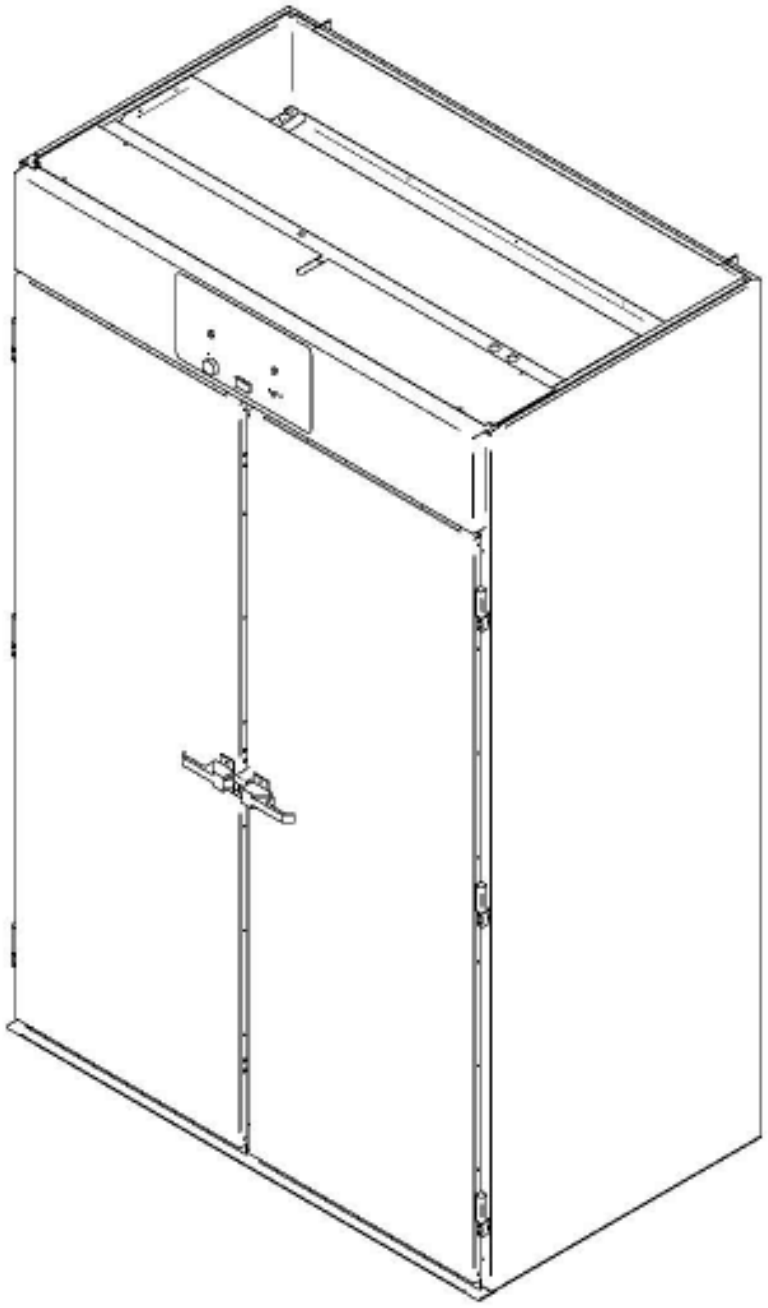


Model FMP 100 - 200 PROOFER

APPLIED ARL RESEARCH LABORATORIES

NSF®

MODEL FMP 100-200 PROOFER
OPERATION AND SERVICE MANUAL

Table of contents

Friedrich Metal Products Co., Inc.
6204 Technology Drive
Browns Summit, NC 27214
(336) 375-3067

INSTALLATION

SPECIAL NOTICES

- Your Friedrich Proofer has been thoroughly tested and checked before shipping to your store. Upon receipt of crated unit unpack carefully and inspect for damages. File any claims that may be required with the shipping company immediately. If necessary to replace damaged parts with new ones, contact FMP via phone(336)-375-3067 or FAX (336) 621-7901 to expedite shipment.

- The customer is responsible for providing and completing all the installation work necessary to ensure the safe and proper operation of the Proofer. This includes but is not limited to complying with all local codes with respect to electrical work and plumbing hookups (inlet water line, water softener (if used), water filter (if used), and drain line).

- In addition all work must be done in strict compliance with plans and specifications provided by Friedrich. Contact FMP in writing (FAX (336) 621-7901) for resolution of any matter arising out of interpretation of plans and/or specifications.

- Further, if installers determine that an installation cannot be accomplished in strict accordance with plans and specifications, the customer must contact FMP in writing (FAX) to request a written authorization (FAX) to deviate from the original plans and specifications. Written authorizations from FMP to alter plans and specifications will be added to the customer's order file to preserve the equipment warranty. If a written authorization to alter plans and specifications is not in the customer's own file and not on file with FMP, the equipment warranty shall be deemed void.

IMPORTANT

- Any and all electrical, plumbing or other installation work not completed in strict accordance with FMP plans or specifications or interpretations provided in writing (FAX) will immediately void any and all warranties covering the Proofer.

INSTALLATION REOUIREMENTS.

a. Electrical Service - All FMP Proofers are ARL listed.
Customers are responsible for complying with local electrical codes when installing Proofers purchased through FMP.
All Proofer models require isolated electrical service for operating the blower/control and heating systems.

o Refer to electrical schematic for requirements on specific models.

b. Plumbing Facilities - All Proofer models require the following plumbing facilities to handle the water needs of the humidity generating systems:

- o 1/4-inch water inlet line
- o 3/4-inch drain line(s)
- o Cold water inlet
- o An inlet water filter and/or water softener may be required in areas with known water quality problems.

NOTE
Operation of the Proofer depends on the presence of some ions (i.e. iron), while scale forming ions (i.e. calcium)can be a problem. In areas where there are known water quality problems contact a local water treatment company for recommended filter/softener installations.

2-2. INSTALLATION DIAGRAMS. Figure 4-1 and 4-2 show where electrical service and plumbing facilities are to be connected to a Proofer being installed. The electrical lines shall be run and connected in strict compliance with local codes for 120 volt ac and 208/240 volt ac service. The plumbing shall also be installed and connected to be compliant with local codes. In addition the following plumbing installation techniques apply:

a. Use a 1/4-inch copper water pipe as the inlet water line to the Proofer water supply solenoid. Water pressure must be 20-30 psi (pounds per square inch).
b. Use both a shut off valve and a disconnect fitting as part of the inlet line, installed as close to the Proofer as practical.
c. Use a 3/4-inch copper drain pipe connected between the Proofer drain(s) and an approved drain source. Pitch the drain pipe downward (1-inch per foot) to achieve an efficient gravity drain. (A trough drain installed in front of the Proofer is highly recommended.)

SAFETY INFORMATION

1. The frame of unit MUST be electrically grounded at all times. See "Installation - electrical."
   FAILURE TO GROUND THIS UNIT MAY RESULT IN AN ELECTRICAL SHOCK.

2. **DO NOT** use aluminum foil or any other protective material on inner liner surfaces or food racks.

3. The proofing area **MUST** be kept clear and free of combustible materials, gasolines and other flammable vapors and liquids.

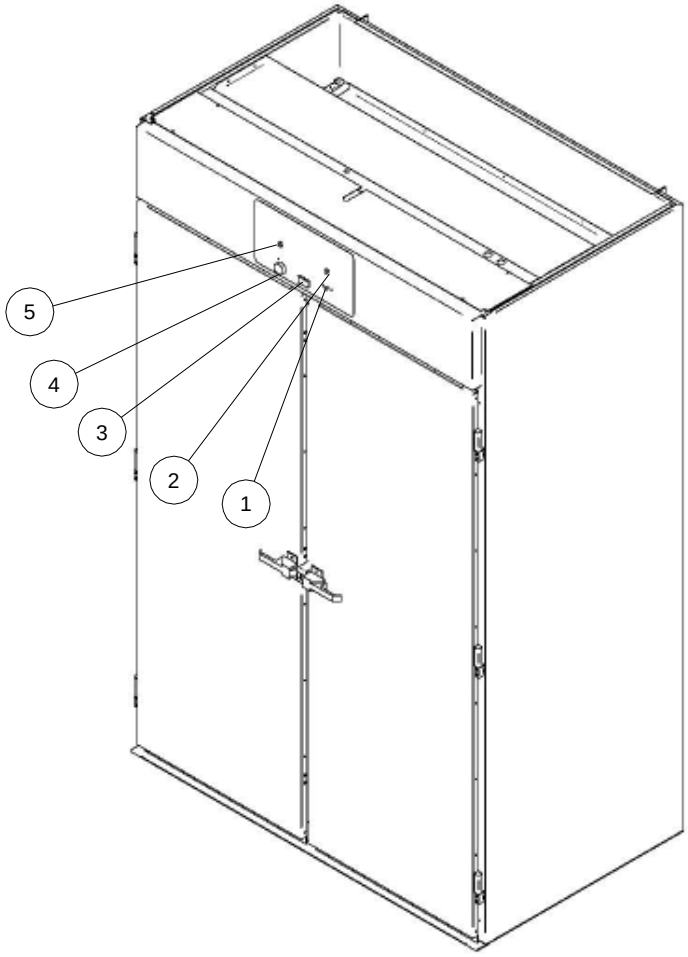
4. **DO NOT** open service panel when unit is in operation, or leave open during operation.

5. **DO NOT** allow unqualified personnel to perform service work or adjustments on this unit. To do so will **VOID** warranty and could result in a hazardous condition.

6. Be sure any new employees, who might operate the unit, are instructed on operation and safety information prior to operating the unit.

7. Keep this instruction manual for reference.

Model FMP 100 - 200 PROOFER



PROOFER CONTROLS AND COMPONENTS

1. TEMPERATURE CONTROL - To be set between 90 and 110 degrees F. depending on local conditions and product to be proofed.
2. TEMPERATURE INDICATOR - Light, to show heating elements are operating to bring temperature in proofer to set value. Extinguishes when set value is obtained.
3. POWER SWITCH - To be set to "On" position for proofing. Built in power indicator lights to show 120 volt AC power is applied to the blower and/or control circuit.
4. HUMIDITY CONTROL - To be set between 60 and 70% RH depending on local conditions and product to be proofed.
5. HUMIDITY INDICATOR - Light, to show system is operating to bring humidity in proofer to set value. Extinguishes when set value is obtained.

OPERATING INSTRUCTIONS

REFER TO PAGES ON PROOFER CONTROLS AND COMPONENTS AS NEEDED FOR DETAILS ON LOCATION AND FUNCTION OF FEATURES.

STEP 1 - Set power switch to "On" position.

Listen for and observe the following:

a. Fan starts and runs
b. Power indicator (built into switch) lights red.

STEP 2 - Depending on local conditions and products to be proofed, set humidity and temperature controls as follows:

a. Set humidity control to recommended setting between 60 and 70% RH. Observe that humidity indicator lights up, showing that system is operating to bring humidity in proofer to set value. When first powered up, control displays actual humidity.
   1. Press <SET> button….will display "SP"
   2. Press <SET> button again to display or set desired humidity.
   3. Press <UP> or <DOWN> arrow buttons to set desired humidity.
   4. Press <SET> button again to initiate change….will display "SP"
   5. Press <SET> and <DOWN> arrow button at same time or wait one minute to quit programming and display actual humidity.

b. Set temperature control to recommended setting between 90 and 110 degrees F. Observe that temperature indicator lights up, showing that system is operating to bring temperature in proofer to set value.

STEP 3 - Wait 20 - 30 minutes for humidity and temperature inside proofer to stabilize.

NOTES:

1. If humidity is set too high, condensation inside proofer may be excessive and water will accumulate on floor.
2. Frozen dough products must be completely thawed before proofing.
3. Humidity does not cause dough to rise, but does add moisture to prevent drying.
4. For "crusty bread" products, texture of proofed dough should be soft and pliable to the touch, not sticky or dry. If the proofed product goes into the oven sticky or dry, no matter how much steam is added during baking, a proper durable crust will not form.

STEP 4 - Load product into proofer and proceed with proofing jobs for the day.

NOTE:

When loading and unloading product, keeping "Door Open" time as short as possible will result in faster proofing and energy savings.

STEP 5 - After unloading last product from proofer at end of work day, set power switch to "Off" position.

CLEANING

1. At end of workday wipe down inside and outside of proofer.
2. Once a week clean outside of proofer with non-abrasive stainless steel cleaner.

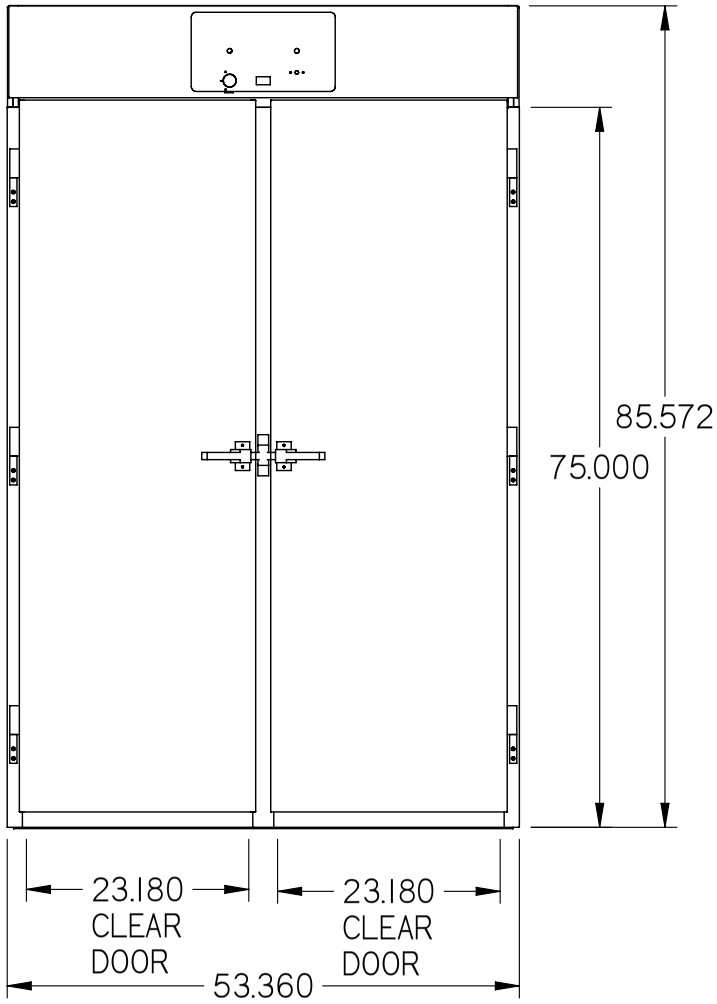
The points of connection for electrical service and plumbing facilities are shown for each Proofer model in the installation diagrams on page 7 and 8. The installation diagrams also give details of the physical features of each Proofer model for use by installation planners and installers. These physical features include dimensional data, uncrated weights, and clearances required for running and connecting electrical and plumbing lines. Use the installation diagram for the Proofer model as a guide to installing the unit.

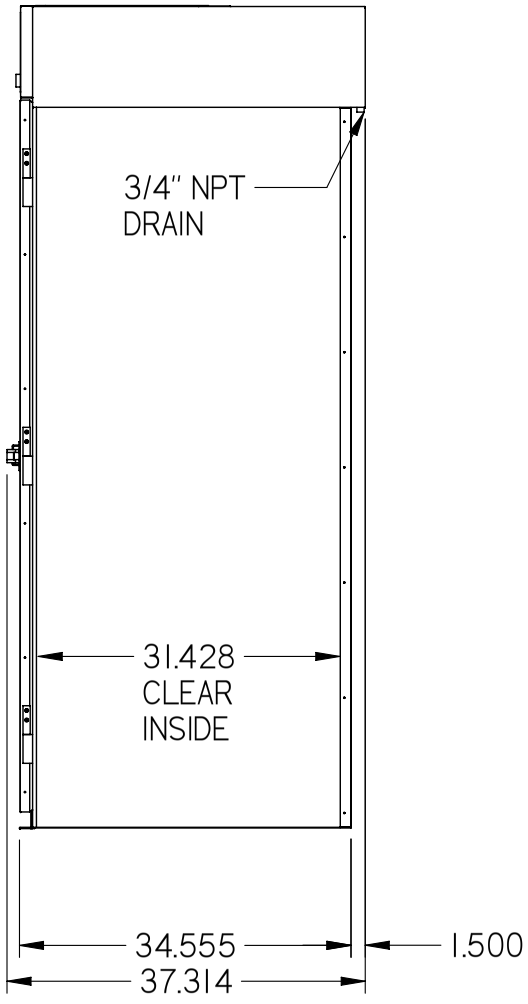
BAKERY PROOFER

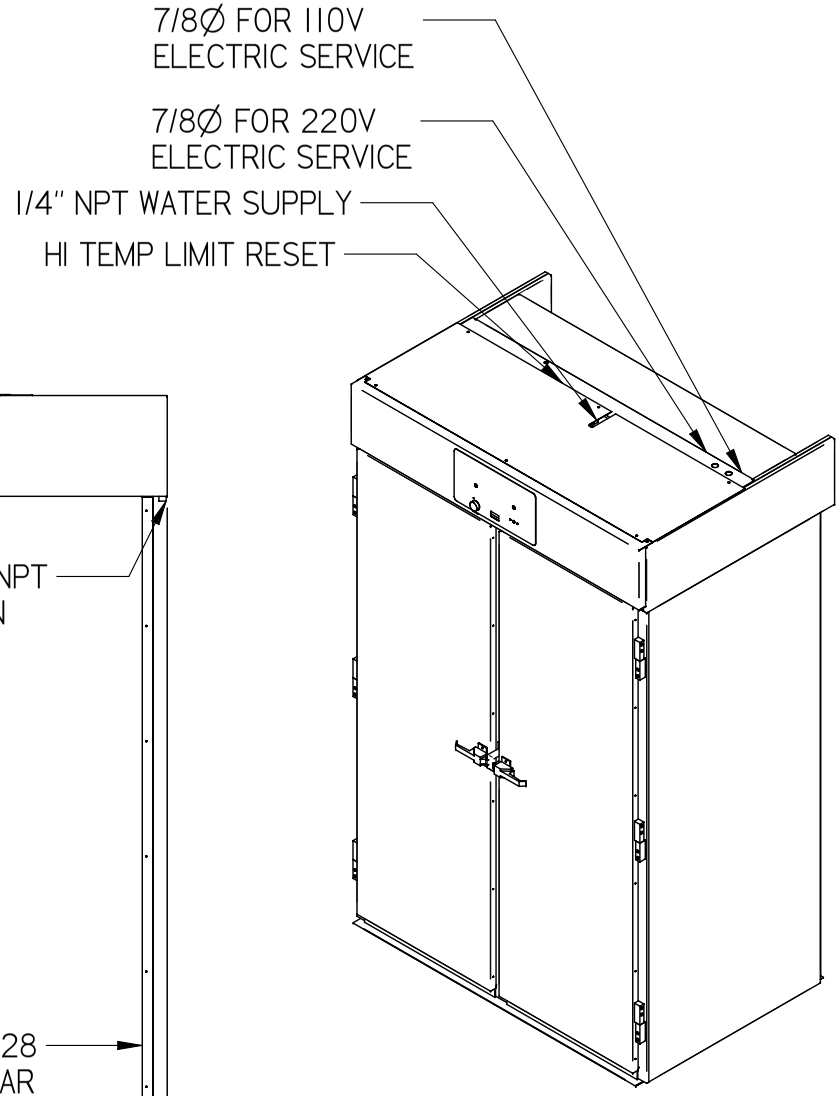
MODEL FMP 200-909-2

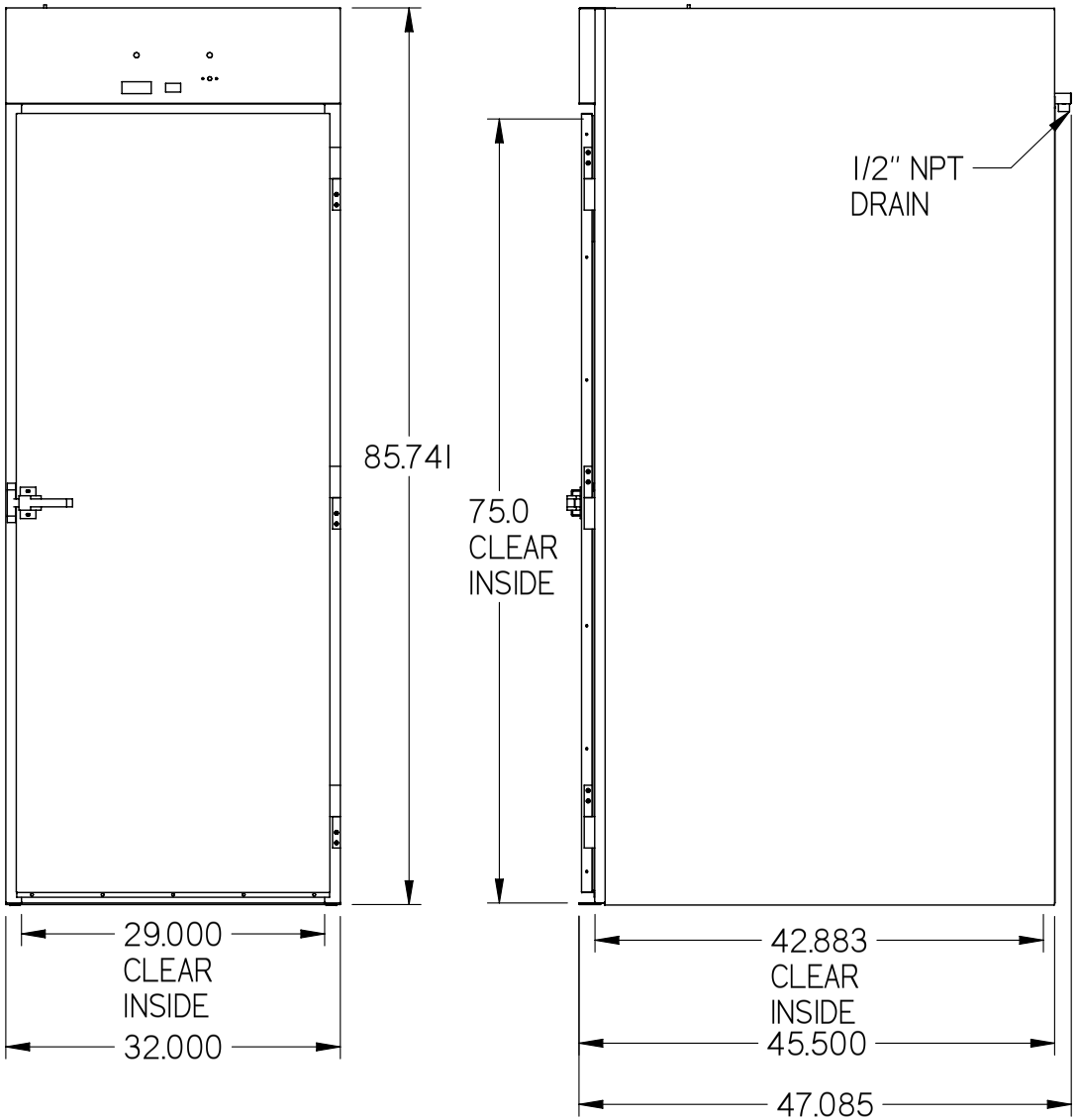
POWER REQUIREMENTS
120V 1 PH. 15 AMP
240V 1 PH. 15 AMP
WEIGHT 450 LBS.
UNIT REQUIRES A FLAT
AND LEVEL FLOOR

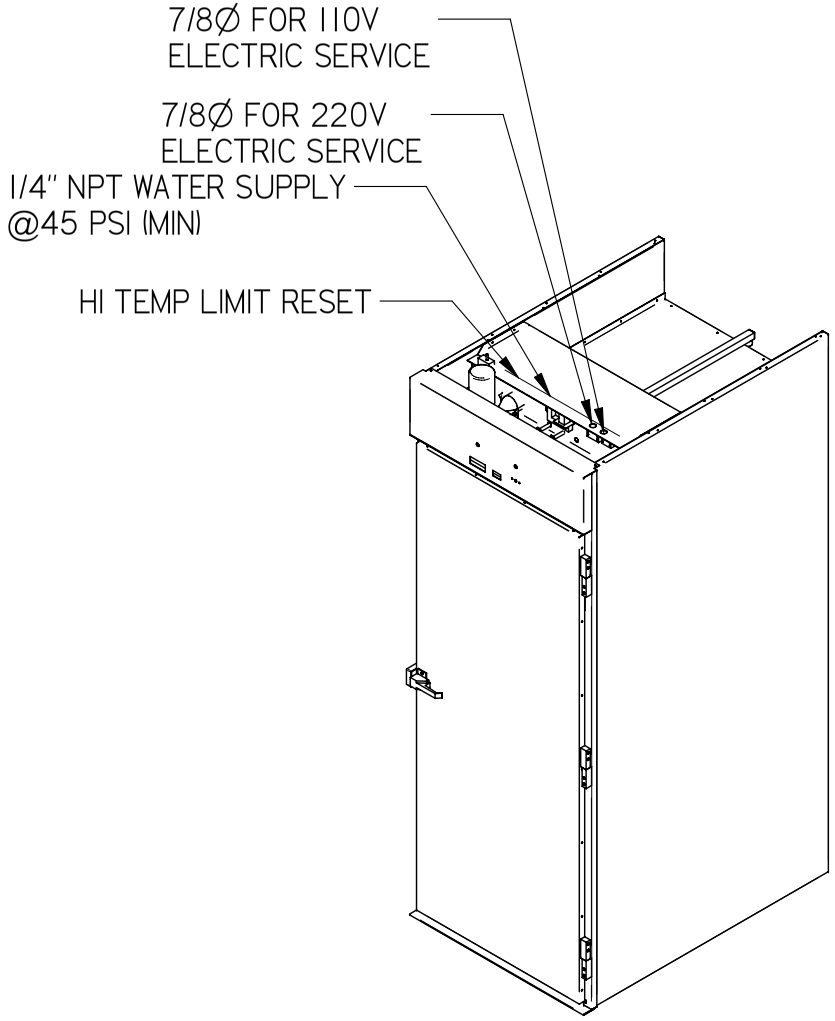
DOOR OPENING
23 X 75









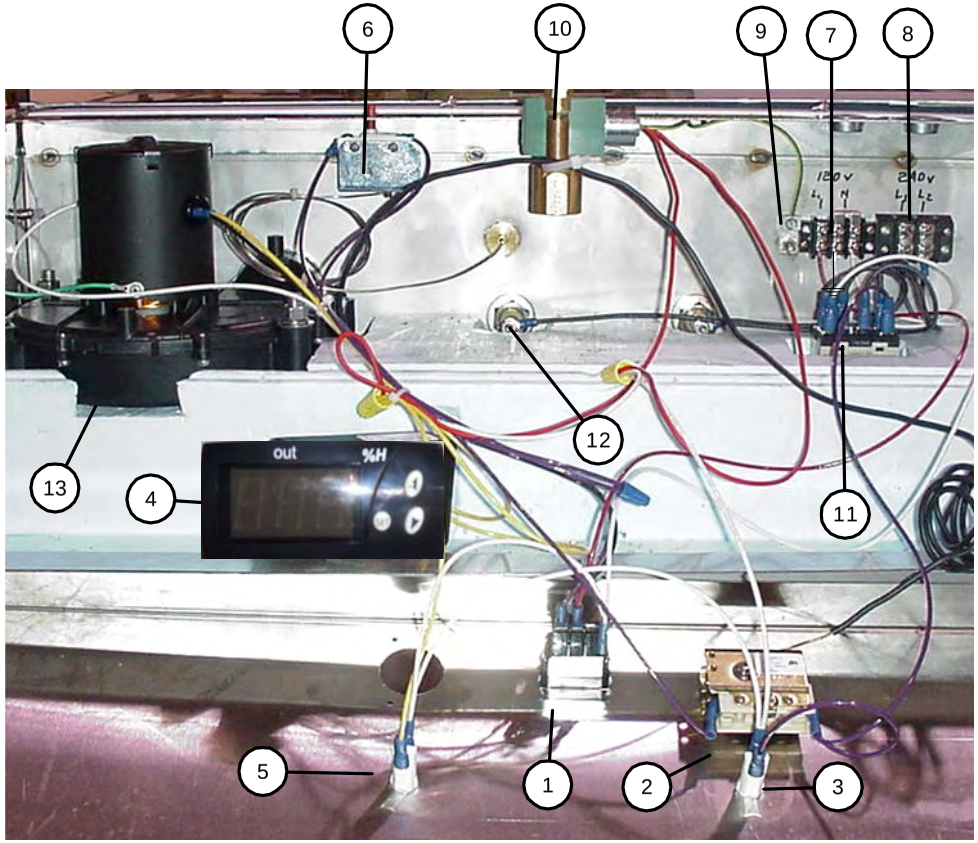


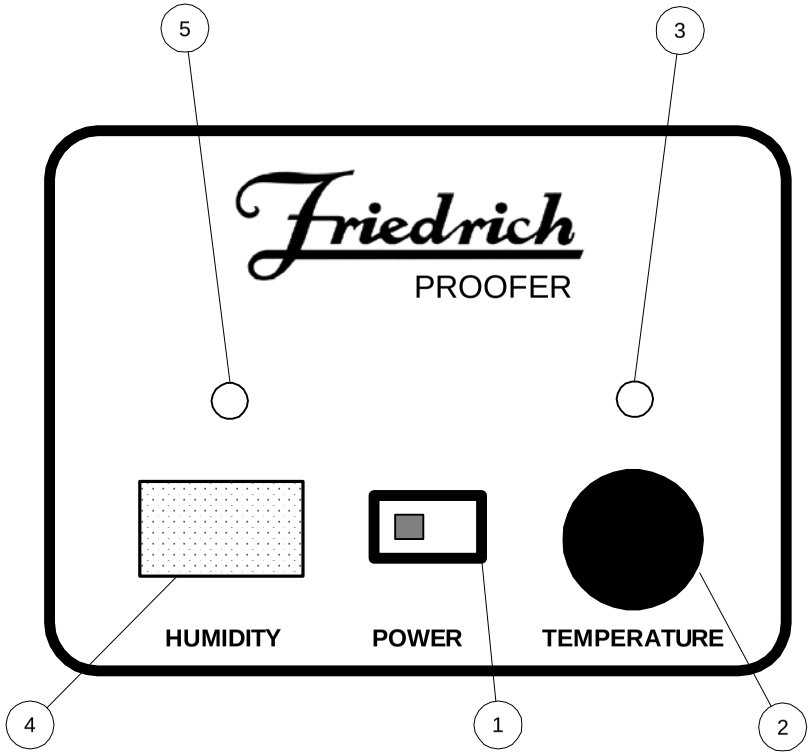
BAKERY PROOFER

MODEL FMP 200-910

POWER REQUIREMENTS
120V 1 PH. 15 AMP
240V 1 PH. 15 AMP
WEIGHT 450 LBS.
UNIT REQUIRES A FLAT
AND LEVEL FLOOR

NOTE : ALL DIMENSIONS TO OUTSIDE OF BENDS / MATERIAL UNLESS OTHERWISE NOTED .		Tolerences : .XX = ±.062 .XXX = ±.031 X° = ±.5° .125 Unless otherwise noted	Friedrich METAL PRODUCTS
Tape #	3		Model FMP 910 PROOFER
Mat.	B/A		Part 910 PROOFER ASSEMBLY
# Req. 1 Makes 1		- - - - - -	Dr by GB / Mod. 7/2/2012 / Drn 12/18/2008
File # ASSEMBLY.dft		Where Used / Qty	Scale NS / Dwg.# 910 -1000 / Rev. A





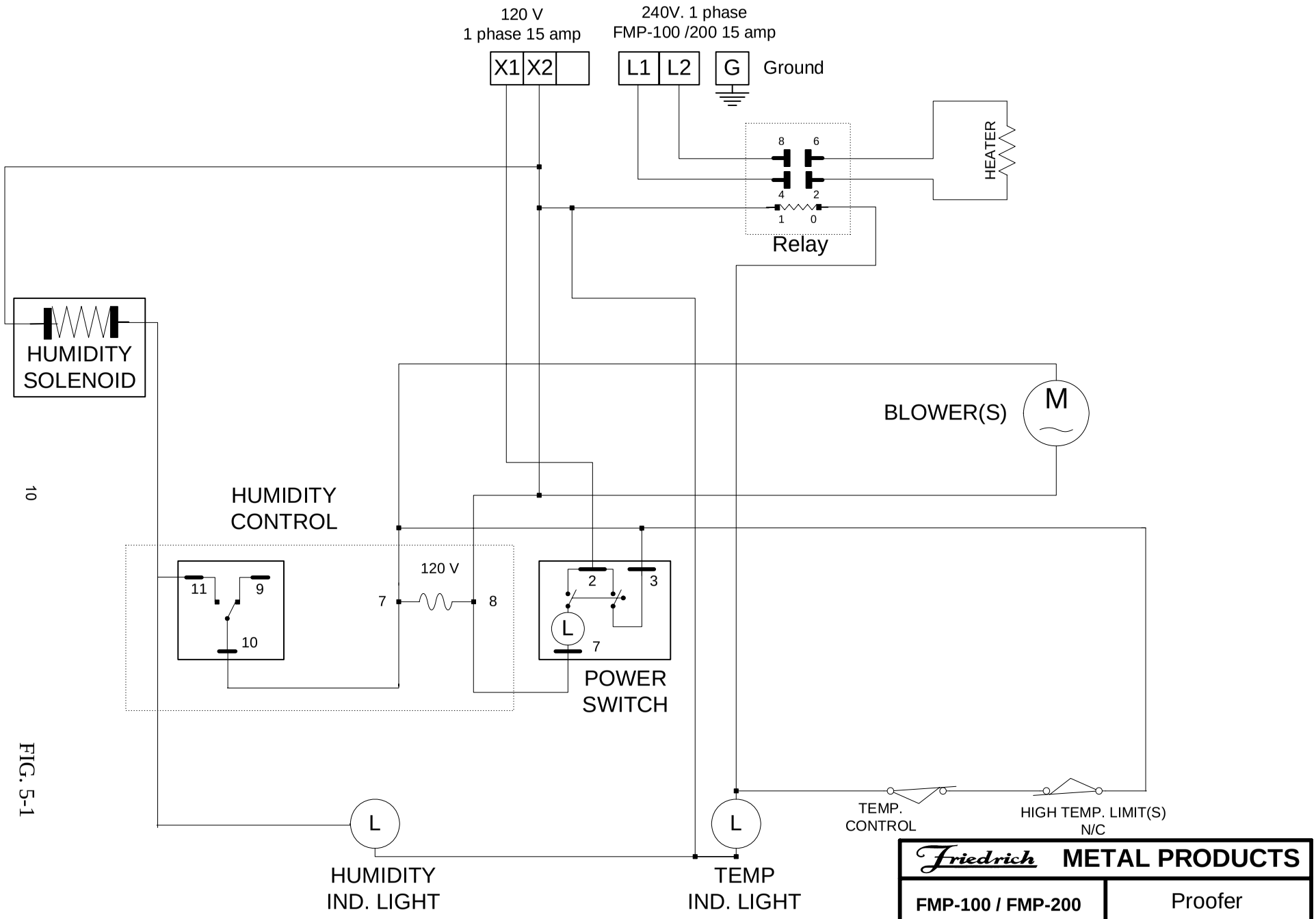
	QTY
1. SWITCH, POWER (W/ INDICATION)	1
2. CONTROL, TEMPERATURE	1
3. LIGHT, INDICATOR (TEMPERATURE)	1
4. CONTROL, HUMIDITY	1
5. LIGHT, INDICATOR (HUMIDITY)	1
6. HIGH TEMPERATURE LIMIT (MANUAL RESET)	1
7. TERMINAL BLOCK (120 VOLT)	1
8. TERMINAL BLOCK (240 VOLT)	1
9. GROUNDING LUG	1
10. VALVE, HUMIDITY	1
11. RELAY, HEAT	1
12. HEATER	1
13. BLOWER	1

Friedrich METAL PRODUCTS

FMP 100 / 200

ELECTRIC PANEL

7/22/2011
page 5-2 PARTS
Digital.vsd



Friedrich METAL PRODUCTS		
FMP-100 / FMP-200	Proofer	
Electrical Schematic	DWG.# 100-1	Rev. # C
Drawing 1	SERIAL NO. 022-	DRAWN 03/24/11

FIG. 5-1