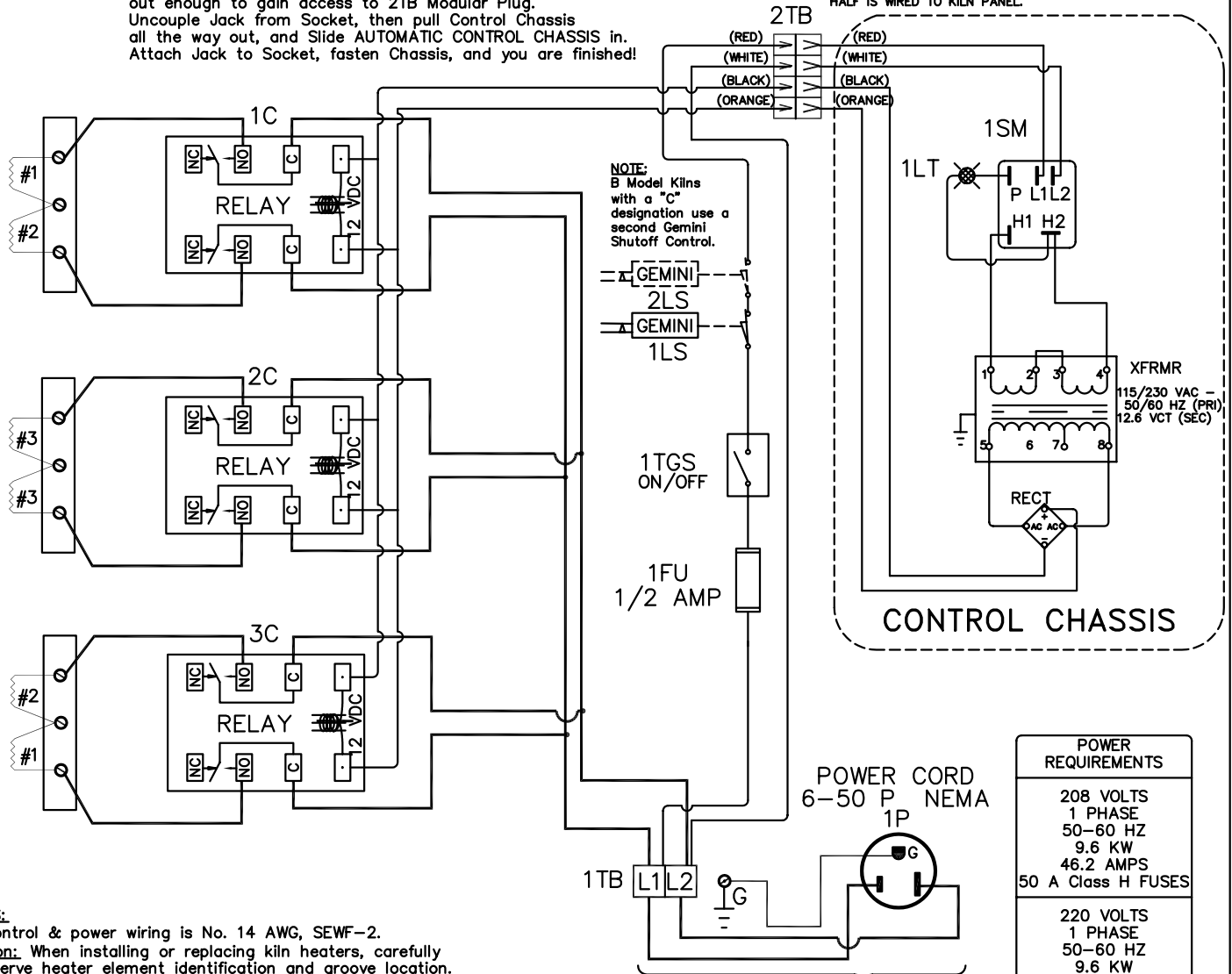


TO CONVERT TO AUTOMATIC CONTROL: (See Drawing K050-101)  
 Unfasten Control Chassis from Instrument Panel, and pull Chassis  
 out enough to gain access to 2TB Modular Plug.  
 Uncouple Jack from Socket, then pull Control Chassis  
 all the way out, and Slide AUTOMATIC CONTROL CHASSIS in.  
 Attach Jack to Socket, fasten Chassis, and you are finished!

NOTE:  
 MALE HALF OF PLUG IS WIRED TO  
 CONTROL CHASSIS AND FEMALE  
 HALF IS WIRED TO KILN PANEL.



**NOTES:**  
 All control & power wiring is No. 14 AWG, SEWF-2.  
**Caution:** When installing or replacing kiln heaters, carefully  
 observe heater element identification and groove location.  
 Industrial & commercial applications may require the installation  
 of a LOCKOUT/TAGOUT device to prevent the Kiln from operating  
 during maintenance.  
 This Kiln is recommended to be wired & connected to an approved  
 U. L. & NEC configured receptacle and properly fused according  
 to the KW load specification listed on the Kiln Nameplate.  
 L&L Kiln Mfg., Inc., also recommends fuses rather than circuit  
 breakers to prevent nuisance tripping.

**SAFETY SWITCH BY CUSTOMER**  
 Connect to 240 Volt, 2 Wire, Single Phase - or  
 220 Volt, 2 Wire, Single Phase - or  
 208 Volt, 2 Wire, Single Phase  
 50 or 60 Cycles.  
**SEE POWER REQUIREMENTS TABLE ABOVE,  
 AND KILN NAMEPLATE AMP/VOLT RATINGS**

| POWER REQUIREMENTS |                    |
|--------------------|--------------------|
| 208 VOLTS          | 1 PHASE            |
| 50-60 HZ           | 9.6 KW             |
| 46.2 AMPS          | 50 A Class H FUSES |
| 220 VOLTS          | 1 PHASE            |
| 50-60 HZ           | 9.6 KW             |
| 43.7 AMPS          | 50 A Class H FUSES |
| 240 VOLTS          | 1 PHASE            |
| 50-60 HZ           | 9.6 KW             |
| 40.0 AMPS          | 50 A Class H FUSES |

### ELECTRICAL PARTS LIST

| SYMBOL   | QTY | DESCRIPTION                  | SHOP PART NO.   | CUSTOMER PART NO. |
|----------|-----|------------------------------|-----------------|-------------------|
| 1P       | 1   | 72" POWER PLUG NEMA 6-50P    | E-CRD-372050-A1 | L-G-PC50/72       |
| 1TB      | 1   | POWER CONNECTION BOARD       | E-TER-2X6095-A1 | L-S-PB00/00       |
| 1FU      | 1   | CONTROL FUSE                 | E-FUS-AGC2F5-A1 | L-C-FS05/00       |
| 1FUB     | 1   | PANEL MOUNT FUSE HOLDER      | E-FUB-P20101-A1 | L-G-FSPB/00       |
| 1TGS     | 1   | ON/OFF ROCKER SWITCH         | E-SWT-XN2010-A1 | L-G-SWRK/00       |
| 1,2LS    | 2   | SHUTOFF CONTROL MICROSWITCH  | E-LIM-XL415S-A1 | N-B-SOMS/00       |
| 2TB-M    | 1   | WIRESET w/ MALE CONNECTOR    | (COMPOSITE)     | L-B-WRST/ML       |
| 2TB-F    | 1   | WIRESET w/ FEMALE CONNECTOR  | (COMPOSITE)     | L-B-WRST/FM       |
| SM (240) | 1   | INPUT ZONE SWITCH            | E-INF-240XXX-A1 | L-J-INFO/30       |
| SM (208) | 1   | INPUT ZONE SWITCH            | E-INF-208XXX-A1 | L-J-INFO/20       |
| LT       | 1   | INPUT ZONE PILOT LIGHT       | E-PIL-SR250V-A1 | L-G-PILO/00       |
| XFRMR    | 1   | CONTROL RELAY TRANSFORMER    | E-TRD-212VAS-A1 | L-G-TR12/00       |
| RECT     | 1   | BRIDGE RECTIFIER             | E-RCT-02100X-A1 | L-G-BRIG/RF       |
| 1-3C     | 3   | POWER CONTACTOR              | E-CNT-E0252Y-A1 | L-G-RL25/12       |
| H#1(240) | 2   | 240 Volt #1 HEATING ELEMENTS | .               | E-B-2301/30       |
| H#1(208) | 2   | 208 Volt #1 HEATING ELEMENTS | .               | E-B-2301/20       |
| H#1(220) | 2   | 220 Volt #1 HEATING ELEMENTS | .               | E-B-2301/40       |
| H#2(240) | 2   | 240 Volt #2 HEATING ELEMENTS | .               | E-B-2302/30       |
| H#2(208) | 2   | 208 Volt #2 HEATING ELEMENTS | .               | E-B-2302/20       |
| H#2(220) | 2   | 220 Volt #2 HEATING ELEMENTS | .               | E-B-2302/40       |
| H#3(240) | 2   | 240 Volt #3 HEATING ELEMENTS | .               | E-B-2303/30       |
| H#3(208) | 2   | 208 Volt #3 HEATING ELEMENTS | .               | E-B-2303/20       |
| H#3(220) | 2   | 220 Volt #3 HEATING ELEMENTS | .               | E-B-2303/40       |

**L&L Kilns**  
 hotkilns.com

505 SHARPTOWN ROAD  
 SWEDESBORO, NJ 08085

PHONE: (856) 294-0077  
 FAX: (856) 294-0070

| REV# | DATE     | REVISION DESCRIPTION                                 |
|------|----------|--|
| B    | 11/3/09  | CLARIFIED MODEL DESIGNATION BASED ON GEMINI CONTROLS |
| A    | 11/2/09  | UPDATED LOGO, ADDRESS, TITLE BLOCK, & BORDER         |
| 0    | 11/21/96 | MISC AS-BUILT CHANGES                                |

TITLE: **MODELS BA23 & BA23C  
 WIRING DIAGRAM**

Shown with Manual Input Control  
 208 or 220 or 240 Volts / 1 Phase

|   |                         |                                    |
|---|-------------------------|------------------------------------|
| DRAWN BY: <b>J.E.M.</b>                   | REV. CODE: <b>B</b>     | DRAWING NO. <b>K056-101</b>        |
| DATE: 4/17/96                             | SCALE: 1 = 8            |                                    |
| CHK: .                                    | APP: .                  |                                    |
| JOB NO: STANDARD                          | SER NO: .               | SHEET NO.   OF                     |
| FILE NAME: L:\E\1\KILN_(INACTIVE)\B-MODEL | MADE FROM: K056-100.dwg | BA23 1-Phase (Manual L&L Mfg. Dwg) |