



Middleby Cooking Systems Group • 1400 Toastmaster Drive • Elgin, IL 60120 • (847)741-3300 • FAX (847)741-4406

## Solid State Slot Toaster

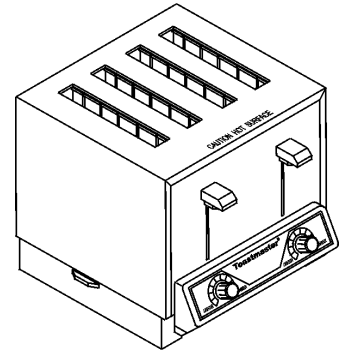
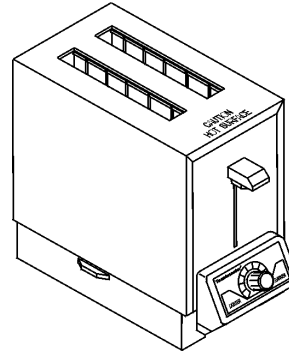
Models TP209, TP224, TP409, TP424, TP430,  
HT409, HT424, BTW09, BTW24

# OWNER'S OPERATING AND INSTALLATION MANUAL



© 1999 Toastmaster, A Middleby Company.

**Toastmaster** is a registered trademark of Toastmaster, A Middleby Company. All rights reserved.



### WARNING: IN CASE OF FIRE

Disconnect the toaster from its power source IMMEDIATELY. This allows the unit to cool, making it easier to put out the fire.

### WARNING

FOR YOUR SAFETY DO NOT STORE OR USE GASOLINE OR OTHER FLAMMABLE VAPORS OR LIQUIDS IN THE VICINITY OF THIS OR ANY OTHER APPLIANCE

### WARNING

IMPROPER INSTALLATION, ADJUSTMENT, ALTERATION, SERVICE OR MAINTENANCE CAN CAUSE PROPERTY DAMAGE, INJURY OR DEATH. READ THE INSTALLATION AND OPERATING INSTRUCTIONS THOROUGHLY BEFORE INSTALLING OR SERVICING THIS EQUIPMENT.

### WARNING

DO NOT PICK UP THE TOASTER BY INSERTING FINGERS INTO THE TOASTER SLOTS AND GRASPING THE HEATING ELEMENTS. ELECTRICAL SHOCK AND DAMAGE TO THE HEATING ELEMENTS CAN OCCUR.

### WARNING

NEVER INSERT A KNIFE, FORK, OR SIMILAR OBJECT INTO THE TOASTING CHAMBER. ELECTRICAL SHOCK AND DAMAGE TO THE HEATING ELEMENTS CAN OCCUR.

### WARNING

DISCONNECT THE UNIT FROM ITS ELECTRICAL POWER SUPPLY BEFORE CLEANING OR SERVICING.

### CAUTION

Using any parts other than genuine Toastmaster factory parts relieves the manufacturer of all liability.

### IMPORTANT

Contact your authorized service agent to perform maintenance and repairs. A service agency directory is supplied with your toaster.

### IMPORTANT

Toastmaster (manufacturer) reserves the right to change specifications and product design without notice. Such revisions do not entitle the buyer to corresponding changes, improvements, additions or replacements for previously purchased equipment.

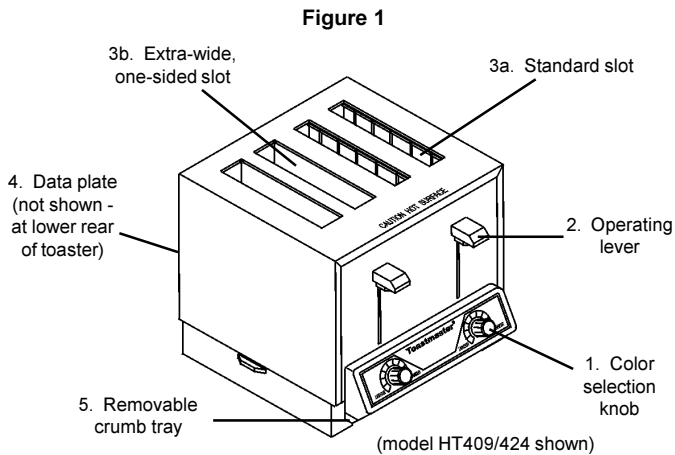
### RETAIN THIS MANUAL FOR FUTURE REFERENCE

This manual provides detailed information for the installation and operation of your toaster. It also contains information to assist the operator in diagnosing problems in the event of a malfunction. This manual is an important tool for the operator and should be kept readily available.

## I. DESCRIPTION AND SPECIFICATIONS

### A. Component Location

The major components of the toaster are shown in Figure 1 below.



### B. Component Function (see Figure 1)

1. Color selection knob - see Section III, **Operation**.
2. Operating lever - see Section III, **Operation**.
- 3a. Standard slot - 1-1/8"/29mm wide, these slots can accommodate "Texas Size" bread, frozen waffles, English muffins, etc. Heating elements are located on both sides of the slot.
- 3b. Extra-wide slot - 1-5/8"/41mm wide, these slots can accommodate bagels and thick English muffins. A heating element is located on one side of the slot, permitting one-sided toasting.
4. Data plate - Provides manufacturing and electrical information.
5. Crumb tray - Collects crumbs from the toasted product. The tray can be removed for cleaning.

### C. Toaster Information

Slot information:

	TP209, TP224	TP409, TP424, TP430	HT409, HT424	BTW09, BTW24
Standard slots	2	4	2	0
Extra-wide, one-sided slots	0	0	2	4

#### NOTE

Electrical specifications are provided on the wiring diagrams at the back of this Manual.

## II. INSTALLATION

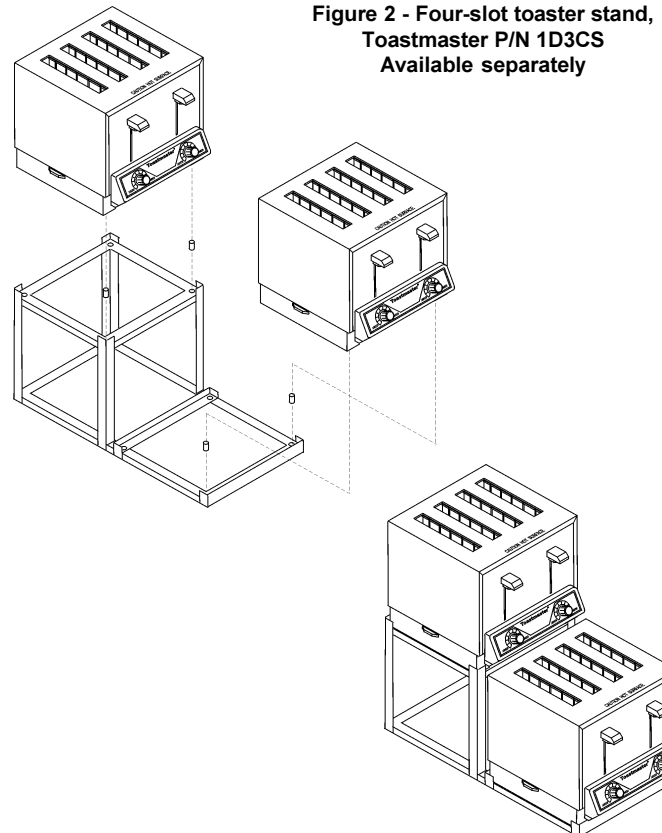
### IMPORTANT

*IT IS THE CUSTOMER'S RESPONSIBILITY TO REPORT ANY CONCEALED OR NON-CONCEALED DAMAGE TO THE FREIGHT COMPANY.*

### A. Installation Options and Kit Availability

Two-slot toasters (TP209/224) are to be installed on a countertop, as described in Part B, *Electrical Utility Connection*, below.

Four-slot toasters (TP409/424/430, HT409/424, BTW09/24) may be installed EITHER on a countertop, OR on the four-slot toaster stand shown in Figure 2, below. The stand (Toastermaster P/N 1D3CS) is not included with your toaster, but is available separately.



- To install the toaster on a countertop, follow the instructions in Part B, *Electrical Utility Connection*, below.
- To install the toaster on a stand, follow the assembly instructions included with the stand kit. Then, proceed to Part B, *Electrical Utility Connection*.

### B. Electrical Utility Connection

1. Position the toaster in place.
2. Before proceeding with the electrical connection, check the following:
  - a. Check that the electrical supply matches the toaster's requirements. Refer to the toaster's data plate (at the lower rear of toaster - see Figure 1), and to the electrical specifications provided on the wiring diagrams at the back of this Manual.
  - b. Check that the appropriate receptacle is available for the power cord plug.
  - c. Check that the main electrical supply source is turned OFF.

*CONSULT ALL APPLICABLE NATIONAL AND LOCAL CODES FOR FURTHER ELECTRICAL CONNECTION REQUIREMENTS.*



#### WARNING

*ENSURE THAT ANY PACKING MATERIAL RESIDUE HAS BEEN REMOVED FROM INSIDE THE TOASTING CHAMBER.*

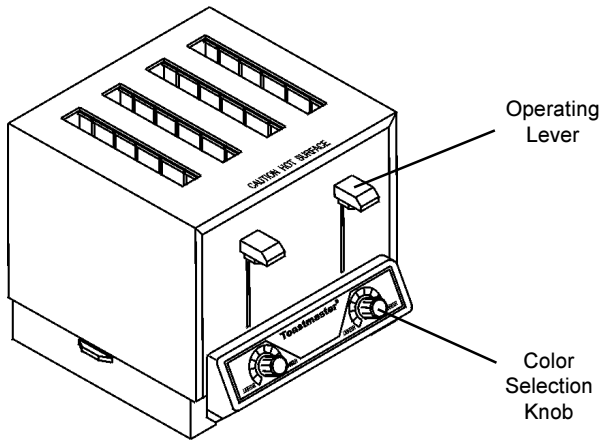
3. Insert the power cord plug into its receptacle.

### III. OPERATION

#### A. Location and Function of Controls

This section provides a basic description of the toaster controls, their location, and the functions they perform. The operator **MUST** be familiar with the controls. See Figure 3.

Figure 3 -Toaster Controls



1. *Color Selection Knob*

Adjusts the darkness of the toasted bakery product.

- Turn the knob to the **LEFT** for lighter toasting.
- Turn the knob to the **RIGHT** for darker toasting.

2. *Operating Lever*

- Press the lever **DOWN** to load the bakery product into the toaster.
- Push the lever **UP** to manually raise the product during the toasting cycle. If the operating lever is not raised manually, it will be automatically raised at the end of the toasting cycle.

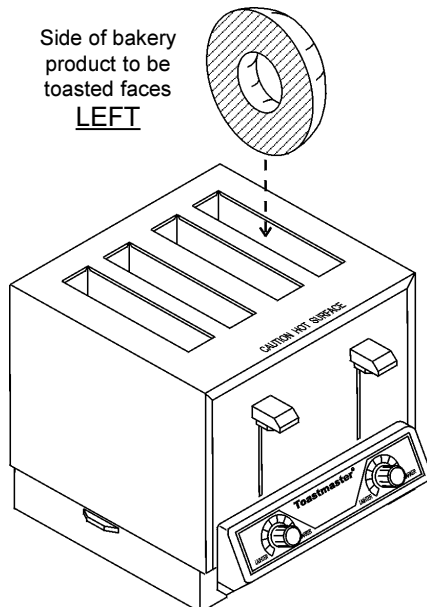
#### B. Operation Procedure

##### CAUTION

**THE REMOVABLE CRUMB TRAY MUST BE IN PLACE BEFORE THE TOASTER MAY BE OPERATED.** If the tray is removed for cleaning, ensure that it is replaced before operation.

1. Insert the bakery product into the slots. For extra-wide, one-sided slots, check that the side of the product that is to be toasted faces the **LEFT** side of the slot, as shown in Figure 4.

Figure 4 - Loading extra-wide, one-sided slots  
Models HT409/424, BTW09/24 only



2. Turn the color selection knob (if necessary) to set the desired darkness. A medium color setting is achieved at the 9 o'clock position.

##### NOTE

It will be necessary to determine the color setting for each different bakery product that is to be toasted. Test a single piece at the 9 o'clock setting, and then adjust the Color Selection Knob as necessary to find the proper setting.

3. Press the Operating Lever **DOWN** to lower the product into the toasting chambers.
4. Wait for the toasting cycle to complete, and the toasted product will automatically be raised.

##### OR

Push the Operating Lever **UP** to manually raise the product at any time during the toasting cycle.

#### C. Clearing Jams

##### WARNING

**DISCONNECT THE TOASTER FROM ITS ELECTRICAL POWER SUPPLY BEFORE ATTEMPTING TO CLEAR A JAM.**

##### WARNING

**DO NOT TOUCH HOT SURFACES ON THE TOASTER, OR REACH INTO THE TOASTING CHAMBER, UNTIL THE UNIT HAS COOLED THOROUGHLY.**

##### WARNING

**NEVER INSERT A KNIFE, FORK, OR SIMILAR OBJECT INTO THE TOASTING CHAMBER. THIS CAN CAUSE AN ELECTRICAL SHOCK OR DAMAGE THE HEATING ELEMENTS.**

#### D. Cleaning

##### WARNING

**DISCONNECT THE TOASTER FROM ITS ELECTRICAL POWER SUPPLY BEFORE CLEANING OR SERVICING.**

##### WARNING

**DO NOT TOUCH HOT SURFACES ON THE TOASTER, OR REACH INTO THE TOASTING CHAMBER, UNTIL THE UNIT HAS COOLED THOROUGHLY.**

##### WARNING

**WHEN CLEANING THE TOASTER, NEVER APPLY ENOUGH LIQUID TO STAND IN PLACE ON THE UNIT. DO NOT SPRAY, RINSE, OR SUBMERGE THE TOASTER. EXCESSIVE MOISTURE IN THE UNIT WILL CAUSE A SEVERE ELECTRICAL HAZARD AND MAY OTHERWISE DAMAGE THE TOASTER.**

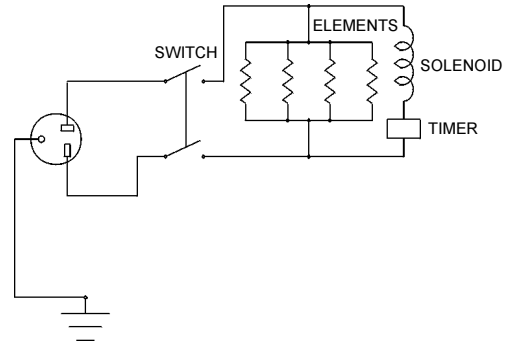
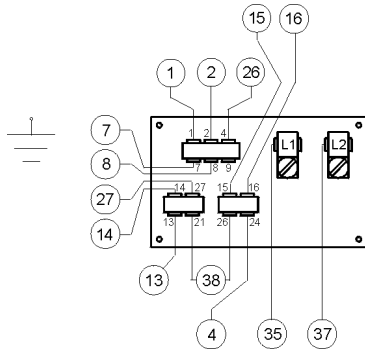
##### CAUTION

**DO NOT clean your toaster using abrasive cleaners or pads. Both will scratch and dull the finish.**

1. Wipe the exterior of the toaster with a sponge or cloth soaked in hot or warm detergent water. Wipe with a clean, damp cloth to remove the excess detergent, and then wipe again to dry the toaster.
2. Remove the crumb tray, and empty it. Wash the crumb tray in warm detergent water, and rinse it.
3. After the crumb tray is dry, replace it in the toaster.

## Model TP209

### Wiring Diagram - Terminal Board



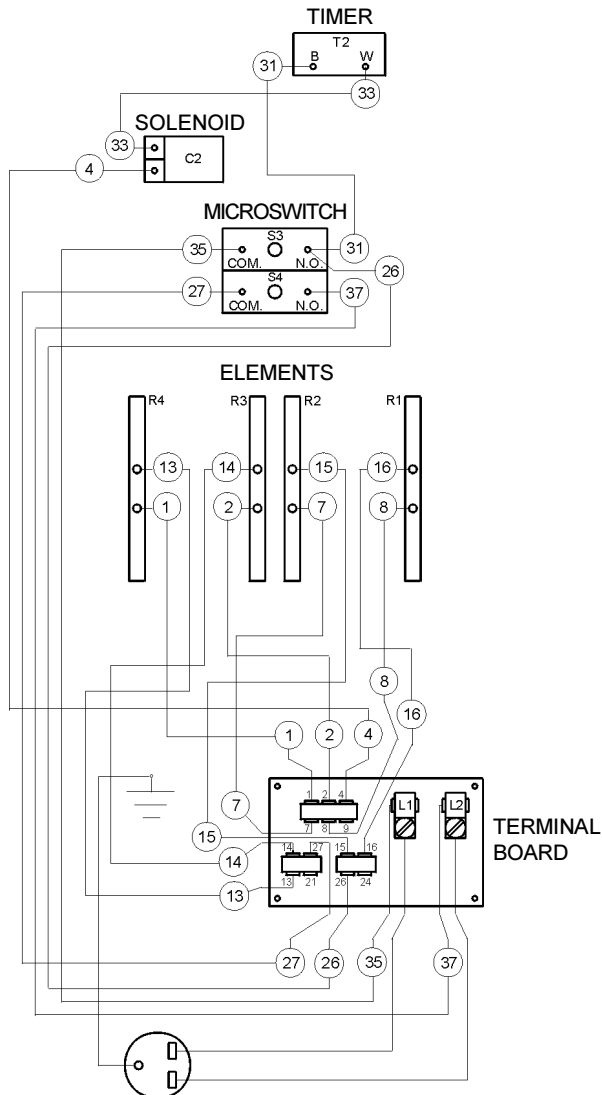
**NOTE: All other wiring connections match the TP224 wiring diagram at the bottom of this page.**

### Electrical Specifications

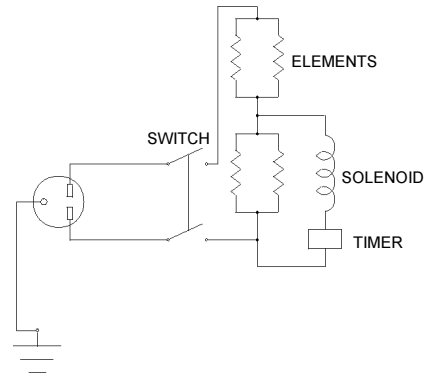
- 120V, 50/60 Hz, 1 Ph, 1.1kW, 9.0A
- Plug type: NEMA 5-15P

## Model TP224

### Wiring Diagram



### Schematic

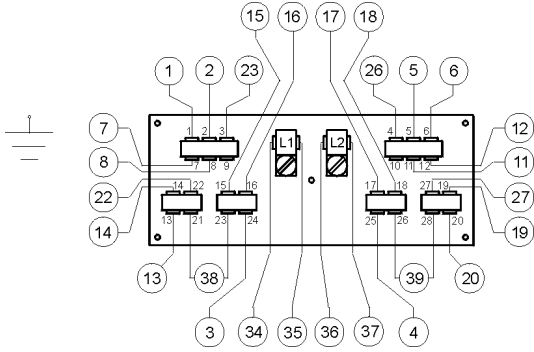


### Electrical Specifications

- 208V, 50/60 Hz, 1 Ph, 1.0kW, 4.8A *OR*
- 240V, 50/60 Hz, 1 Ph, 1.3kW, 5.3A
- Plug type: NEMA 6-15P

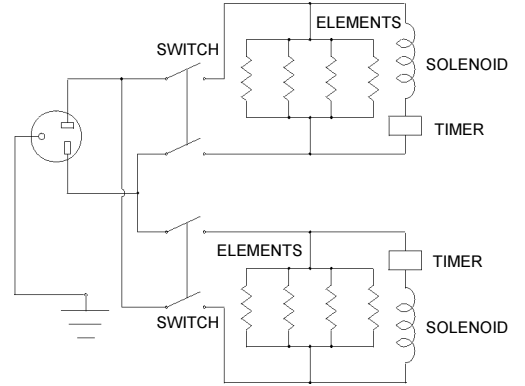
# Model TP409

## Wiring Diagram - Terminal Board



**NOTE: All other wiring connections match the TP424/430 wiring diagram at the bottom of this page.**

## Schematic

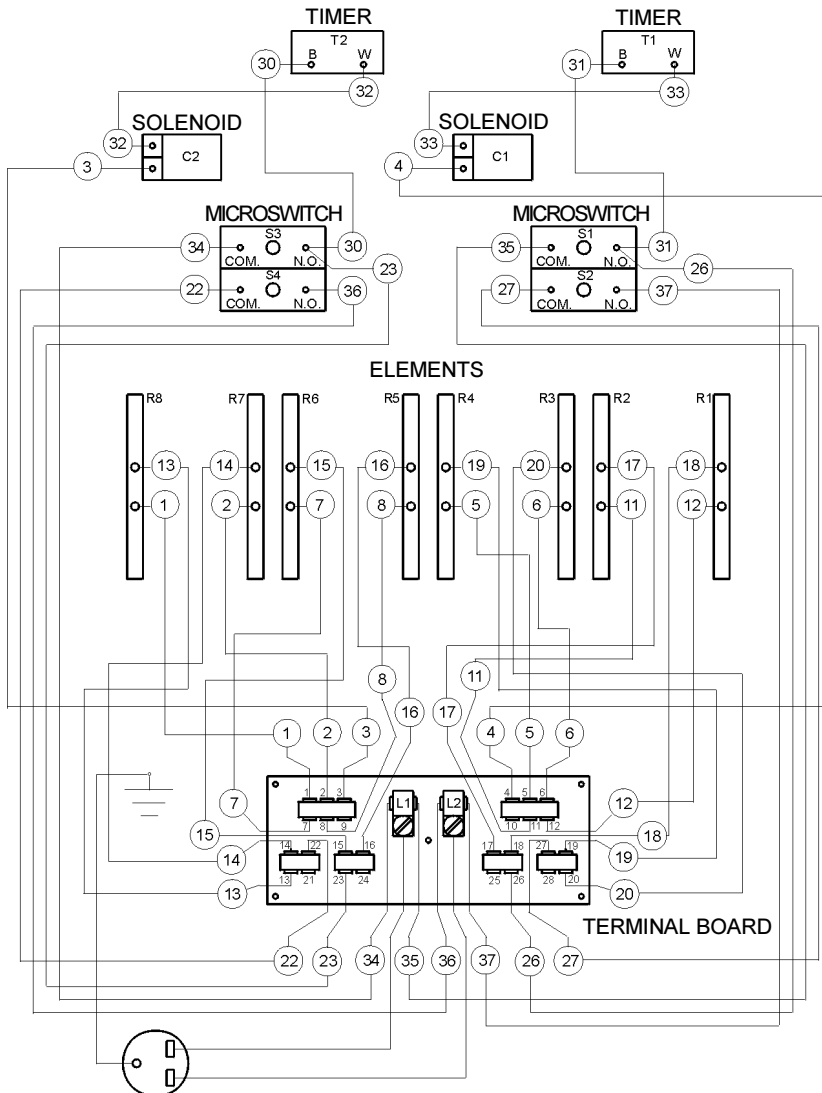


## Electrical Specifications

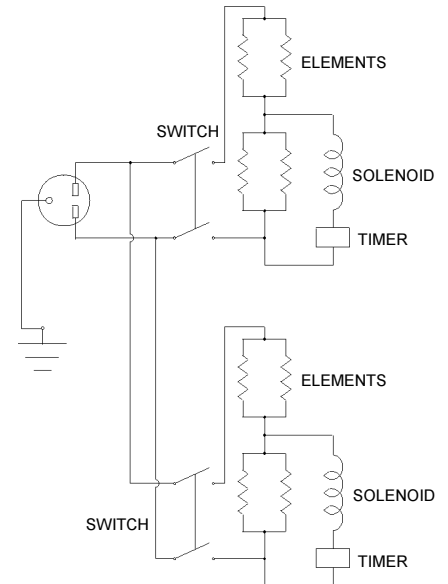
- 120V, 50/60 Hz, 1 Ph, 2.2kW, 18.3A
- Plug type: NEMA 5-20P (USA) OR NEMA 5-30P (Canada)

# Models TP424 & TP430

## Wiring Diagram



## Schematic

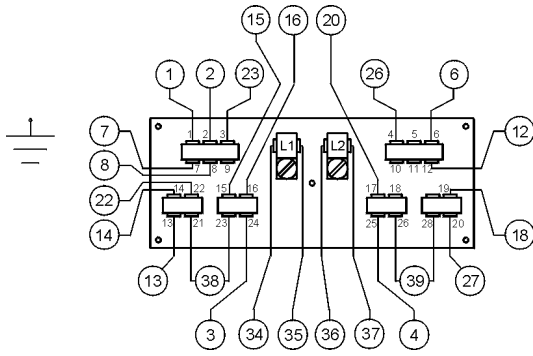


## Electrical Specifications

- Model TP424:**
- 208V, 50/60 Hz, 1 Ph, 2.0kW, 9.6A *OR*
  - 240V, 50/60 Hz, 1 Ph, 2.6kW, 10.8A
  - Plug type: NEMA 6-15P
- Model TP430:**
- 208V (Canada), 50/60 Hz, 1 Ph, 2.6kW, 12.5A
  - Plug type: NEMA 6-20P

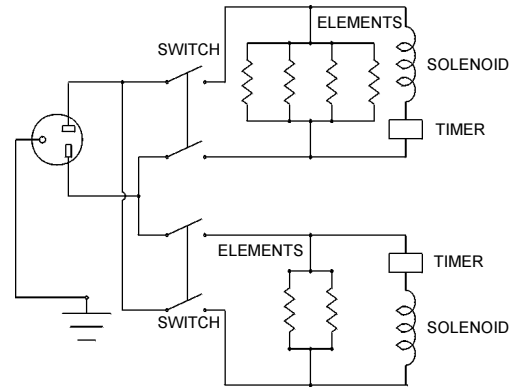
## Model HT409

### Wiring Diagram - Terminal Board



**NOTE: All other wiring connections match the HT424 wiring diagram at the bottom of this page.**

### Schematic

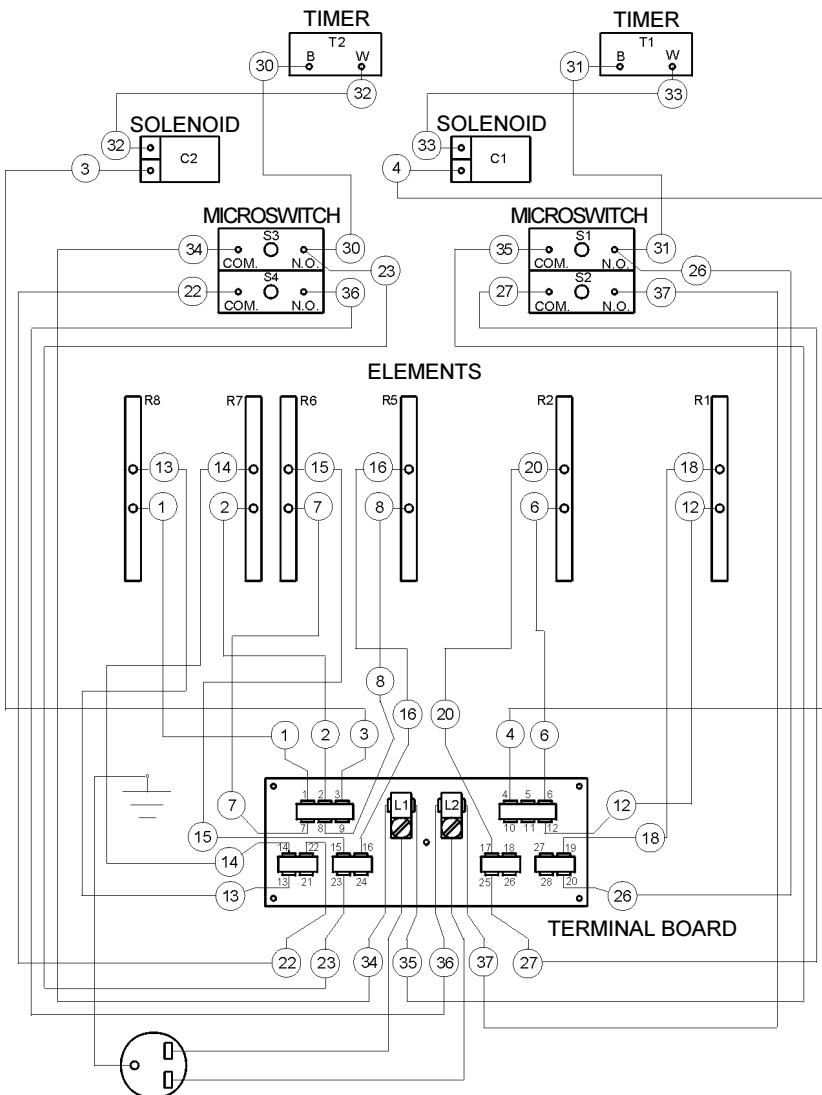


### Electrical Specifications

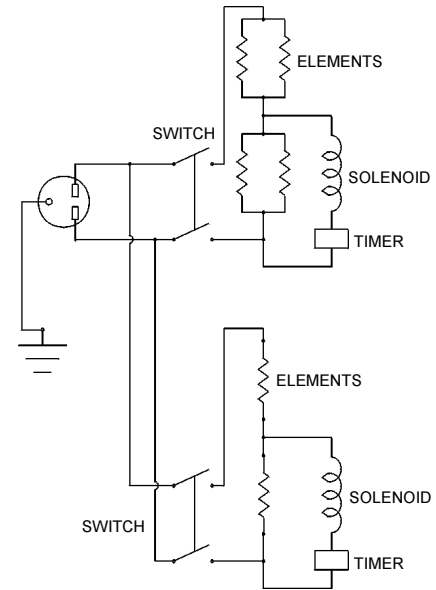
- 120V, 50/60 Hz, 1 Ph, 2.0kW, 16.6A
- Plug type: NEMA 5-20P

## Model HT424

### Wiring Diagram



### Schematic

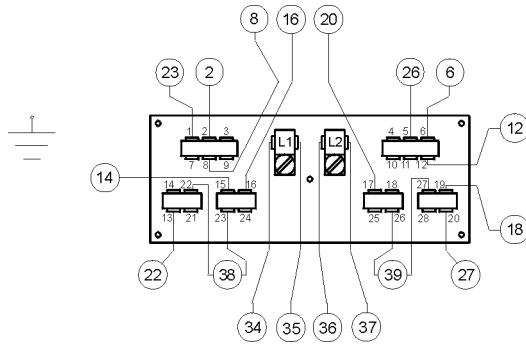


### Electrical Specifications

- 208V, 50/60 Hz, 1 Ph, 1.7kW, 8.0A *OR*
- 240V, 50/60 Hz, 1 Ph, 2.2kW, 9.2A
- Plug type: NEMA 6-15P

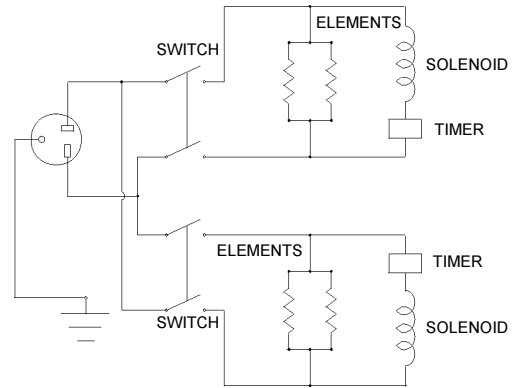
## Model BTW09

### Wiring Diagram - Terminal Board



**NOTE: All other wiring connections match the BTW24 wiring diagram at the bottom of this page.**

### Schematic

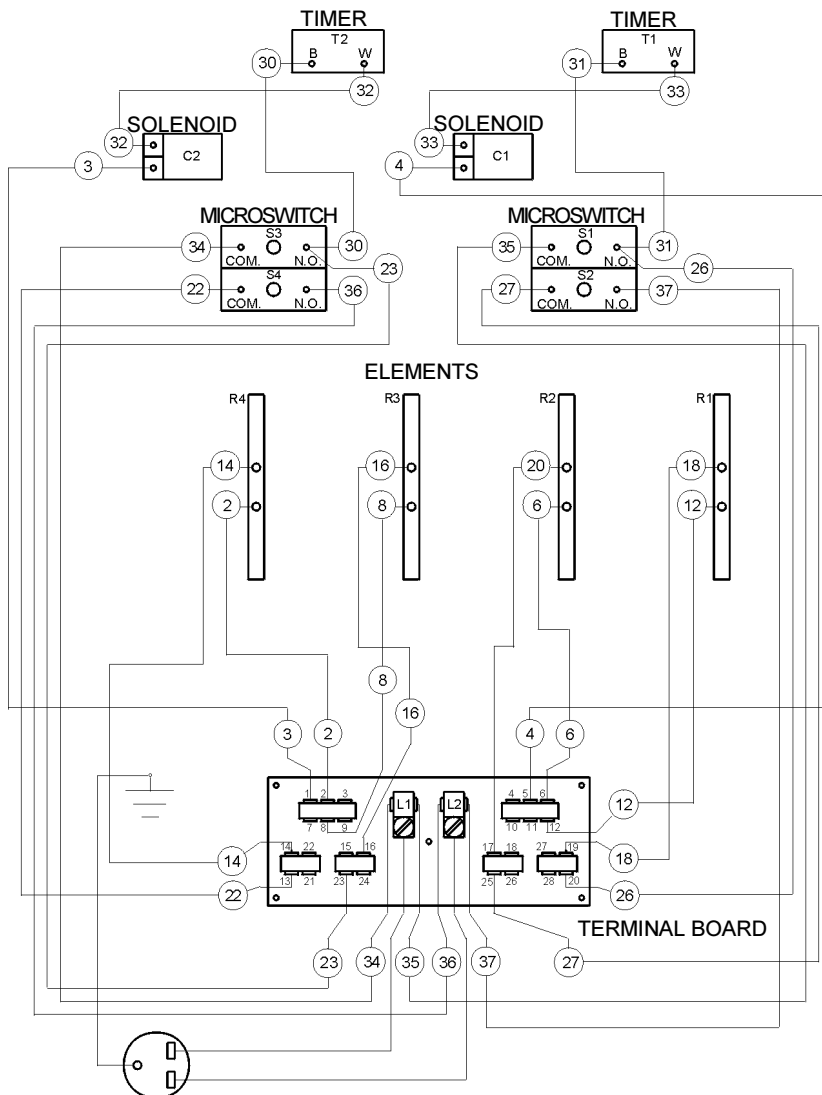


### Electrical Specifications

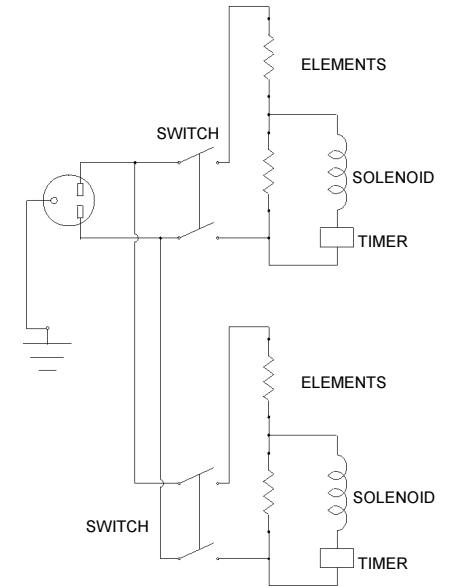
- 120V, 50/60 Hz, 1 Ph, 1.8kW, 15.0A
- Plug type: NEMA 5-20P

## Model BTW24

### Wiring Diagram



### Schematic



### Electrical Specifications

- 208V, 50/60 Hz, 1 Ph, 1.6kW, 7.7A *OR*
- 240V, 50/60 Hz, 1 Ph, 1.8kW, 7.5A
- Plug type: NEMA 6-15P



*A Middleby Company*

Toastmaster • 1400 Toastmaster Drive • Elgin, IL 60120 • USA • (847)741-3300 • FAX (847)741-4406  
***Middleby Corp 24-Hour Service Hotline 1-800-238-8444***

***[www.middleby.com](http://www.middleby.com)***