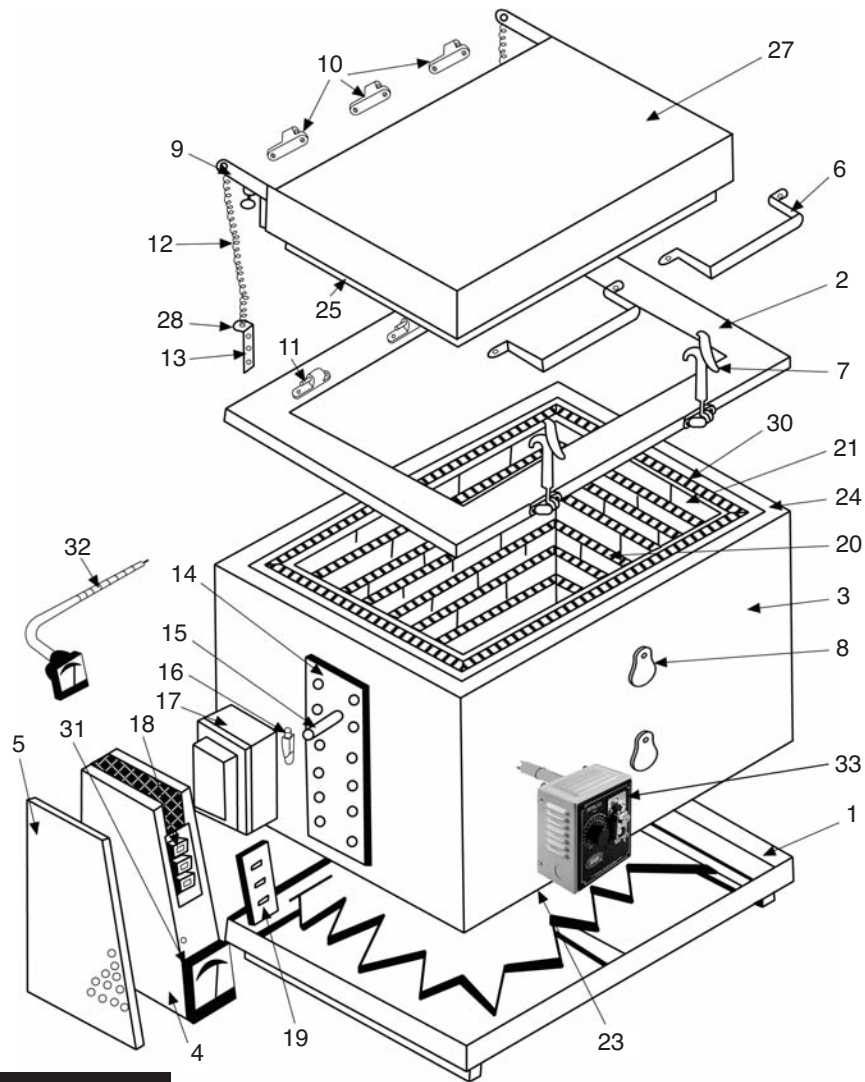


AMACO® High Fire Electric Kiln HF-105

240 Volts AC, Single Phase & Three Phase

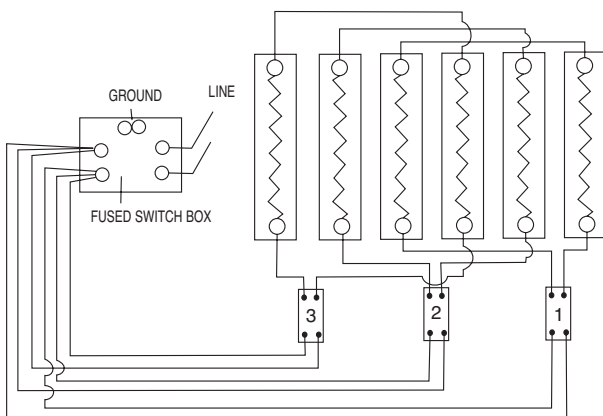
Model HF-105
with manual controls
and Kiln-Sitter®



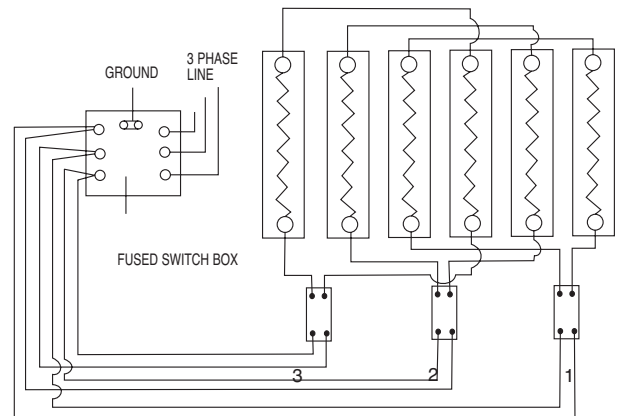
NOTE: Part numbers 17-19, 31, 32 are for Kiln-Sitter models only. See page 7 for Select Fire™ diagram and parts list.

See page 6 for replacement parts list that corresponds to the numbers on this drawing.

**240 Volts AC, Single Phase
Manual Control Models**



**240 Volts AC, Three Phase
Manual Control Models**



General Information

The AMACO® HF-105 High Fire Kiln has a maximum attainable temperature of Cone 10 (2381°F, 1305°C). The average fast-fire time required for this kiln to reach 1950°F (1066°C) is 6½ hours. The HF-105 is available with manual control switches or the Select Fire™ Computer Control for precise control, convenience, and consistent results firing after firing. During every firing, pyrometric cones should be placed in the kiln so that they can be viewed through the peephole(s).

This booklet contains a wiring diagram for the HF-105 kiln, Select Fire™ Controller (single and three phase) and a parts list with accompanying drawing for the HF-105 and Select Fire™. Before installing the kiln, consult these diagrams for recommendations on electric service, fuses, etc.

Also included with this booklet is an AMACO® Electric Kilns Installation/Operation/Maintenance manual which includes important information about selecting a location for your kiln, firing guidelines, do-it-yourself instructions for replacing elements plus complete programming and operating instructions for the Select Fire™ Controller.

Operating Information for Manual Models with Kiln-Sitter®

The Amaco® HF-105 high fire kiln is equipped with a fused safety switch box and three toggle switches. A pilot light indicates when the kiln is operating.

Close kiln door and latch securely before firing. Turn safety switch to "ON", place the appropriate cone in the Kiln-Sitter®, and push the plunger button. NOTE: If the kiln is equipped with a KilnVent, it must be turned on prior to firing.

The toggle switches operate as follows:

- LOW: Turn on any switch
- MEDIUM: Turn on any two switches
- HIGH: Turn on all three switches

The time required for firing will depend on the temperature to be attained, the number of objects being fired, and electric current fluctuations. Approximate cycle times are as follows:

- LOW: approximately 1 hour
- MEDIUM: approximately 1 hour
- HIGH: until desired temperature is reached

When firing time has been completed, turn off all switches and allow the kiln to cool overnight. If glazed pieces are removed from the kiln when the pieces are too hot, crazing may result due to sudden cooling. NOTE: Kilns equipped with a KilnVent will cool faster.

Installation of Kiln

Place kiln at least 18 inches from any existing wall at the sides and back. Connect kiln to an electric circuit which corresponds to that stamped on the kiln name plate. No. 6 gauge wire or larger should run from the power supply to the fused safety switch box on the kiln. 45 ampere fuses are required for single phase models, 40 ampere fuses for three phase models.

KILN SPECIFICATIONS HF-105

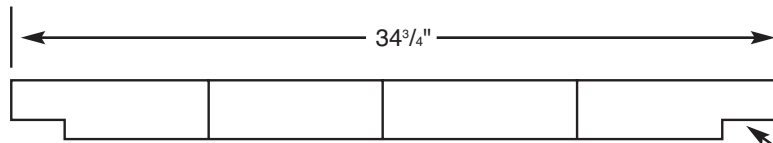
(Single and three phase unless otherwise noted)

Voltage	240 volts, AC only
Amp Rating.....	48 (single phase), 30 (three phase)
Kilowatt Rating	11.52
Firing Speed Control	Three Toggle Switches or Select Fire™
Maximum Temperature.....	2300°F, 1260°C
Firing Chamber Dimensions (W x D x H)	30" x 20" x 24"
Firing Chamber Area	8.33 cubic feet
Exterior Dimensions (W x D x H)	47¼" x 33½" x 39½"
Elements	Six Wire Coils
Shipping Weight	733 lbs.

Ordering Replacement Parts: when ordering replacement parts for this kiln, be sure to specify the Model Number, Serial Number and Voltage.

HF-105 Front and Back Brick

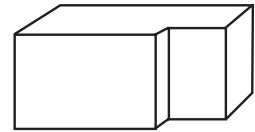
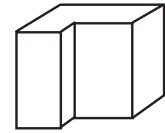
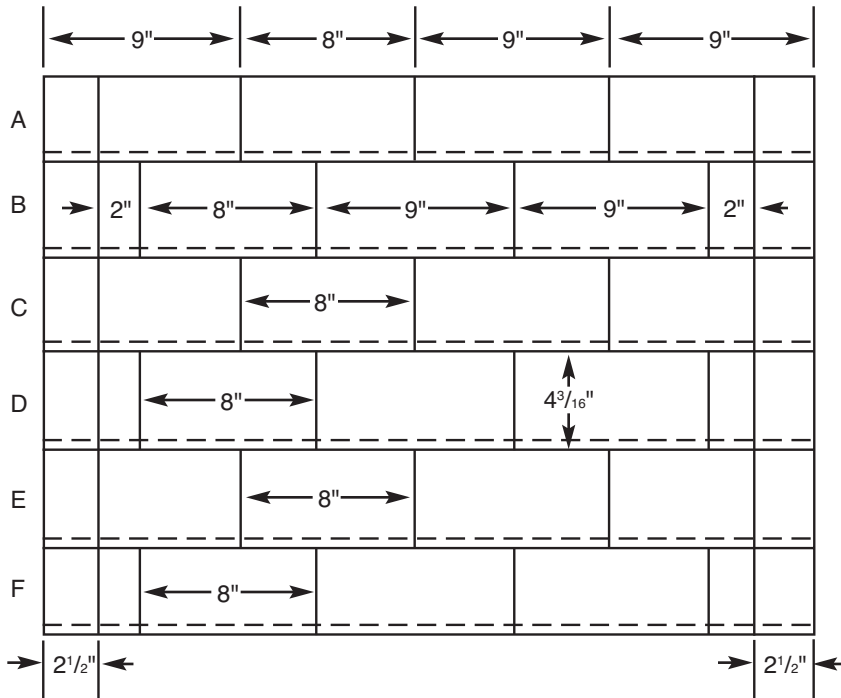
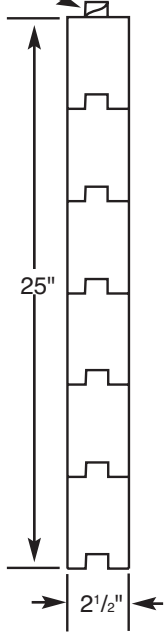
TOP VIEW



NOTE: Mill off 2 1/2" on ends, by 7/8" depth after assembly.

SIDE VIEW

CUT OFF TOP TANG



MILL

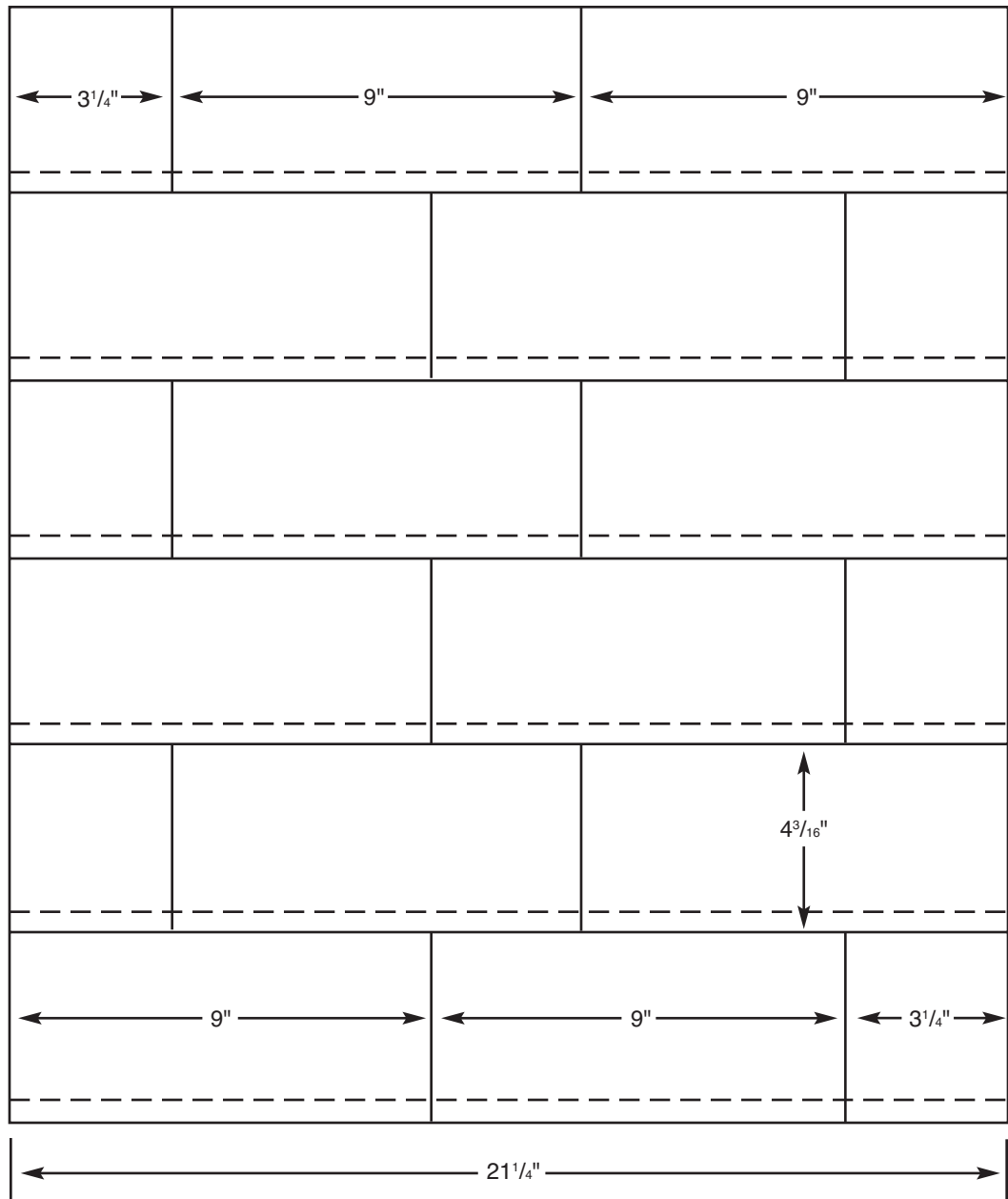
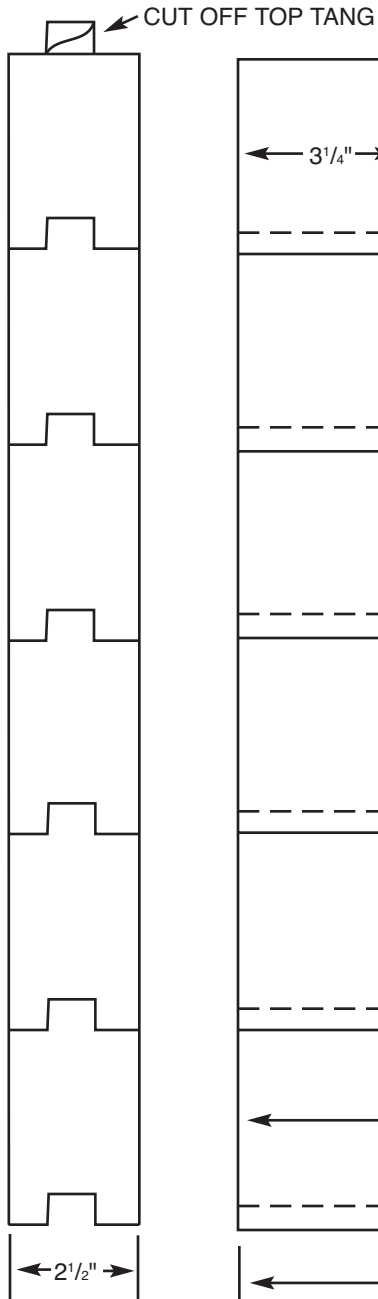
Row A, C, and E brick layouts are the same.
Row B, D, and F brick layouts are the same.

HF-105 Left and Right Side Brick

TOP VIEW

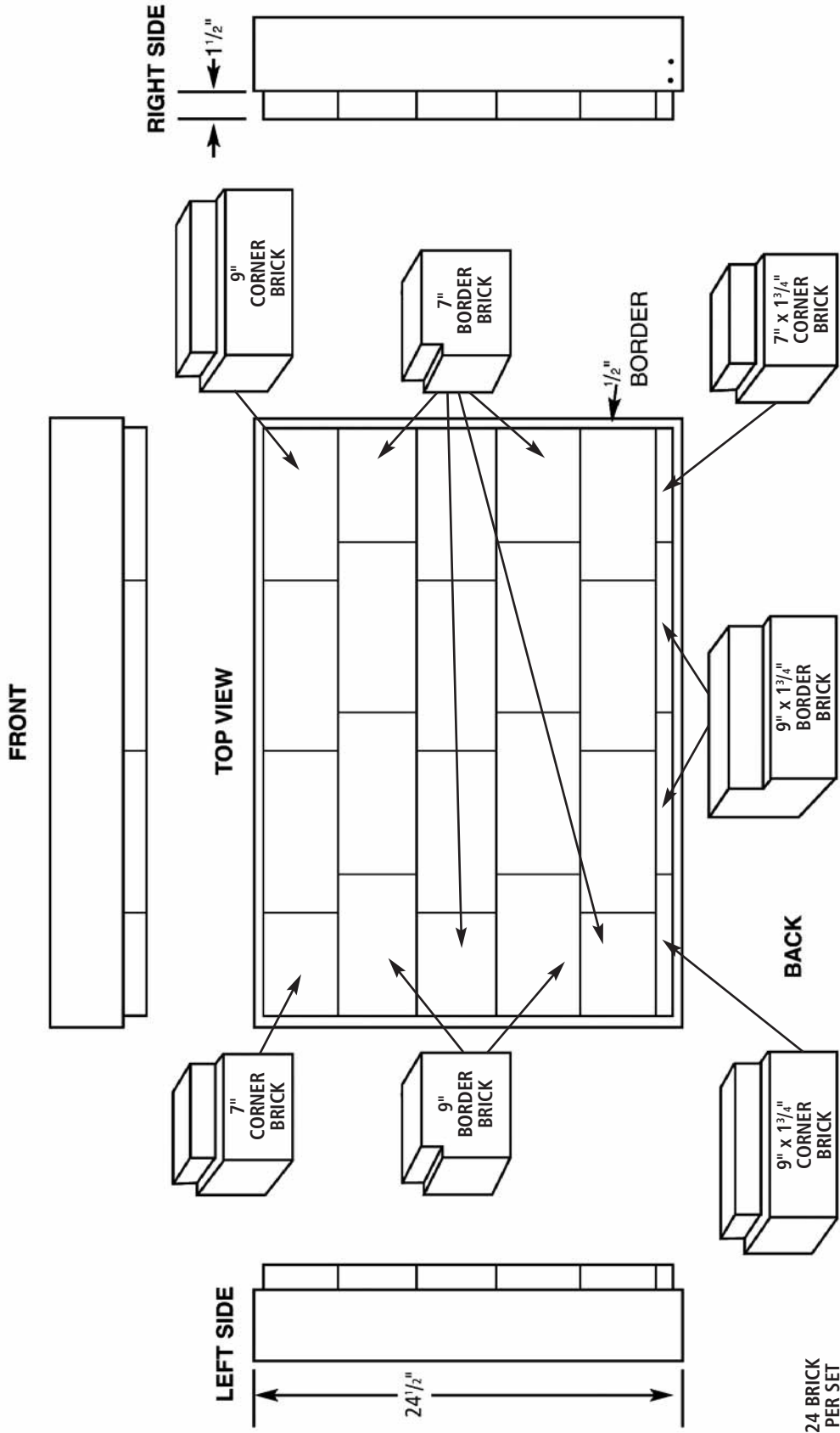


END VIEW



NOTE: Kiln has 2 1/2" insulation on sides and 3 1/2" on bottom. Kiln has one piece CEM-FIL.

HF-105 Door Brick



REPLACEMENT PARTS LIST

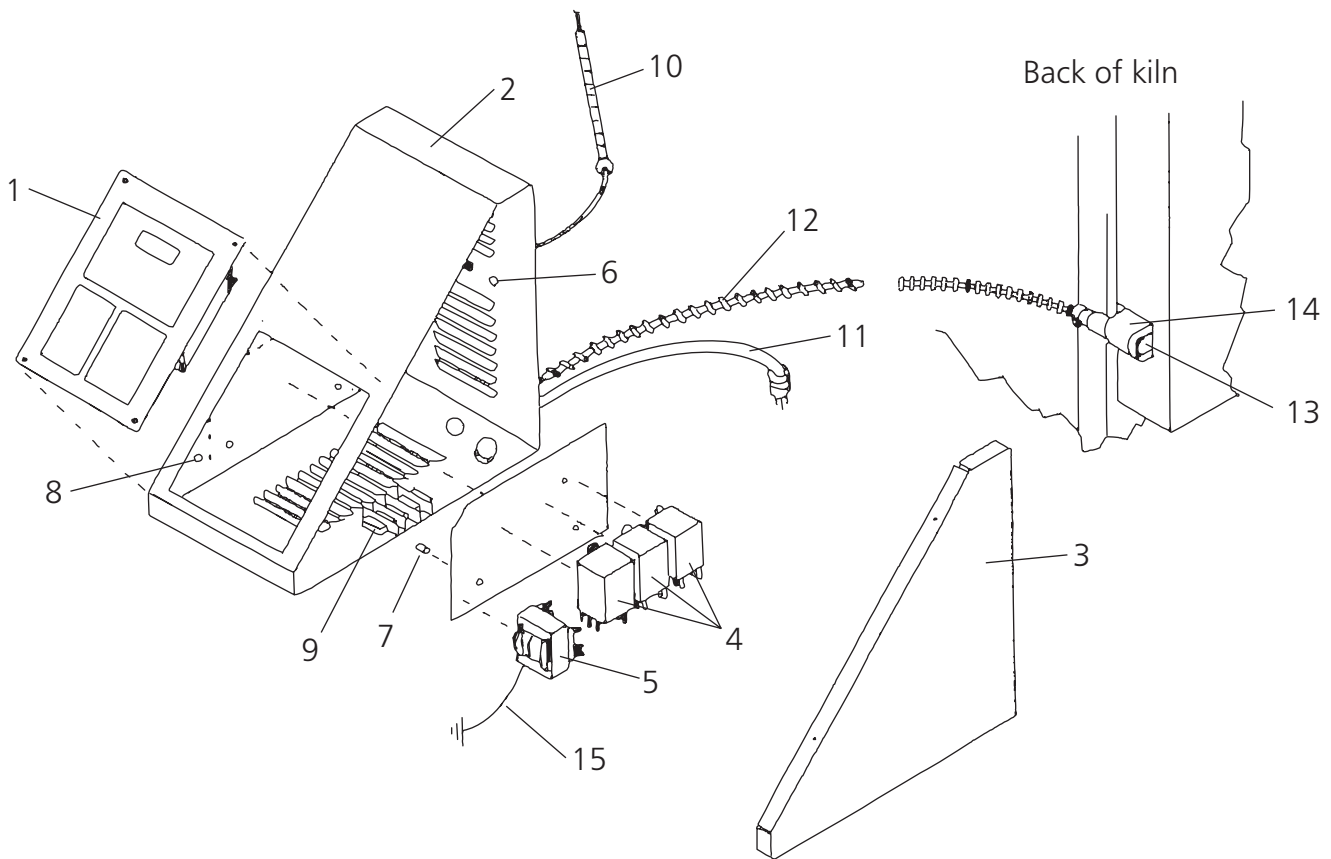
AMACO® HIGH FIRE ELECTRIC KILN HF-105

DETAIL NO.	PART NO.	DESCRIPTION	PARTS/ KILN
1	*	Bottom Frame	1
2	*	Top Frame	1
3	*	Shell	1
4	*	Terminal Guard	1
5	*	Terminal Guard Cover	1
6	28129H	Door Handle	2
7	28153X	Lid Latch	2
8	29025C	Peephole Cover	2
9	29820B	Spring Arm	2
10	28073H	Hinge Without Pin	6
11	28072G	Hinge Pin	3
12	29821R	Spring	2
13	29235F	Bracket Spring	2
14	29827X	CEM-FIL	1
15	28069D	Insulator PT-12¼ Inner Door x ½ Outer Door x 5"L	12
16	28071F	Connector Terminal Lug 10NPW	12
17	28108W	Safety Switch - 60 Amp., 3 Phase (ITE JN 422C) – Kiln-Sitter® models only	1
18	28062S	Toggle Switch - 30 Amp – Kiln-Sitter® models only	3
19	29542P	Switch Cover Plate - 3 Gang – Kiln-Sitter® models only	1
20	29837K	Element Coil, 240 Volts Only, 1 Phase	6
20	29836J	Element Coil, 240 Volts Only, 3 Phase	6
21	29839M	Brick, Grooved Wall	90
23	29850Y	Bottom Brick, 1 Set	1
24	29855E	End Insulation Set	2
24	29856F	Front Insulation	1
24	29856F	Back Insulation	1
24	29858H	Bottom Insulation 1	
24	29859J	Lid Insulation	1
25	29852B	Lid Brick, 1 Set - 24 Pieces	1
27	29811F	Door, Metal Shell Only	1
28	29264M	Eye Bolt with Nuts	2
30	29863N	Fiberfrax Rope	1
31	28825W	Pyrometer - Kiln-Sitter® models only	
32	28842B	Thermocouple, 48" long, 7" probe - Kiln-Sitter® models only	
33	28741B	Kiln Sitter®, LT-3 Model with Limit Timer, 208, 220/240 Volts, Single Phase Kiln-Sitter® models only	1
33	28739Y	Kiln Sitter® with Limit Timer and Relay, 208, 220/240 Volts, Three Phase Kiln-Sitter® models only	1
	29976T	KilnVent-Suspended Version, 115 Volt, 1.1 Amp (optional)	1
	29968J	Master KilnVent, 115 Volt, 1.1 Amp (optional)	1
	24122S	Select Fire (Wall Mount), Single Phase (optional)	1
	24123T	Select Fire (Wall Mount), Three Phase (optional)	

* Special Order Item. Allow extra time for shipment.

REPLACEMENT PARTS LIST

SELECT FIRE™ COMPUTER CONTROL



1	24250P	Select Fire Control	1
2	*	Select Fire Control Box	1
3	*	Select Fire Control Box Cover	1
4	24276H	Relays	3
5	24278K	Transformer	1
6	22134W	Fuse Holder	1
7	*	3/16" spacer	3
8	*	5/8" spacer	3
9	27749M	Terminal Block, 60 amp	1
10	28845T	Thermocouple, 72" long lead wire	1
11	27759A	Power cord with plug, single phase	1
11	28674D	Power cord with plug, three phase	1
12	*	Power to coils	1
13	28418L	Conduit Fitting	1
14	28419M	Conduit Cover	1
15	*	Ground (14 gauge wire)	1

*Special order item. Allow extra time for shipment.



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