	1001.00339.00	BACK COVER, CBS-2121, AUTOMATIC
30	1	1401.00143.00	WIRING DIAGRAM, CBS-2121 COMBO, 1-PH (L-N-PE)
31	1	1086.00046.00	BUSHING, STRAIN RELIEF, .12"-.58" DIA CABLE
32	1	1102.00321.00	ASSEMBLY, LID COVER, FILL TANK, CBS-2121
<b>33</b>	<b>1</b>	1102.00334.00	<b><u>US-UL</u></b> ASSEMBLY, POWER CORD, <b><u>120VAC w/NEMA 5-15P PLUG</u></b>
<b>33</b>	<b>1</b>	1102.00357.00	<b><u>EU</u></b> ASSEMBLY, POWER CORD, <b><u>16A/250VAC, EU1-16P PLUG</u></b>
<b>33</b>	<b>1</b>	1102.00388.00	<b><u>UK</u></b> ASSEMBLY, POWER CORD, <b><u>13A/250VAC, UK BS 1363/A PLUG</u></b>
34	1	1046.00049.00	LABEL, WARNING "ELECTRIC SHOCK OR FIRE", 4x4
35	2	1046.00050.00	LABEL "CAUTION, HOT SURFACE", CBS-2121 POUROVER
36	1	1046.00052.00	LABEL, WARNING, HOT WATER OVERHEAD
37	1	1046.00048.00	LABEL, WARNING & STARTUP INSTRUCTION, CBS-2121
38	1	1043.00036.00	TEMPLATE, SN LABEL, FETCO PRODUCTS
<b>39</b>	<b>1</b>	1057.00069.00	VALVE, INLET <b><u>100-120VAC ONLY</u></b>
<b>39</b>	<b>1</b>	1057.00070.00	VALVE, INLET <b><u>220-240VAC ONLY</u></b>
40	1	1102.00164.00	ADAPTER ASSY, 3/4" BSP X 1/4 SAE FLARE
41	2	1082.00010.00	SCREW, M4x10 ZINC-PLATED PAN HD. PHILLIPS MACH
42	1	1402.00090.01	HARNESS, CBS-2121 COMBO, UL/CE
43	1	1402.00090.02	HARNESS, CBS-2121 COMBO, WARMERS OPTION, UL/CE
44	1	B018200BN2	BB ASSY, 0.200" HOLE, BRN PLUG
			Drawing 1101.00303.00 & 1101.00503.00

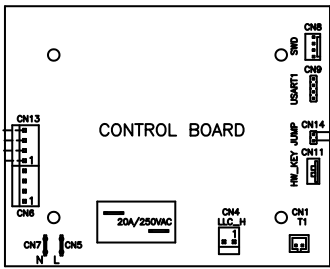
# Electrical Wiring Diagrams



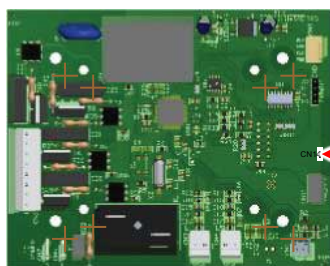
International (CE) version 230 volts AC



WIRING, CBS\_2121 AUTO COMBI,CE 1-PH(L, N, PE)  
 DRAWING NO.1401.00165.00



Warmers **enabled**  
 Jumper on C14 in place



Warmers **disabled**  
 Jumper on C14 removed

**WARMERS:** Warmers are enabled only when jumper on control board position C14 is in place.

Warmer circuit is disabled when jumper on control board position C14 is removed.

→ Warmer icons appear on screen only when C14 jumper is installed to enable warmer circuit.

→ Warmer icons disappear from screen when C14 jumper is removed to disable warmer circuit.

End of section notes

