

# metos

## Coffee Grinder

GR 12

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### Installation- and User manual

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## Contact Information

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## Product Description/Features

### GR-1.2- Single Hopper Coffee Grinder

With 2 Portion Sizes

### GR-1.3- Single Hopper Coffee Grinder

With 3 Portion Sizes

- ▶ Ditting slicing type grinding burrs
- ▶ Self adjusting brew basket holder
- ▶ Fully automatic, with digital timer control
- ▶ 15 lb. hopper capacity
- ▶ Front accessible & Service Friendly
- ▶ Overload motor protection
- ▶ Anti-static Outlet Chamber

### GR-2.2- Dual Hopper Coffee Grinder

With 2 Portion Sizes Per Side

### GR-2.3- Dual Hopper Coffee Grinder

With 3 Portion Sizes Per Side

- ▶ Ditting slicing type grinding burrs
- ▶ Self adjusting brew basket holder
- ▶ Fully automatic, with digital timer control
- ▶ Two 5 lb. removable hoppers
- ▶ Front accessible & Service Friendly
- ▶ Overload motor protection
- ▶ Anti-static Outlet Chamber

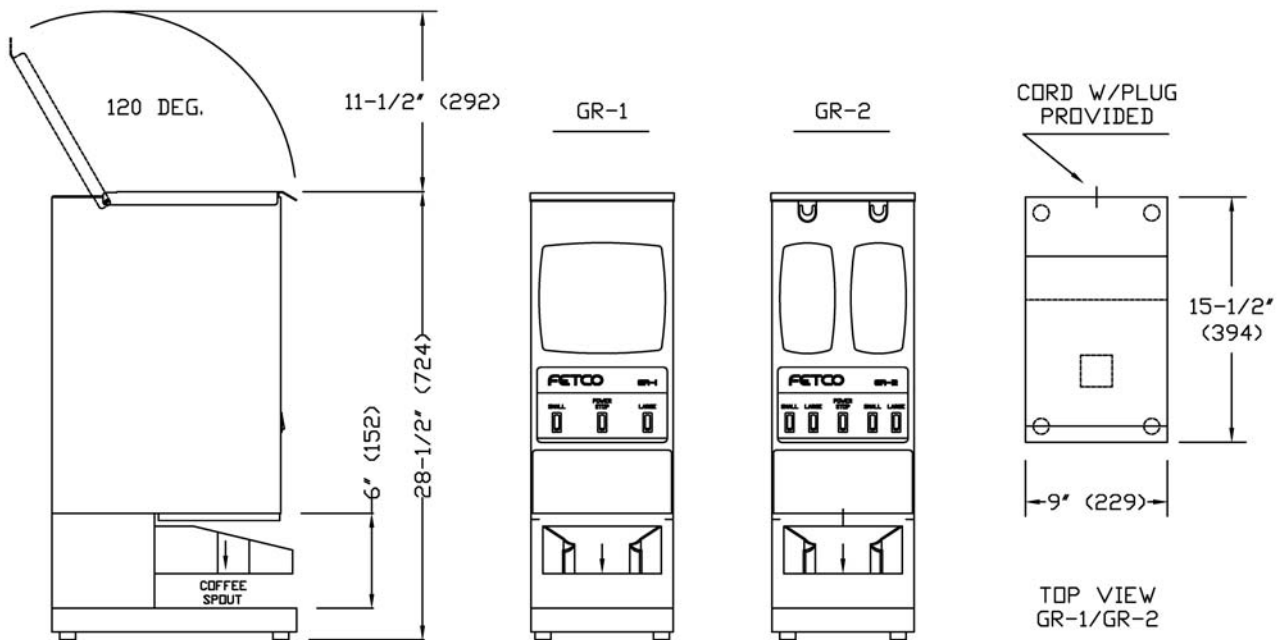
## Technical Data

### Grinder Specifications

	GR-1.2& GR-1.3	GR-2.2 & GR-2.3
Hopper Capacity:	1 x 15 lbs. / 1 x 6.8 kg.	2 x 5 lbs. / 2 x 2.3 kg.
Timer Range:	00.1 sec. – 999.0 sec.	00.1 sec. – 999.0 sec.
Grind Rate* Per. Minute:	18 oz. / 510g	18 oz. / 510g
Grind Setting Default:	Medium	Medium
Brew Basket Size Range:	7" to 9" diameter	7" to 9" diameter
Electrical:	North America: 120 VAC, single phase 5.2 amps, 0.67 HP NEMA 5-15P plug/cord Export: 220 VAC, single phase 5.2 amps, 0.67 HP	North America: 120 VAC, single phase 5.2 amps, 0.67 HP NEMA 5-15P plug/cord Export: 220 VAC, single phase 5.2 amps, 0.67 HP

\* Grind rate is determined at medium grind with medium size, average to dark roast beans

## Dimensions & Utility Connections



## Installation

**Warning: Read this User's Guide before installing. Damage caused by improper installation will not be covered under warranty.**

1. Inspect the container for visual or hidden damage. The carrier must be notified of any punctured or damaged cartons immediately.
2. Install the grinder in selected location making sure surface is level, and that grinder will fit. **Caution: Never push equipment against cords or wall outlets.**
3. Remove cord from inside hopper and plug into the back of the grinder.
4. Before plugging grinder into 120 volt, 15 amp. wall outlet make sure outlet is not overloaded, a dedicated circuit is preferred.
5. Following the operating procedures below test grinder for proper operation.
6. If you need further assistance please call our Technical Support Dept. at 800-338-2699 or e-mail [techsupport@fetco.com](mailto:techsupport@fetco.com).



**Warning: To prevent electrical shock, this unit must be properly grounded.**

# Operating Procedures

1. **Turn grinder on/off switch to the on position.**
  - The power switch will illuminate to indicate that the grinder has power and is operational.
2. **Fill the hopper(s) with whole coffee beans.**
  - The GR-2 models have two 5lb. removable hoppers. These hoppers must sit squarely on the floor of the hopper chamber. When placing the hoppers inside the hopper chamber make sure chamber is clear of stray whole beans and debris. The hoppers will not sit properly if this is not done.
  - Both hoppers must be placed into the grinder before operating grinder; and plastic covers must be on hoppers.
3. **Place the brew basket with paper coffee filter in the plastic holding arms.**
  - The plastic arms will hold all FETCO brew baskets up to 52H models; and will fit most all other manufactures.
  - All other sizes, FETCO recommends placing paper coffee filters on lower shelf and grinding directly into filter.
4. **Press portion switch. (Factory Defaults)**
  - Small portion: 4 ounces
  - Medium portion: (Available only on GR-1.3 and GR-2.3.) Approximately 6 ounces
  - Large portion: 8 ounces
5. **Allow grinder to complete its cycle then remove brew basket from plastic holding arms.**

## Cleaning:

- a) Use stainless steel cleaner on all stainless steel surfaces. (Never use abrasives on these surfaces.)
  - b) Use damp cloth on other surfaces. Use mild detergent as needed.
  - c) Removable hoppers on GR-2 models are dish washer safe (the covers are not).
  - d) After washing hoppers FETCO recommends hand drying them.
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# Service

## Warranty

All FETCO grinders come with a limited warranty. All warranty service must be authorized by calling the Technical Support Department at (800) 338-2699. A Return Authorization number will be issued for all parts replaced under warranty.

## Principles of Operation

### Timing Systems:

The timing system consists of the programmable digital timer board, the start switch, the hopper solenoid (GR -2 models only), the solid state capacitor, and the grinder motor.

When the start switch is pressed, the timer starts its' cycle.

### GR-1

The timer energizes the capacitor, and the motor is then energized.

When the timer finishes its cycle, it removes voltage from the capacitor, and the motor. The grind cycle timed sequence is complete.

## GR-2

The timer energizes the hopper solenoid; which opens the guillotine on the removable hopper, which allows coffee beans to drop into the grinding chamber. The timer also energizes the capacitor which energizes the motor.

When the timer finishes its cycle, it removes voltage from the hopper solenoid, which closes the guillotine on the removable hopper. The capacitor and the motor are on an adjustable delay (See Programming section). This delay ensures that all beans have passed through the grind chamber, preventing cross contamination of different coffees. After the delay, voltage is removed from the capacitor and the motor. The grind cycle timed sequence is complete.

The power/stop switch is used only when it is necessary to interrupt the grind cycle before the cycle is finished.

## Grinder Foreign Object Protection

FETCO coffee grinders feature two types of overload protection to prevent damage to the unit if a foreign object enters the grinding chamber and stalls the motor.

- The control board is equipped with a thermal breaker with an audible alarm that will cut power to the motor if the control board overheats.
- The motor is equipped with a thermal breaker (no alarm) that will cut power to the motor if the motor overheats.

Once the foreign object is removed and the unit cools down, the thermal breakers will automatically reset.

**Warning: If this occurs DO NOT TRY TO FIX THIS PROBLEM YOURSELF. Immediately unplug the grinder and call a qualified service technician.**

## Adjustments

### Grind Adjustment

*These adjustments are to be made by qualified service personnel only.*

The grinder is factory set at medium grind.

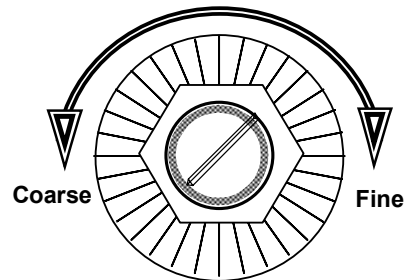
If adjustment is necessary:

- Remove all whole beans from hopper.
  - ❖ GR-1: Scoop out as many of the beans as possible. Then lift the window straight up and sweep out the remaining beans.
  - ❖ GR-2: Remove both hoppers and dump beans out, place both hoppers back in grinder.
- Select large portion switch and activate. This will clear grind chamber of all whole coffee beans.
- Remove the front cover making sure to remove all four screws (2) in front (2) underneath next to coffee outlet.
- Using a 7/8" or 22 mm wrench turn retaining nut counter-clockwise at least one turn.
- Using a 3/8" to 1/2" standard screwdriver turn the adjustment screw clockwise for a finer grind, counter-clockwise for a coarser grind. **Note:** Do not exceed more than a 1/4 turn in either direction.
- Using a 7/8" or 22 mm wrench turn retaining nut clockwise locking adjustment screw in place.
- Using a small amount of whole coffee beans test to make sure grind setting is correct if not repeat the above steps.

**Note:** It may be necessary to adjust the timer cycle to compensate for the effect that the grind setting can make on quantity of coffee ground per minute. A finer grind will produce less ground coffee per minute and a coarser ground will produce more ground coffee per minute.

To return grind setting to factory settings:

- Follow the first four steps of the grind adjustment procedure.
- Turn adjustment screw clockwise until burrs meet, back off slightly.
- Using a marker, mark the twelve o'clock position of the adjustment screw.
- Turn the adjustment screw counter clockwise to just past the four o'clock position.
- Turn retaining nut clockwise locking adjustment screw in place.
- Test by running small batch.



Beginning in August 2003, the control board for the GR-1 & 2 Series grinders was changed. The following programming instructions apply only to new models with software version 0.9 and above. For earlier models, see the User's Guide that was supplied with the unit.

The Programming Instructions are also on a label on the underside of the lower cover.

## Programming Instructions – Software Version 0.9 and Above

- ▶ Turn the power switch off.
- ▶ Remove the lower cover.
- ▶ Turn the power switch on.  
The currently programmed model number will flash briefly. (example: **12** = GR-1.2, **23** = GR-2.3)
- ▶ Then, if the software default settings are currently programmed, the display will read **DEF**. If not, the display will be blank.
- ▶ Hold **SET** for 5 seconds, until the display reads **SET**.
- ▶ Release **SET**, the software version will be displayed.  
(Example: 0.9, 1.0, etc.)
- ▶ Press **SET**. The display will read **TYP** briefly, followed by the currently programmed model number. Press the **UP** and **DOWN** buttons until the correct model number is displayed. (GR-1.2 = **12**, GR-2.3 = **23**, etc.)
- ▶ Press **SET**. The display will read **DEF**. Press **SET** to skip this section.  
To reset the unit to factory default settings, hold **SET** for 5 seconds, until **STO** is displayed briefly. This will exit programming mode. To re-enter programming mode, hold **SET** for 5 seconds again.
- ▶ Press **SET**. The display will read **DLY** briefly, followed by the current motor delay setting in seconds.  
**(GR-2.2 & 2.3 only)**  
Press **UP** and **DOWN** to adjust.
- ▶ Press **SET**. The first switch number will be displayed briefly, followed by the current setting in seconds.  
Example: LH1 = Left side small batch, 7.0 seconds
- ▶ Press **SET**. The next switch number will be displayed briefly, followed by the current setting.  
Example: LH2 = Left side medium batch, 13.5 seconds.
- ▶ Continue this way until all switches are programmed.  
See the chart for switch designations.
- ▶ Important! To save your changes and return to operating mode, you must hold **SET** for 5 seconds until the display reads **STO**.

**23**

**DEF**

**SET**

**X.X**

**TYP**

**23**

**DEF**

**STO**

**DLY**

**8.0**

**LH1**

**7.0**

**LH2**

**13.5**

**STO**

### CONTROL BOARD



### MOTOR DELAY

This sets the time that the motor continues to run after the hopper doors close on GR-2 series grinders. This delay ensures that all beans have passed through the grind chamber, preventing cross contamination of different coffees.  
Default setting: 8 sec.

### SWITCH DESIGNATIONS

Model GR-	1.2	1.3	2.2	2.3
Left Small	LH1	LH1	LH1	LH1
Left Med.		LH2		LH2
Left Large	LH3	LH3	LH3	LH3
Right Small			RH1	RH1
Right Med.				RH2
Right Large			RH3	RH3

### DEFAULT SETTINGS

Small – LH1/RH1 = 7 sec.  
Med. – LH2/RH2 = 13.5 sec.  
Large – LH3/RH3 = 20.0 sec.

**Approximate grind times for medium size, average to dark roast beans.**

<b>Batch Size</b>	<b>Typical Coffee Dosage</b>	<b>Timer setting (seconds)</b>
	Notes	Notes
½ Gallon	2 – 4 oz. 57 – 113 grams	6.7 - 13.3 sec.
2.5 – 3.0 Liters	2 - 4.5 oz. 57 – 128 grams	6.7 - 15 sec.
1 Gallon	4 – 8 oz. 113 – 227 grams	13.3 - 27 sec.
1.5 Gallons	6 – 12 oz. 170 – 340 grams	20 – 40 sec.
2 Gallons	8 – 16 oz. 227 – 454 grams	27 – 53 sec.
3 Gallons	12 – 24 oz. 340 – 680 grams	40 - 80 sec.
6 Gallons	39 – 51 oz. 1.1 – 1.44 kg.	130 -170 sec.

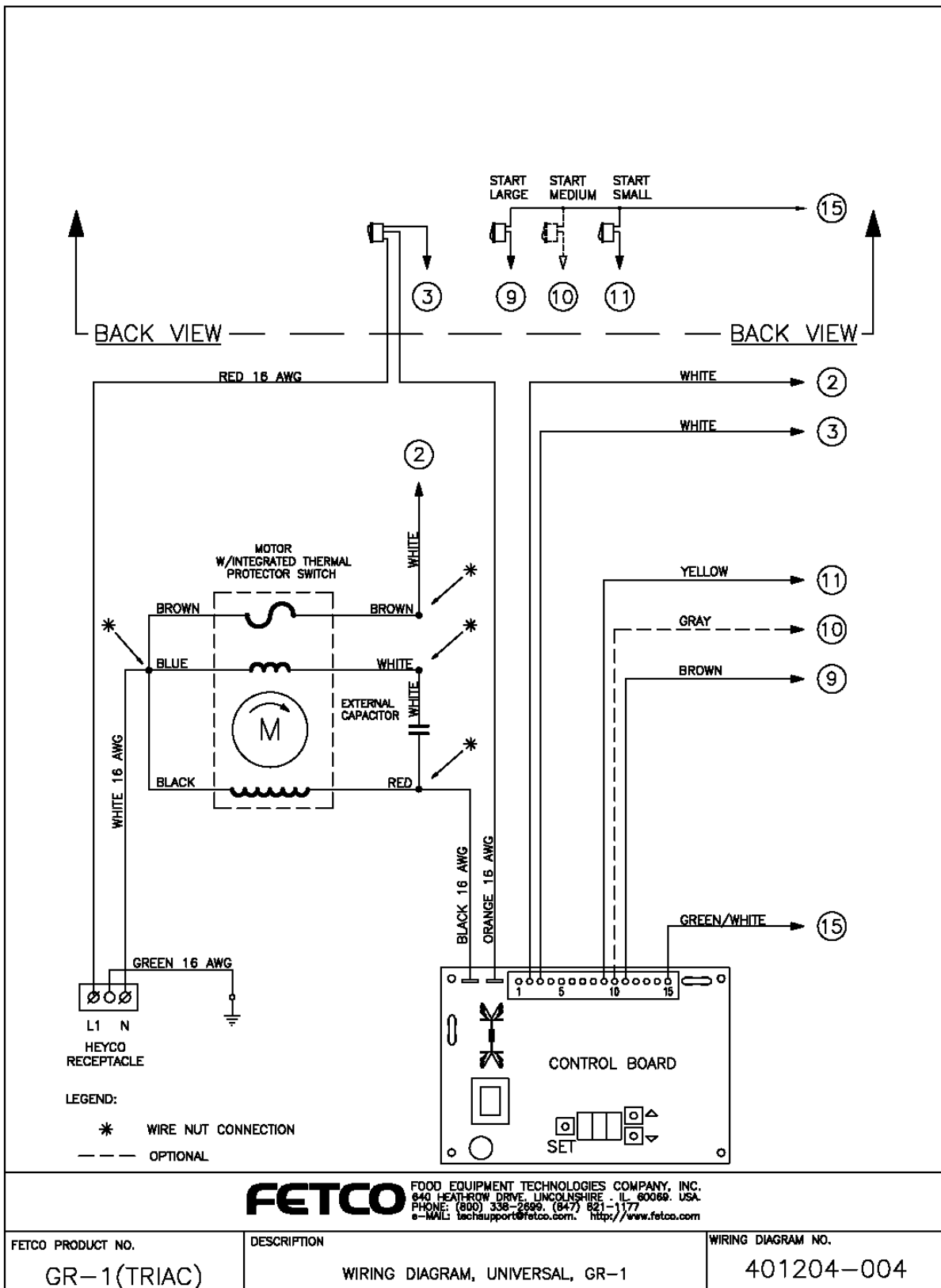
Factors in the whole coffee beans such as: age, size, oily or dry, and degree of roast will affect grind times.



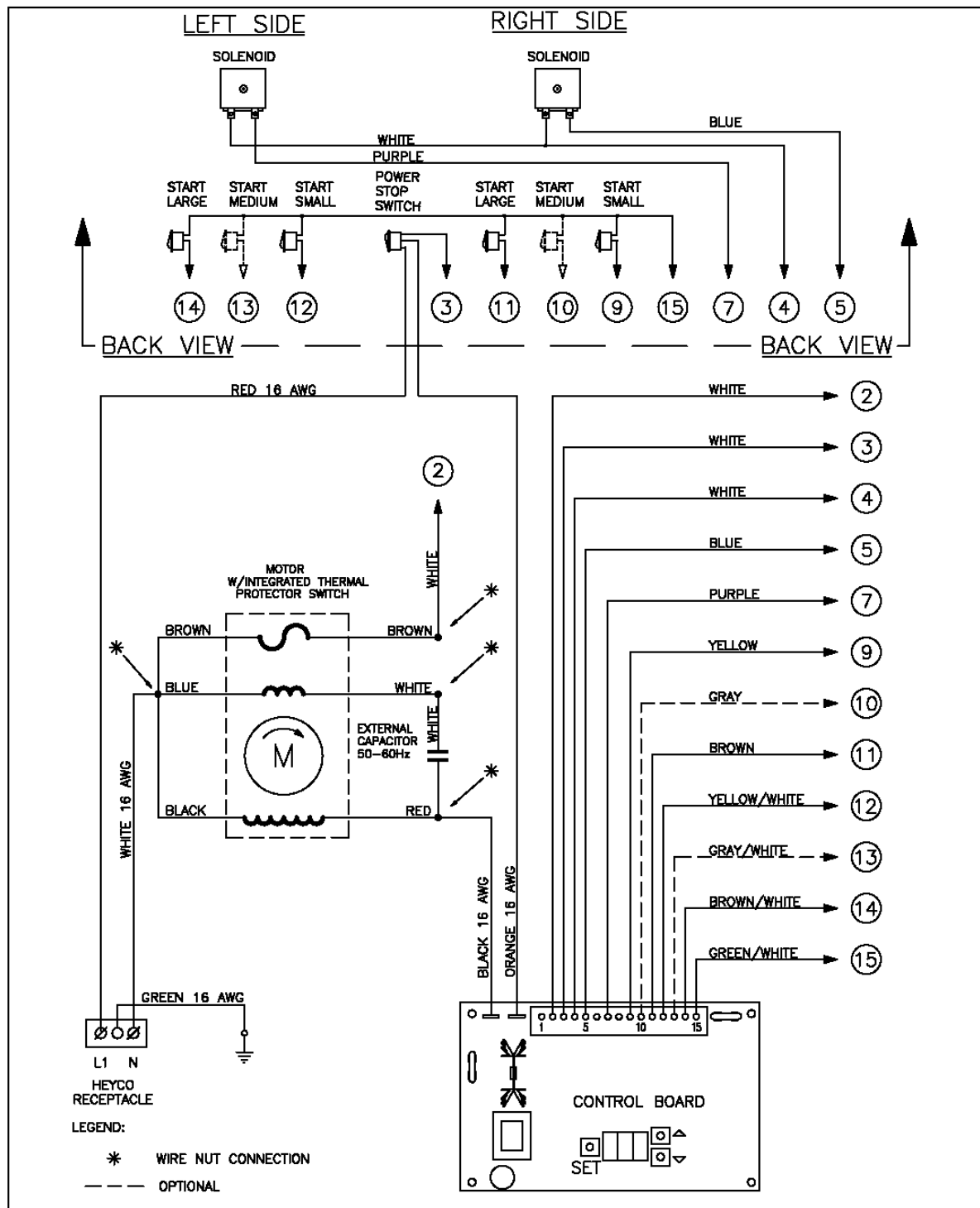
# Wiring Diagrams

## GR-1

Effective August 2003



Effective August 2003

**FETCO**

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FETCO PRODUCT NO. GR-2(TRIAC)	DESCRIPTION WIRING DIAGRAM, UNIVERSAL, GR-2	WIRING DIAGRAM NO. 401197-008
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The crossed-out wheeled bin means that within the European Union the product must be taken to separate collection at the product end-of life. This applies to your device but also to any enhancements marked with this symbol. Do not dispose of these products as unsorted municipal waste.