

# FETCO User's Guide and Operator Instructions

# **FETCO** GR Series Coffee Grinders

# Models:

- ▶ GR 1.2
- GR 1.3
- ▶ GR 2.2
- ▶ GR 2.3







NOTICE TO INSTALLER: Please leave this book with the machine.

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**Contact Information** 

## **FETCO**®

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PATENTS: WWW.fetco.com/patents

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# **Contact Information**

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# **Product Description/Features**

GR-1.2- One permanent hopper - 2 Portion Sizes

**GR-1.3-** One permanent hopper – 3 Portion Sizes

GR-2.2- Dual removable hoppers - 2 Portion Sizes per side

GR-2.3- Dual removable hoppers – 3 Portion Sizes per side

- ► FETCO slicing type grinding burrs
- ► Self adjusting brew basket holder
- ▶ Fully automatic, with digital timer control
- ▶ Front accessible & Service Friendly
- ► Motor overload protection
- ▶ Control board overload protection

# **Specifications**

Hopper Capacity: GR-1.2 & 1.3: 15 lbs. / 6.8 kg.

GR-2.2 & 2.3: 5 lbs. / 2.3 kg. each

Timer Range: 00.1 sec. – 999.0 sec.

Grind Rate\*: 18 oz. / 510g per minute

Grind Setting Default: Medium

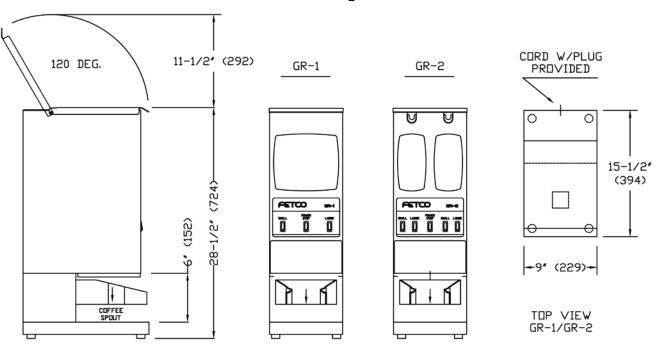
Brew Basket Size: 7" to 9" diameter

Electrical:

Export: 230 VAC, single phase Type B motors: 3.8 amps, 0.74 HP

G01622 GR-1.2, 2 PORTIONS, 230V AC CE Marked G01623 GR-1.3, 3 PORTIONS, 230V AC CE Marked G02622 GR-2.2, 2 PORTIONS, 230V AC CE Marked G02623 GR-2.3, 3 PORTIONS, 230V AC CE Marked

# **Dimensions & Utility Connections**

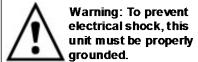


<sup>\*</sup> Grind rate is determined at medium grind with medium size, average to dark roast beans

# Installation

Warning: Read this <u>User's Guide</u> 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.
- 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.



# **Operating Instructions**

- 1. Turn the on/off switch to the on position.
  - The power switch will illuminate to indicate that the grinder has power.
- 2. Fill the hopper(s) with whole coffee beans.
  - The GR-2 models have two 5lb. removable hoppers. The hoppers must sit squarely on the floor of
    the hopper chamber. Before placing the hoppers inside the hopper chamber, make sure the
    chamber is clear of stray whole beans and debris, or the hoppers will not sit properly.
  - Both hoppers with their covers must be in place before operating the grinder.
- 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 16" X 6"; and will fit most other manufacturers' brew baskets.
  - For brew baskets that do not fit into the plastic arms, place the coffee filter on the lower shelf and grind directly into the filter.
- 4. Press the desired portion switch.
  - See the Programming section for instructions on setting the various batch sizes.
- 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 dishwasher safe (the covers are not).
- d) After washing hoppers FETCO recommends hand drying them.

# **Service and Support**

For service and support information, contact the Technical Support department. Our hours are 7:00 AM to 6:00 PM Central Time, Monday through Friday. Phone: (800) 338-2699 or (847) 719-3000. Email: techsupport@fetco.com.

Utilize only qualified beverage equipment service technicians for service. A Service Company Directory may be found on our web site, http://www.fetco.com.

## Warranty

All FETCO grinders come with a limited warranty. Warranty service must be authorized by the Technical Support Department. A Return Authorization number will be issued for all parts replaced under warranty.

# **Principles of Operation**

### GR-1

When one of the start switches is pressed, the timer energizes the grinding motor. The coffee beans are fed into the grinding chamber by a rotating auger spring. When the timed cycle is complete, voltage is removed from grinding motor.

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

## GR-2

When one of the start switches is pressed, the timer simultaneously energizes the grinding motor and the hopper solenoid. The hopper solenoid opens the guillotine on the bottom of the hopper, which allows the coffee beans to drop into the grinder. The coffee beans are fed into the grinding chamber by a rotating auger spring.

When the timed cycle is complete, voltage is removed from the hopper solenoid and the guillotine closes, stopping the flow of beans out of the hopper. The auger spring continues to feed any remaining beans into the grinding chamber.

Several seconds after the guillotine closes, voltage is removed from the grinding motor. This delay ensures that all beans have passed through the grinding chamber, preventing cross contamination of different coffees.

The motor delay is factory set at 20 seconds, but can be adjusted if necessary. (See Programming section.)

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 an audible alarm 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 breaker will automatically reset.

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

Installation safety and hygiene directions-For International and CE equipment

- 1. Access to the service area is restricted to persons having safety/hygiene knowledge and practical experience of the coffee grinder. This appliance must be installed in locations where it can be overseen by trained personnel.
- 2. For proper operation, this appliance must be installed indoors where the temperature is between 10°C/50°F to 35°C/95°F and with moderate humidity.
- 3. All commercial food 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.
- 4. Children should be supervised to ensure that they do not play hot beverage equipment.
- 5. This unit must be installed and serviced by qualified personnel only.
- 6. Installation must conform to all local electrical 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.
- 7. 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.
- 8. 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).
- 9. Do not tilt appliance more than 10° to insure safe operation.
- 10. Unit is for protected indoor use only. Do not steam clean or use excessive water on unit.
- 11. This unit is not "jet-proof" construction. Do not pressure wash or use jet spray to clean this unit.
- 12. The unit is not waterproof-do not submerge or saturate with water.

Do not operate if unit has been submerged or saturated with water.

Equipment exposed to flood and contaminated must not be used due to electrical and food safety.

## Grinder service and maintenance

# INSTALLATION, ADJUSTMENT AND SERVICE THESE SECTIONS ARE FOR PROFESSIONAL USE ONLY!

Danger of fire or electric shock, do not open panels. No user serviceable parts inside. All adjustments and service to be performed by authorized professional personnel.

# **Grind Adjustment**

- 1. Empty the hopper(s).
  - GR-1: Scoop out as many beans as possible. Lift the window up and sweep out the remaining beans. GR-2: Remove both hoppers and dump the beans out. Place both hoppers back in grinder.
- 2. Press one of the large portion switches. This will clear the grinding chamber of any remaining beans.
- 3. Remove the front cover. There are 2 screws in front and 2 underneath near the coffee outlet.
- 4. Using a 7/8" or 22 mm wrench turn the retaining nut counter-clockwise at least one turn.
- 5. Using a 3/8" to 1/2" standard screwdriver turn the adjustment screw clockwise for a finer grind, counterclockwise for a coarser grind. *Note:* Do not exceed more than a 1/4 turn in either direction.
- 6. Turn retaining nut clockwise, locking adjustment screw in place.
- 7. Grind a small amount of coffee beans to test the setting. Repeat the above steps if necessary.

## To reset the grind setting to the factory default:

- Follow steps 1 4 of the grind adjustment procedure.
- Turn the adjustment screw clockwise until the grinding discs touch, then back off slightly.
- Using a marker, mark the twelve o'clock position of the adjustment screw.
- Turn the screw counter clockwise to just past the four o'clock position.
- Turn retaining nut clockwise locking adjustment screw in place.
- Test by grinding a small batch.

Note: It may be necessary to adjust the grind time to compensate for the new grind setting.

A finer grind will produce less ground coffee per minute and a coarser grind will produce more ground coffee per minute.



# **Programming Instructions**

## **Software Version 1.2 and Above**

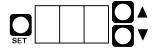
(See Appendix A for units manufactured before August 2003)

- ► 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: 1.2, 1.3, 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

**CONTROL BOARD** 



SET

X.X

TYP

23

DEF

STo

**MOTOR DELAY** 

This sets the time that the motor continues to run after the hopper guillotine closes on GR-2 series grinders. This delay ensures that all beans have passed through the grinding chamber, preventing cross contamination of different coffees.

The motor delay is added to the end of the grind time setting. Default setting: 20 sec.

DLY

20.0

7.0

LH2 13.5

STo

**SWITCH DESIGNATIONS** Model GR-1.2 1.3 2.3 2.2 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.

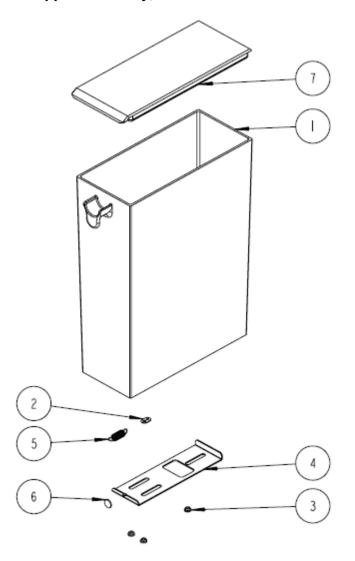
Approximate grind times for medium size, average to dark roast beans.

Batch Size -	Typical Coff	Timer setting				
	Ounces	Grams	Timer setting			
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.			

Grind times are affected by conditions of the coffee beans such as: age, size, oily or dry, and degree of roast.

# **Parts**

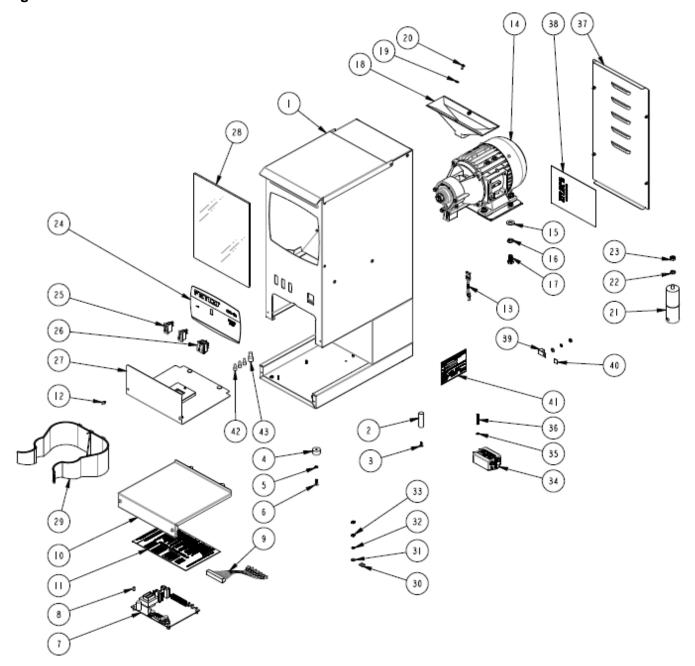
Figure 1 – GR-2.2 & GR-2.3 Hopper Assembly, Part # 1109.00019.00



Parts List – Figure 1 – GR-2.2 & GR-2.3

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Ref	QTY	PART NO.	DESCRIPTION
1	1	1023.00042.00	BODY, HOPPER, GR-2
2	1	1003.00035.00	BRACKET, GUILLOTINE SPRING, GR-2
3	3	1029.00008.00	WASHER, SHOULDER, NYLON
4	1	1003.00034.00	GUILLOTINE, GR-2
5	1	1085.00003.00	SPRING, EXPANSION, 3/8"OD X .026"W X 1.375"L, 0.60 LB/IN
6	1	1097.00013.00	BUMPER, 1/2" DIA, FLAT TOP, ADHESIVE BACKED, BLK
7	1	1023.00043.00	LID, HOPPER, GR-2

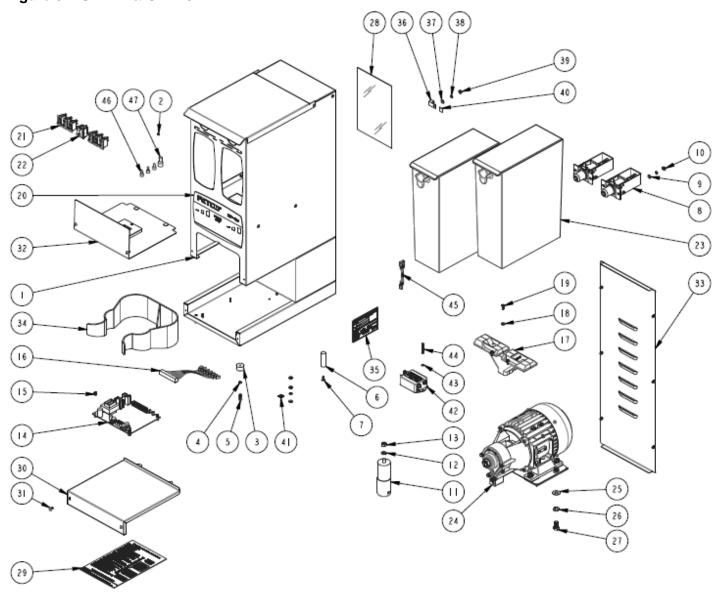
Figure 2 – GR-1.2 & GR-1.3



Parts List – Figure 2 – GR-1.2 & GR-1.3

x3/8LG.
Z
E RANGE
E RANGE
E RANGE

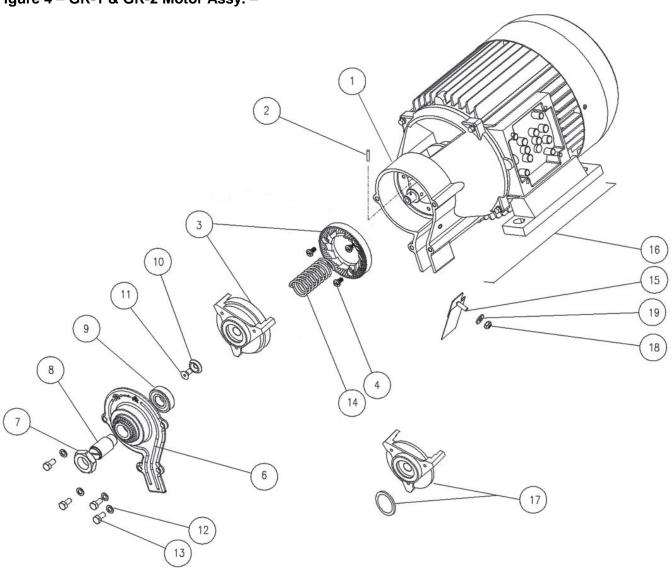
Figure 3 – GR-2.2 & GR-2.3



Parts List – Figure 3 – GR-2.2 & GR-2.3

i aits			– GR-2.2 & GR-	2.3
Ref	GR 2.3	GR2.2	Part Number	Name
1	1	1	1111.00083.00	BODY WELDMENT, GR-2, CE VERSION
2	4	4	1029.00009.00	FASTENER, 9/32" HEAD DIA X .165" LG, PUSH IN
3	4	4	1073.00006.00	FOOT, GRINDER
4	8	8	1083.00019.00	WASHER, #10 SCREW SIZE, SPRING LOCK
5	4	4	1082.00031.00	SCREW, #10-32 X 5/8", PAN HD PHIL, MACHINE
6	1	1	1021.00005.00	ROD, VIBRATION DAMPENING, GR-2
7	1	1	1082.00018.00	SCREW, TRUSS HD. PHIL. SM, #8 X 1/2 LG.
8	2	2	1102.00304.00	SOLENOID ASSEMBLY, 230VAC, GR-2
9	4	4	1083.00026.00	WASHER, #10 SCREW SIZE, FLAT
10	4	4	1084.00014.00	NUT, HEX, #10-32, MACHINE SCREW
11	1	1	1067.00002.00	CAPACITOR, 230VAC VERSION, 12.5uF, 450VAC, 50-60Hz
12	1	1	1083.00025.00	WASHER, M8 SCREW SIZE, SPRING LOCK
13	1	1	1084.00018.00	NUT, HEX, M8 SCREW SIZE
14	1	1	1108.00029.00	ASSY. BOARD, CONTROL & SOFT. GR-1/2, 200-240VAC
15	4	4	1029.00006.00	NUT, FINGER, #4-40 NYLON
16	1	1	1402.00010.00	ELECTRICAL HARNESS, GR 2.3
17	2	2	1023.00044.00	MANIFOLD, GR-2
18	4	4	1083.00010.00	WASHER, #10 SCREW W/NEOPRENE-BONDED SEAL
19	4	4	1082.00017.00	SCREW, TRUSS HD. PHIL. MACHINE, # 6-32 X 1/2 LG.
20	1	-	1045.00007.00	OVERLAY, GR-2.3
20	-	1	1045.00009.00	OVERLAY, GR-2.2
21	6	4	1058.00007.00	SWITCH, START ROCKER, MOMENTARY, 250VAC
22	1	1	1058.00052.00	POWER SWITCH, DPST, 10A/250VAC, GREEN
23	2	2	1102.00033.00	HOPPER, ASSEMBLY, GRF-2.3
24	1	1	1102.00185.00	GRINDING MOTOR AND PLATE ASSY, 230V/50Hz
25	2	2	1083.00022.00	WASHER, 3/8" SCREW SIZE, FLAT
26	2	2	1083.00020.00	WASHER, 3/8 SCREW SIZE, SPRING LOCK
27	2	2	1082.00032.00	SCREW, 3/8"-16 X 3/4" LG, HEX HEAD CAP
28	1	1	1401.00131.00	WIRING DIAGRAM, GR-2, CE
29	1	1	1046.00009.00	LABEL "GR PROGRAMMING"
30	1	1	1112.00023.00	BASE COVER WELDMENT, GR/GRF
31	10	10	1082.00033.00	SCREW, PAN HD PHIL. MACH., W/DUAL WASHER, #6-32x3/8LG.
32	1	1	1102.00023.00	COVER, GRINDER SERVICE ASSEMBLY, W/O RAILS
33	1	1	1001.00035.00	COVER, REAR, GR-2
34	1	1	1023.00041.00	HOLDER, BREW BASKET, GR-1/2
35	1	1	1043.00036.00	TEMPLATE, SN LABEL, FETCO PRODUCTS
36	1	1	1065.00009.00	GROUND LUG CONNECTOR, 14-2 AWG, ALUMINUM
37	2	2	1083.00016.00	WASHER, #8 SCREW SIZE, FLAT
38	2	2	1083.00011.00	WASHER, #8 SCREW SIZE, INTERNAL TOOTH LOCK
39	3	3	1084.00006.00	NUT, 8-32 18-8 HEX MACHINE SCREW
40	1	1	1044.00013.00	LABEL EQUIPOTENTIALITY, CE
41	1	1	1044.00012.00	LABEL GROUND, CE
42	1	1	1052.00051.00	EMI FILTER, 10A, 120/250VAC, 50/60Hz
43	2	2	1083.00009.00	WASHER, #6 SCREW , INTL TOOTH LOCKWASHER
44	2	2	1081.00061.00	STANDOFF, 1/4 HEX x 1 1/4 LG., #6-32 THREAD
45	1	1	1402.00096.00	HARNESS, GR-1/GR-2, CE VERSION ADDITION
46	3	3	1064.00030.00	CRIMP CONNECTOR, PRE-INSULATED, 22-14 AWG WIRE RANGE
47	1	1	1064.00032.00	CRIMP CONN., PRE-INSULATED, NC-8
	hown- All	·	1102.00369.00	POWER CORD ASEMBLY, 10A/250VAC, CE VERSION
		7		

Figure 4 – GR-1 & GR-2 Motor Assy. –



Parts List - Figure 4

Parts Lis			
ITEM	QTY	PART NO.	Description
1	1	1000.00078.00	ASSY, GRINDING HOUSING GR1/2
20	1	1087.00030.00	MOTOR SHAFT PIN
3	1	1000.00085.00	GRINDING DISC, SET OF TWO
4	3	1082.00026.00	SCREW, M4 x 0.7 x 10mm LG., PAN HEAD, SLOTTED, 18-8 SS.
6	6	1015.00005.00	COVER, GRINDING CHAMBER HOUSING
7	1	108400016.00	NUT, M16x1 JAM
8 & 9	1	(1102.00036.00)	BEARING ASSEMBLY
0 & 9	ı	(1102.00030.00)	(factory assembled - includes #8 adjustment shaft and #9 bearing)
10	1	1013.00021.00	WASHER, GR-1/GR-2 COUNTERSUNK
11	1	1082.00027.00	SCREW, M5 X 10, FLAT HEAD SLOTTED
12	4	1083.00017.00	WASHER, M5, SERRATED BELLEVILLE
13	4	1082.00028.00	SCREW, M5 X 12 METRIC, HEX HEAD
14	1	1085.00002.00	SPRING, GRINDER AUGER 6 MM PITCH
15	1	1112.00035.00	WELDMENT, COFFEE GUIDE, GR1/2
16	1	1102.00184.00	COMPLETE ASSEMBLY WITH MOTOR, 230V, 50Hz
17	1	1102.00031.00	ASSEMBLY, ROTATING DISC FLANGE & WASHER, GR-1/2
18	1	1084.00015.00	LOCKNUT, #8-32 SCREW SIZE, HEX THIN NYLON INSERT
19	1	1083.00016.00	WASHER, #8 SCREW SIZE, FLAT

# POLSKIE CENTRUM BADAŃ I CERTYFIKACJI S.A.

02-699 Warszawa, ul. Kłobucka 23A



# CERTYFIKAT ZGODNOŚCI Nr CERTIFICATE OF CONFORMITY No.

CE/43/16/BE

Typ programu certyfikacji - 1a (PN-EN ISO/IEC 17067). Type of certification scheme - 1a (PN-EN ISO/IEC 17067)

Nazwa i adres

posiadacza certyfikatu:

Name and address of the certificate holder:

Food Equipment Technologies Company, Inc. 600 Rose Road, Lake Zurich, IL 60047, USA

Nazwa i adres producenta:

Name and address of the manufacturer:

Food Equipment Technologies Company, Inc. 600 Rose Road, Lake Zurich, IL 60047, USA

Nazwa wyrobu:

Product:

Typ (odmiany): Model/type Ref.:

Mlynek do kawy / Coffee Grinder GR-1.2; GR-1.3; GR-2.2; GR-2.3

Znak handlowy Trademark

FETCO

Podstawowe parametry: Ratings:

230 V~; 50/60 Hz; 500 W; 3,5 A; IPX1

Wyrób spelnia wymagania

zawarte w:

The product complies with the following

standards:

EN 60335-1:2012+A11:2014; EN 60335-2-64:2002+A1:2002; EN 62233:2008; EN 55014-2:2015; EN 55014-1:2012;

EN 61000-3-2:2014; EN 61000-3-3:2013

Zgodnie ze sprawozdaniem

z badań wykonanych przez: As shown in the test report carried out by: PCBC S.A.

Nr i data sprawozdania: Ref. No. and date of the test report:

BW/158/2016 z/of 02.11.2016; BW/157/2016 z/of 02.11.2016; BW/8/2016 z/of 23.09.2016

Wyniki badań potwierdzają spełnianie przez badany egzemplarz wyrobu wymagań norm zharmonizowanych z dyrektywą LVD 2014/35/UE i z dyrektywą EMC 2014/30/UE.

The test results confirm that the tested sample of product fulfils the requirements of harmonized standards against directive LVD 2014/35/EU and with directive EMC 2014/30/EU.



Anna Wyroba Wiceprezes Zarządu V-ce President

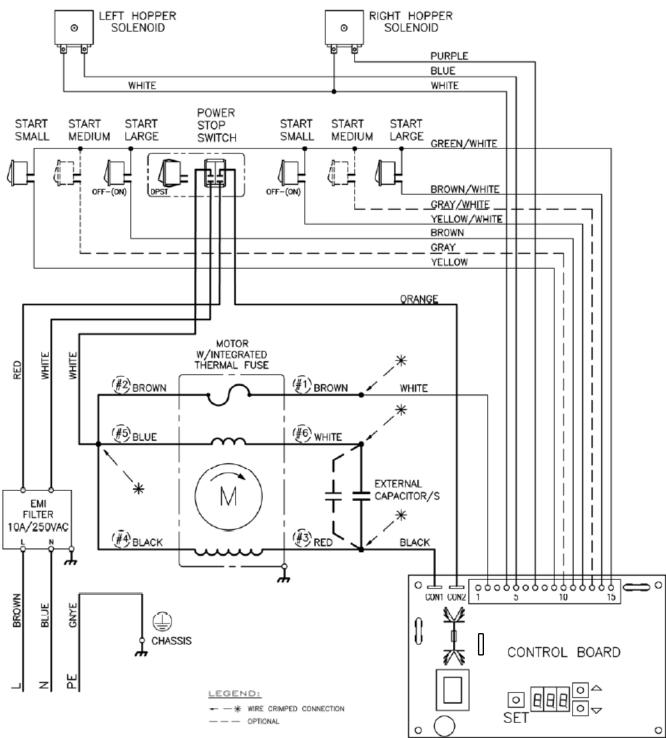
Warszawa, 23.11.2016

Zespół Badań i Certyfikacji Wyrobów Elektrycznych i Ogólnoprzemysłowych Electrical and General Industry Product Testing and Certification Department

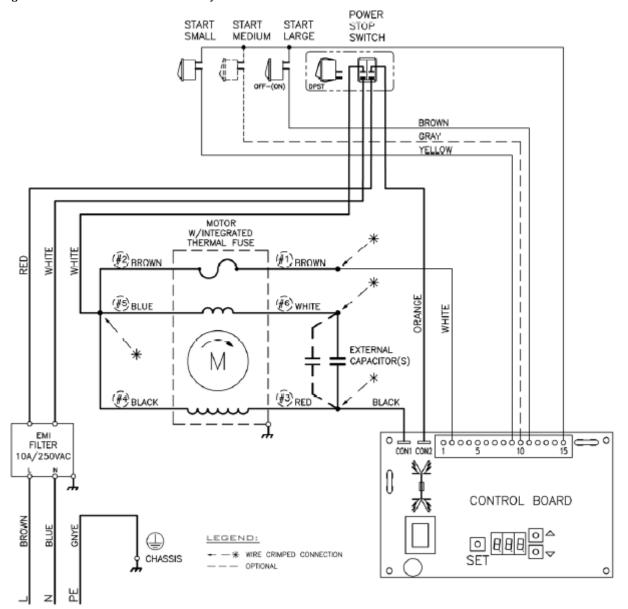
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# **Wiring Diagrams**

**GR-2** Drawing 1401.00131.00 Effective January 2017



**GR-1** Drawing 1401.00132.00 Effective January 2017



	End of section notes																					
N																						