

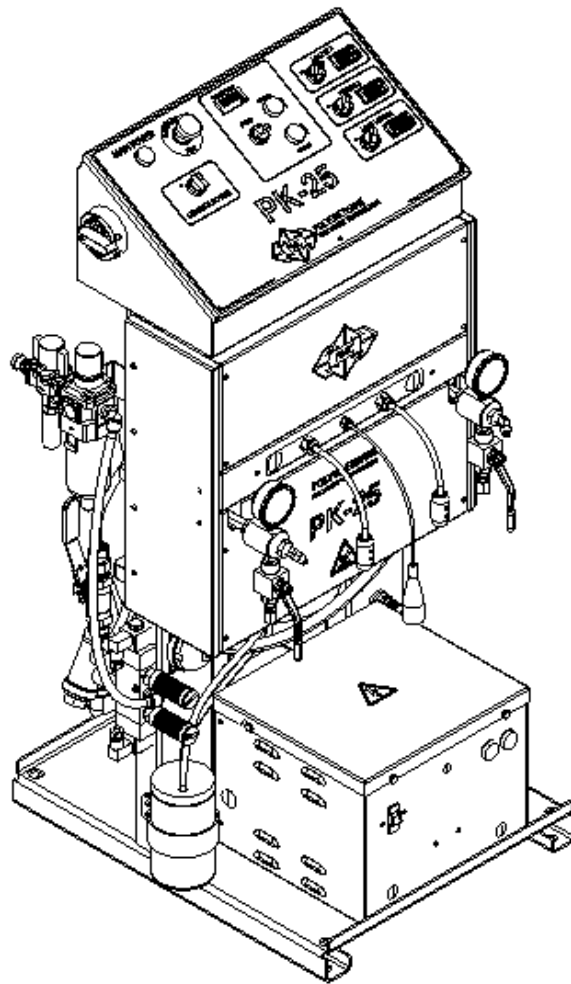


POLYURETHANE
MACHINERY CORPORATION

PK-25 Proportioner Electrical Drawings

Ref. # 203327

Revision 1.1



FOR PROFESSIONAL USE ONLY

Not approved for use in European explosive atmosphere locations

1 Komo Dr.
Lakewood, NJ 08701
Phone: 732-415-4400

URL: <http://www.polymacusa.com>

TABLE OF CONTENTS

WARRANTY1

SAFETY AND HANDLING3

220 VAC-1/3 PHASE CONSOLE COVER5

 Component Identification 5

220 VAC-3 PHASE CONSOLE BOTTOM7

 Component Identification 7

 Schematics 9

 24 VDC Power Circuit9

 Schematics 11

 Incoming Power11

 Heater Circuit12

220 VAC-1 PHASE CONSOLE BOTTOM13

 Component Identification 13

 Schematics 15

 Incoming Power15

 Heater Circuit16

WARRANTY

WARRANTY

Polyurethane Machinery Corporation (hereinafter “PMC”) provides this LIMITED WARRANTY (hereinafter “Warranty”) to the original purchaser (hereinafter “Customer”) covering this equipment and the original PMC manufactured accessories delivered with the equipment (hereinafter “Product”) against defects in material or workmanship of the Product (hereinafter “Defect” or “Defective”) for a period of one (1) year from the date of first purchase as shown on the original PMC invoice (hereinafter “Warranty Period”).

If during the Warranty Period under normal use, the Product is suspected by Customer to be Defective in material or workmanship, it is Customer’s responsibility to contact PMC and return the Product to PMC as directed by PMC, freight prepaid. If PMC determines that the Product is Defective and that such Defect is covered by this Warranty, PMC will credit Customer for the reasonable freight charges incurred by Customer in returning the Defective Product to PMC, and PMC (or its authorized agent) will, at PMC’s option, repair or replace the Product, subject to the following:

Original Invoice: The original invoice must be kept as proof of the date of first sale and the Product serial number. The Warranty does not cover any Product if the Original Invoice appears to have been modified or altered, or when the serial number on the Product appears to have been altered or defaced.

Product Maintenance: It is the Customer’s responsibility to maintain the Product properly. See your maintenance schedule and owner’s manual for details. The Warranty does not cover an improperly maintained Product.

Non-PMC Components and Accessories: Non-PMC manufactured components and accessories that are used in the operation of the Product are not covered by this Warranty. Such components and accessories shall be subject to the warranty offered to the Customer, if any, by the original manufacturer of such component or accessory.

Other Warranty Exclusions: The Warranty does not cover any Product that PMC determines has been damaged or fails to operate properly due to misuse, negligence, abuse, carelessness, neglect, or accident. By way of example only, this includes:

- Normal wear and tear.
- Improper or unauthorized installation, repair, alteration, adjustment or modification of the Product.
- Use of heating devices, pumping equipment, dispensers, or other parts or accessories with the Product that have not been approved or manufactured by PMC.
- Failure to follow the operating instructions and recommendations provided by PMC.
- Cosmetic damage.
- Fire, flood, “acts of God,” or other contingencies beyond the control of PMC.

THE WARRANTY DESCRIBED HEREIN IS THE EXCLUSIVE REMEDY FOR THE CUSTOMER AND IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS, IMPLIED, STATUTORY OR OTHERWISE, AND THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE AND ALL OTHER WARRANTIES ARE HEREBY DISCLAIMED. TO THE FULLEST EXTENT PERMITTED BY LAW, PMC SHALL NOT BE RESPONSIBLE, WHETHER BASED IN CONTRACT, TORT (INCLUDING, WITHOUT LIMITATION, NEGLIGENCE), WARRANTY OR ANY OTHER LEGAL OR EQUITABLE GROUNDS, FOR ANY CONSEQUENTIAL, INDIRECT, INCIDENTAL, LOST PROFITS, SPECIAL, PUNITIVE OR EXEMPLARY DAMAGES, WHETHER TO PERSON OR PROPERTY, ARISING FROM OR RELATING TO THE PRODUCT, EVEN IF PMC HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH LOSSES OR DAMAGES.

Non-Warranty Service by PMC: If PMC determines that the suspected Defect of the Product is not covered by this Warranty, disposition of the Product will be made pursuant to the terms and conditions of PMC's written estimate on a time and materials basis.

Continuing Warranty for Products Repaired or Replaced under Warranty: Following the repair or replacement of a Product covered by this Warranty, such Product will continue to be subject to the original Warranty for the remainder of original Warranty Period or for three (3) months from the repair or replacement date, whichever is longer.

No Rights Implied: Nothing in the sale, lease or rental of any Product by PMC shall be construed to grant any right, interest or license in or under any patent, trademark, copyright, trade secret or other proprietary right or material owned by anyone; nor does PMC encourage the infringement of same.

Exclusive Warranty: This writing is the final, complete, and exclusive expression of the Warranty covering the Product. Any statements made by PMC, its employees or agents that differ from the terms of this Warranty shall have no effect. It is expressly understood that Customer's acceptance of this Warranty, by performance or otherwise, is upon and subject solely to the terms and conditions hereof, and any additional or different terms and conditions proposed or expressed by Customer or anyone, whether in writing or otherwise, are null and void unless specifically agreed to in writing by an Officer of PMC.

SAFETY AND HANDLING

This chapter contains important information on the safety, handling, and use of your PK Series Proportioner.



Before installing the PK Series Proportioner and start-up, carefully read all the technical and safety documentation included in this manual. Pay special attention to the information in order to know and understand the operation and the conditions of use of the PK Series Proportioner. All of the information is aimed at improving user safety and avoiding possible breakdowns from the incorrect use of the PK Series Proportioner.

WARNING! *Presents information to alert of a situation that might cause serious injuries if the instructions are not followed.*

CAUTION! *Presents information that indicates how to avoid damage to the equipment or how to avoid a situation that could cause minor injuries.*

NOTE! *Is relevant information of a procedure being carried out.*

Careful study of this manual will enable the operator to know the characteristics of the PK Series Proportioner and the operating procedures. By following the instructions and recommendations contained herein, you will reduce the potential risk of accidents in the installation, use or maintenance of the PK Series Proportioner; you will provide a better opportunity for incident-free operation for a longer time, greater output and the possibility of detecting and resolving problems quickly and simply.

Keep this Operations Manual for future consultation of useful information at all times. If you lose this manual, ask for a new copy from your PMC Distributor or go online and visit our web site at <http://www.polymacusa.com/>.

The PK Series Proportioner has been designed and built for the application of polyurea chemical systems, polyurethane foam chemical systems, and some two-component epoxy systems.

WARNING! The design and configuration of the PK Series Proportioner does not allow its use in potentially explosive atmospheres, or the pressure and temperature limits described in the technical specifications of this manual to be exceeded.

Always use liquids and solvents that are compatible with the unit. If in doubt, consult your PMC Distributor.

When working with the PK Series Proportioner, it is recommended that the operator wear suitable clothing and elements of personal protection, including, without limitation, gloves, protective goggles, safety footwear, and face masks. Use breathing equipment when working with the PK Series Proportioner in enclosed spaces or in areas with insufficient ventilation. The introduction and follow-up of safety measures must not be limited to those described in this manual. Before starting up the PK Series Proportioner, a comprehensive analysis must be made of the risks derived from the products to be dispensed, the type of application, and the working environment.



To prevent possible injury caused by incorrect handling of the raw materials and solvents used in the process, carefully read the Safety Data Sheet (SDS) provided by your supplier.

Deal with the waste caused according to current regulations.



To avoid damage caused by the impact of pressurized fluids, do not open any connection or perform maintenance work on components subject to pressure until the pressure has been completely eliminated.



Use suitable protection when operating, maintaining or being present in the area where the equipment is functioning. This includes, but is not limited to, the use of protective goggles, gloves, shoes and safety clothing and breathing equipment.



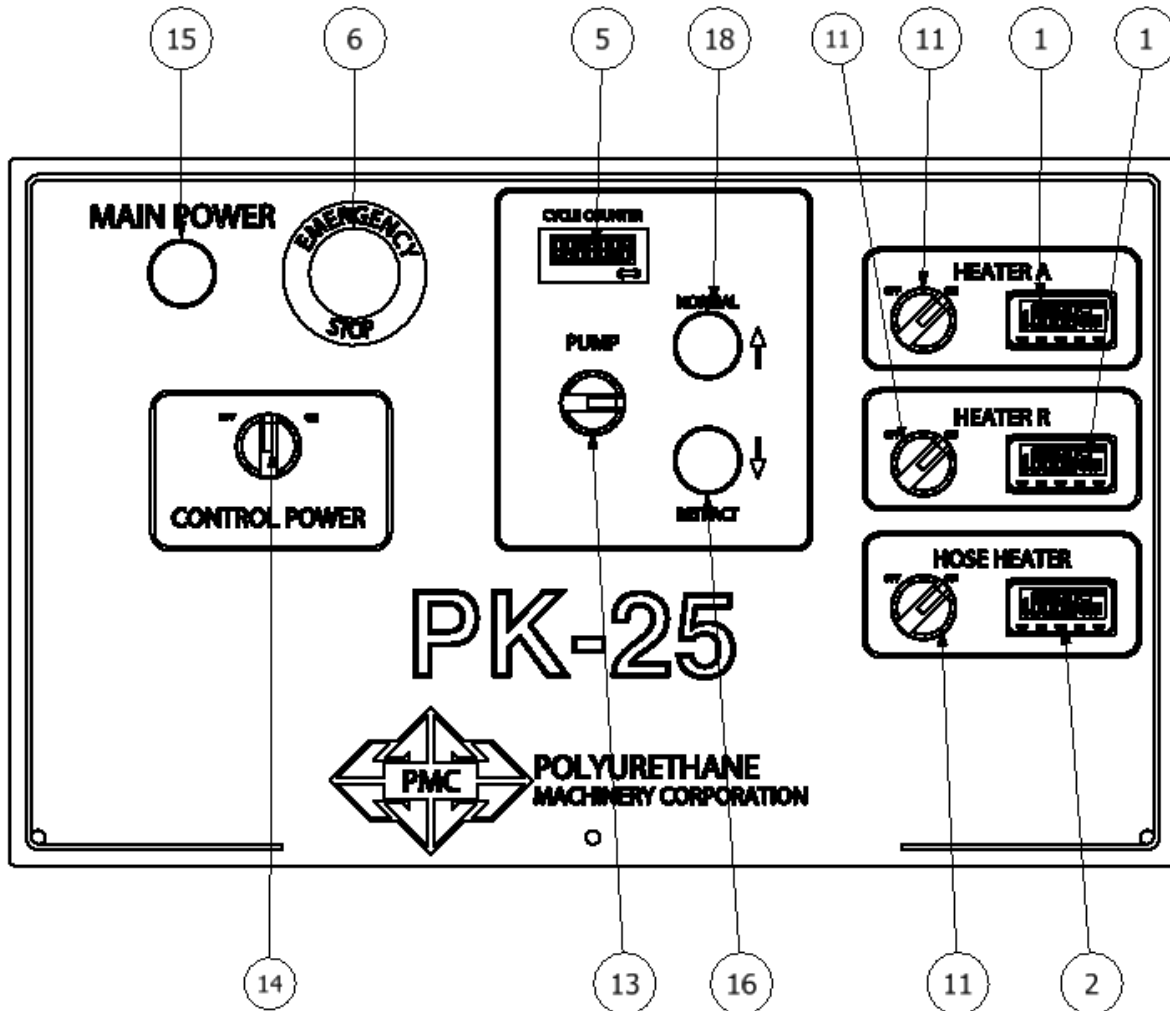
The equipment includes components that reach high temperatures and can cause burns. Hot parts of the equipment must not be handled or touched until they have cooled completely.

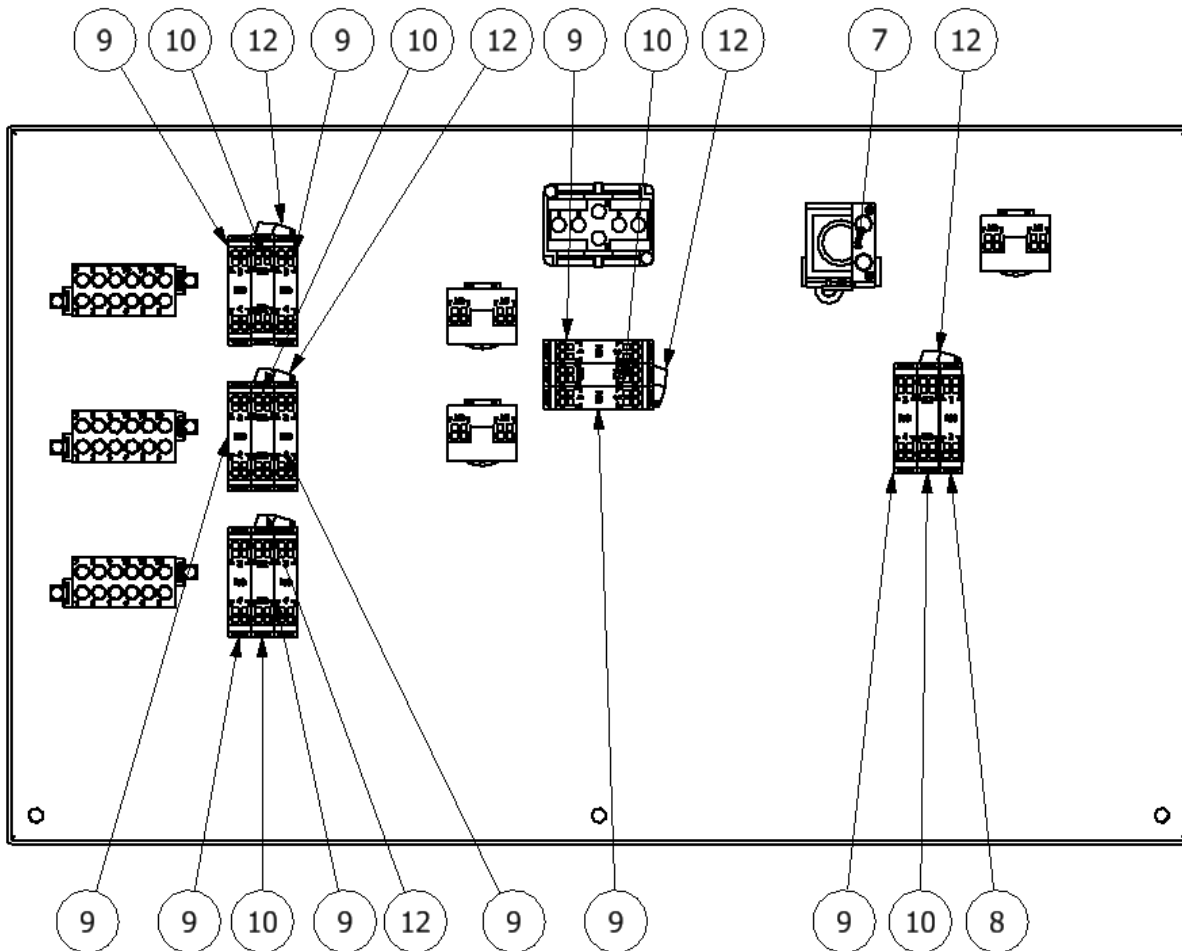


To prevent serious injury through crushing or amputation, do not work with the equipment without the safety guards installed on the moving parts. Make sure that all the safety guards are correctly reinstalled at the end of the repair or maintenance work of the equipment.

220 VAC-1/3 PHASE CONSOLE COVER

Component Identification



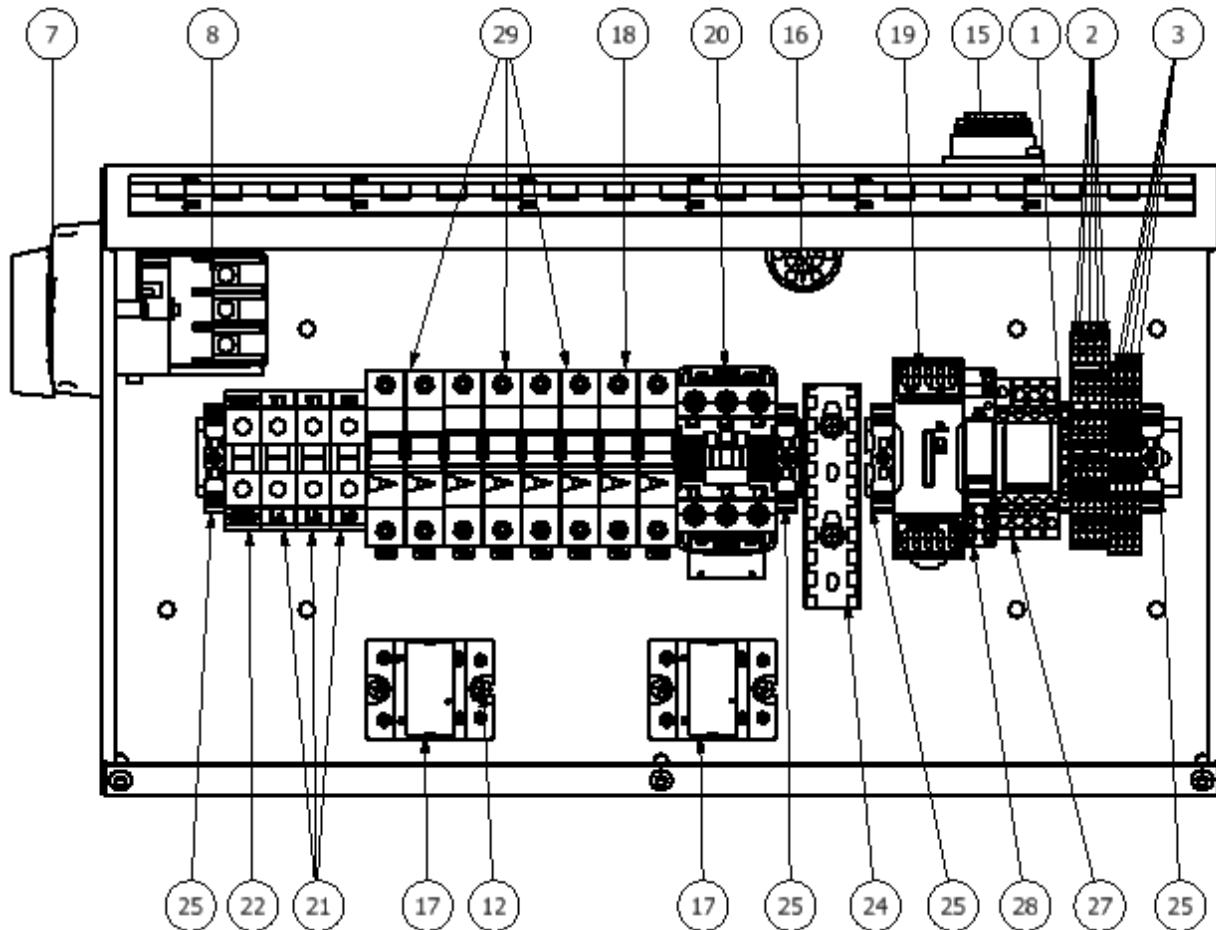


ITEM	PART NUMBER	DESCRIPTION	QTY
1	201154	TEMP CONT, HTR, OMRON	2
2	201155	TEMP CONT, HOSE, OMRON	1
3	201215	LAMP, LED RED, 24VAC/DC	4
4	201216	LIGHT UNIT, WHITE, 24VDC	1
5	201217	CYCLE COUNTER	1
6	201218	E-STOP PUSH-TWIST	1
7	201219	CONTACT BLOCK, NON-LIGHTED SPST-NC	1
8	201220	CONTACT BLOCK, NC, PUSH IN	1
9	201221	CONTACT BLOCK, NO, PUSH IN	9
10	201222	LAMP HOLDER, PUSH-IN	5
11	201223	22mm SWITCH, 2 POS RED, MANUAL	3
12	201224	MOUNTING COLLAR, 22mm	5
13	201225	22mm SWITCH, 3 POS WHITE, MANUAL	1
14	201226	22mm SWITCH, 3 POS RED, RST L/R	1

15	201228	LIGHT UNIT, GREEN, 240VAC	1
16	201229	LIGHT UNIT, ORANGE, 24VDC	2
17	202864	WASHER, FLAT, SAE, #8, ZP	8
18	202869	CONSOLE, 12 X 20 X 9.15	1
19	203129	NUT, K-LOCK, #10-32, ZP	2
20	201898	SHCS, #6-32 X 0.625, 18-8 SS	1
21	201063	WASHER, LOCK, #6, 18-8 SS	1
22	201064	NUT, HEX, #6-32, 18-8 SS	1

220 VAC-3 PHASE CONSOLE BOTTOM

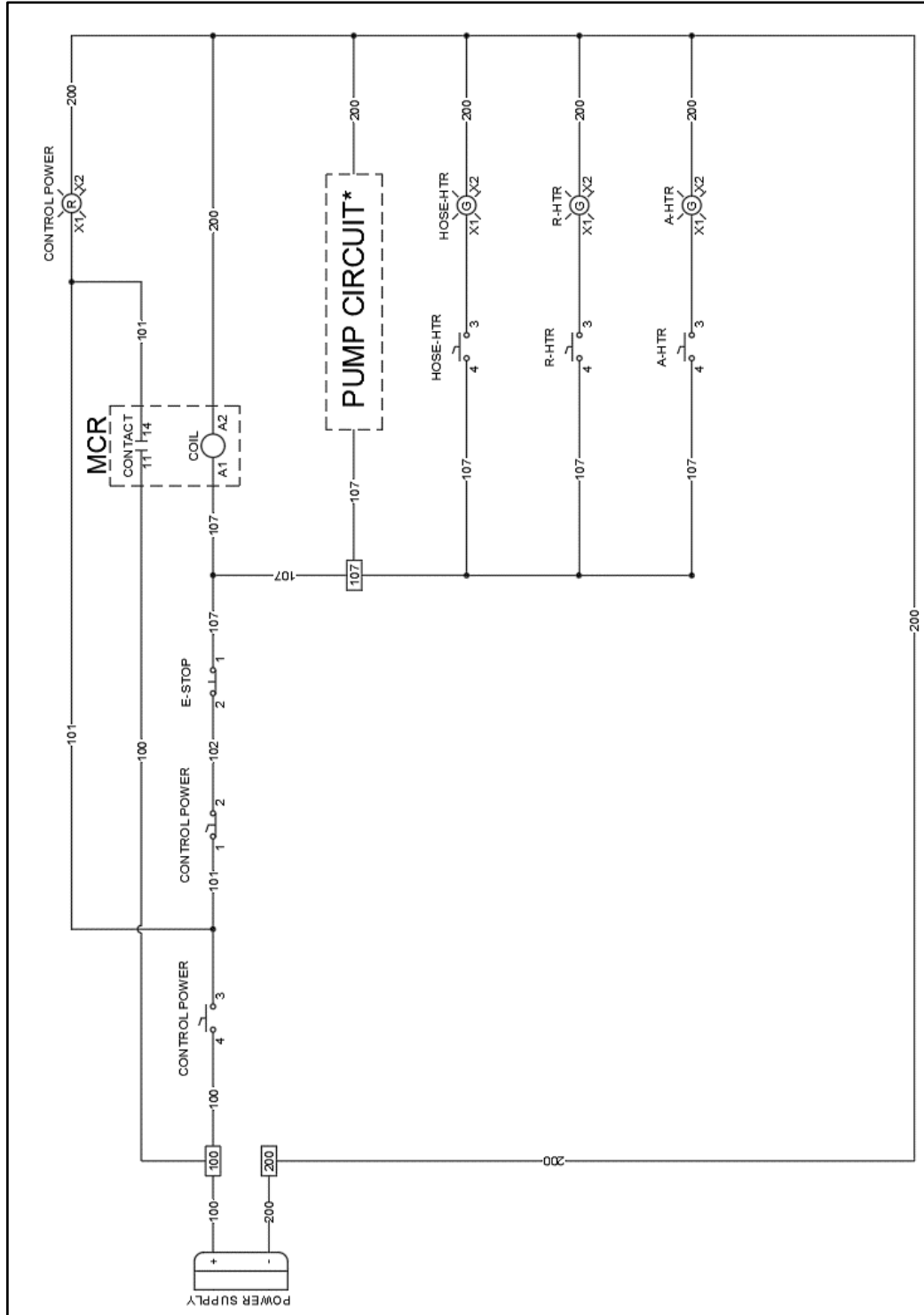
Component Identification



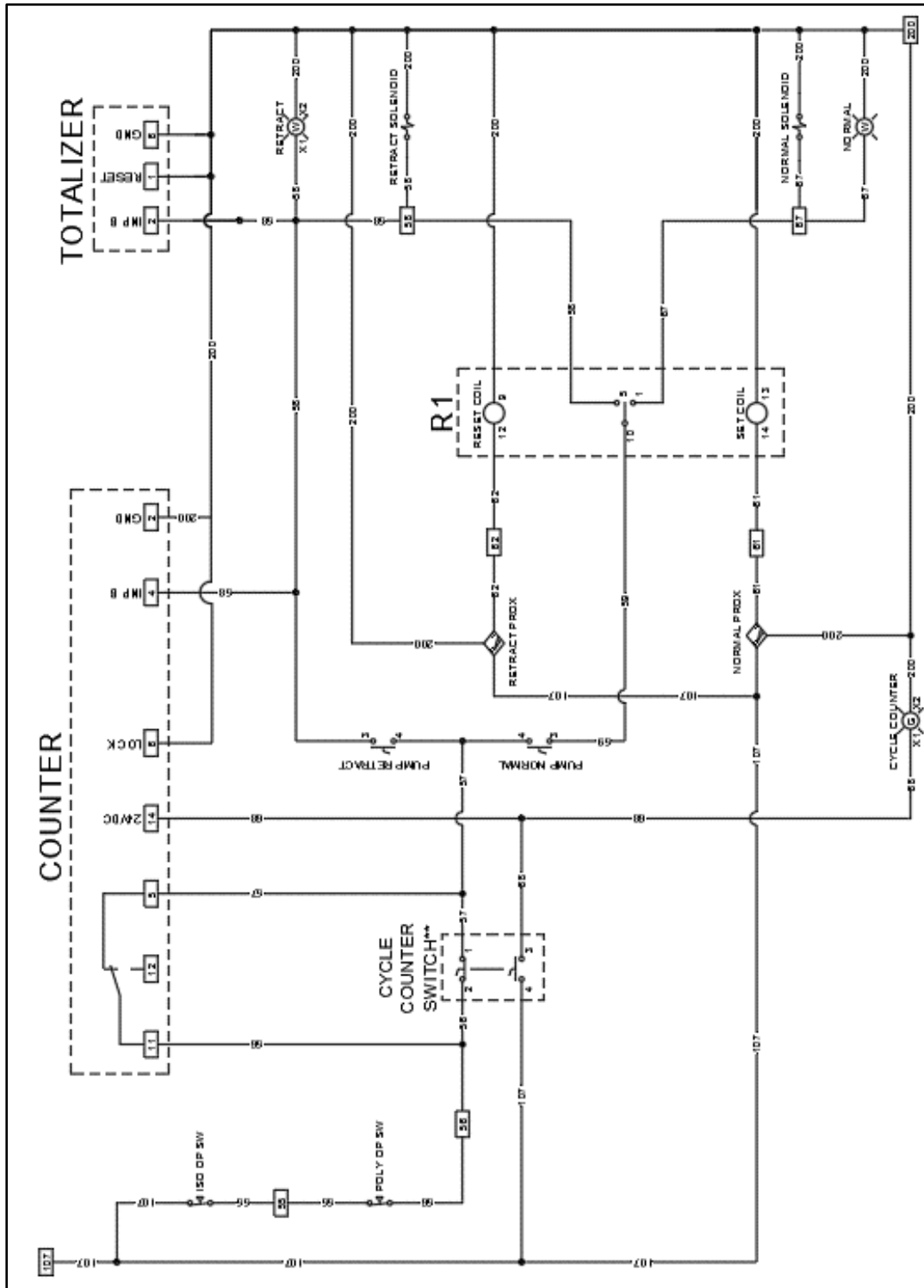
ITEM	PART NUMBER	DESCRIPTION	QTY
1	201045	TERMINAL BLOCK GROUND, PTC	1
2	201046	TERMINAL BLOCK 3 TIER, PTC	5
3	201047	TERMINAL BLOCK 2 TIER, PTC	4
4	201263	JUMPER, 2 POSITION	4
5	201264	JUMPER, 4 POSITION	1
6	201266	MARKER, STRIP, 3.5mm WIDTH	48
7	201303	DOOR MOUNTING KIT, ROTARY DISCONNECT	1
8	201304	DISCONNECT, ROTARY, 80A, 3 POLE	1
9	201895	STRAIN RELIEF, W/NUT, 0.590-1.00 ID	1
10	202861	MARKER, TERMINAL BLOCK, 12mm	1
11	202862	MARKER, TERMINAL BLOCK, 16mm	8
12	202863	PHCS, #8-32 x 0.375, ZP	4
13	202864	WASHER, FLAT, SAE, #8, ZP	8
14	202869	CONSOLE, 12 X 20 X 9.15	1
15	202911	CABLE ASSY, 24 SUPPLY	1
16	203067	CABLE MEMBRANE, 38mm, 13 x 5.2mm	1
17	EL-34	RELAY, 50A, 480V	2
18	EL-114	CIRCUIT BREAKER, 3A, 2 POLE, TYP	1
19	EL-122	POWER SUPPLY, 24VDC	1
20	EL-125-CARLOS	CONTACTOR, 40A, 24V, w/ SURGE	1
21	EL-143	TERMINAL BLOCK; 16MM	3
22	EL-146	TERMINAL BLOCK; 16MM, GRND	1
23	EL-147	DIN RAIL, 35 X 7.5mm	16.375 in
24	EL-149	WIRE DUCT, 1.0 X 2.25, GREY	4.000 in
25	EL-152	END STOP, 35mm	4
26	EL-154	LATCHING RELAY; 24V	1
27	EL-155	RELAY SOCKET	1
28	EL-174	SS Relay, 24VDC	1
29	EL-188	CIRCUIT BREAKER, 32A, 2 POLE	3
30	203130	PHCS, #8-32 x 0.250, ZP	7
31	203131	HHCS, #10-32 x 0.375, GND	1
32	201898	SHCS, #6-32 X 0.625, 18-8 SS	1
33	201063	WASHER, LOCK, #6, 18-8 SS	1
34	201064	NUT, HEX, #6-32, 18-8 SS	1

Schematics

24 VDC Power Circuit

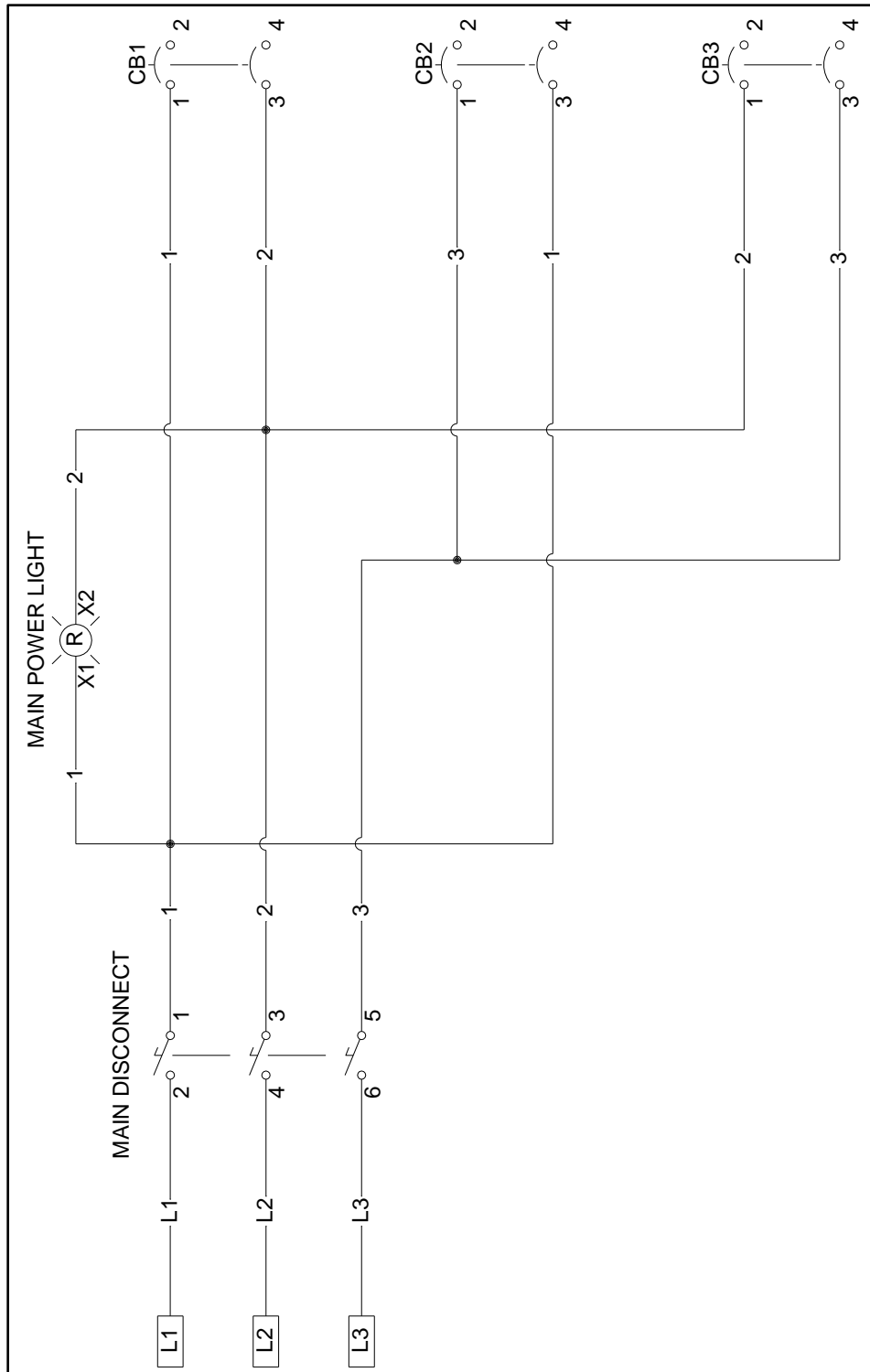


Pump Circuit



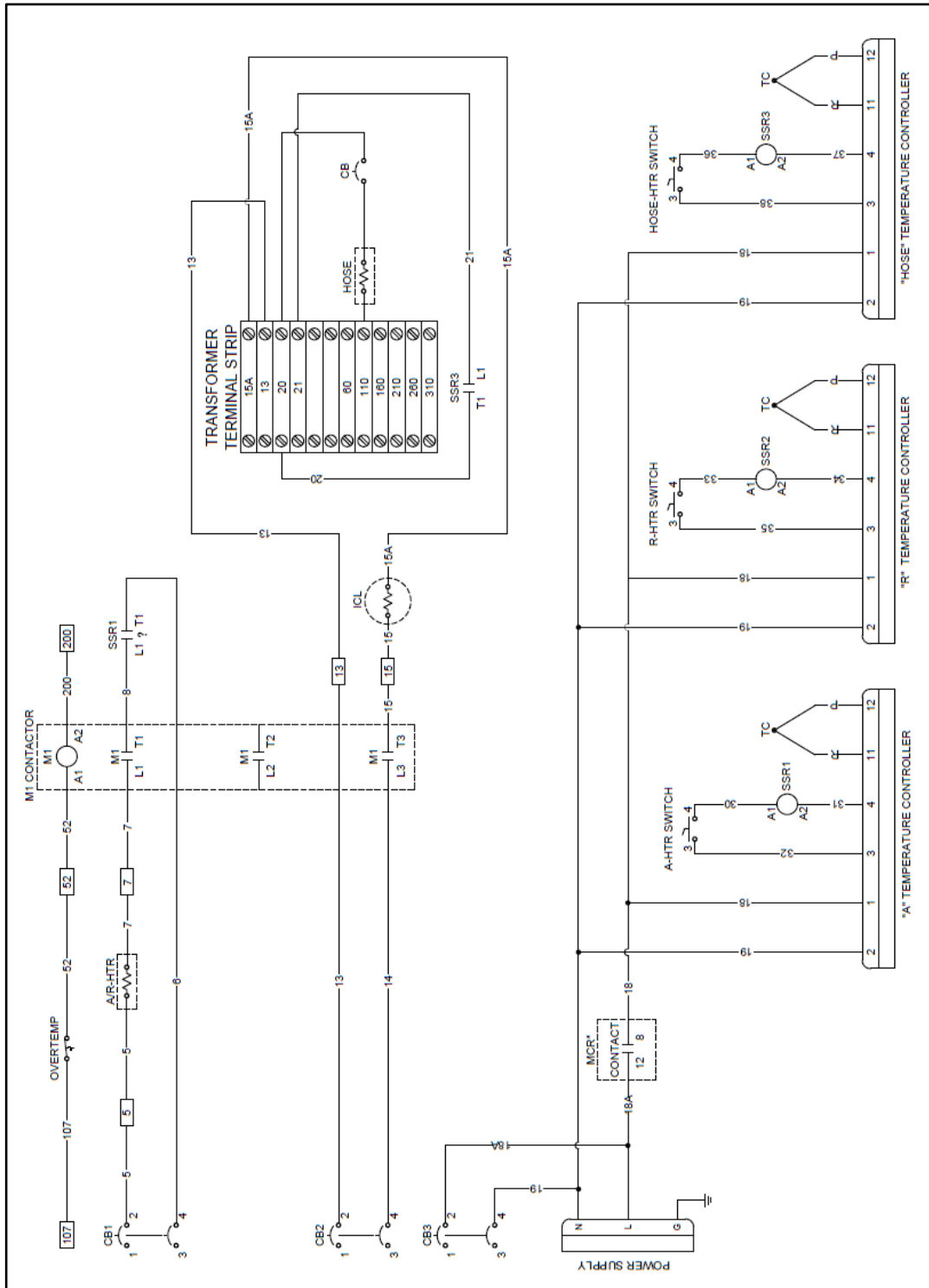
Schematics

Incoming Power



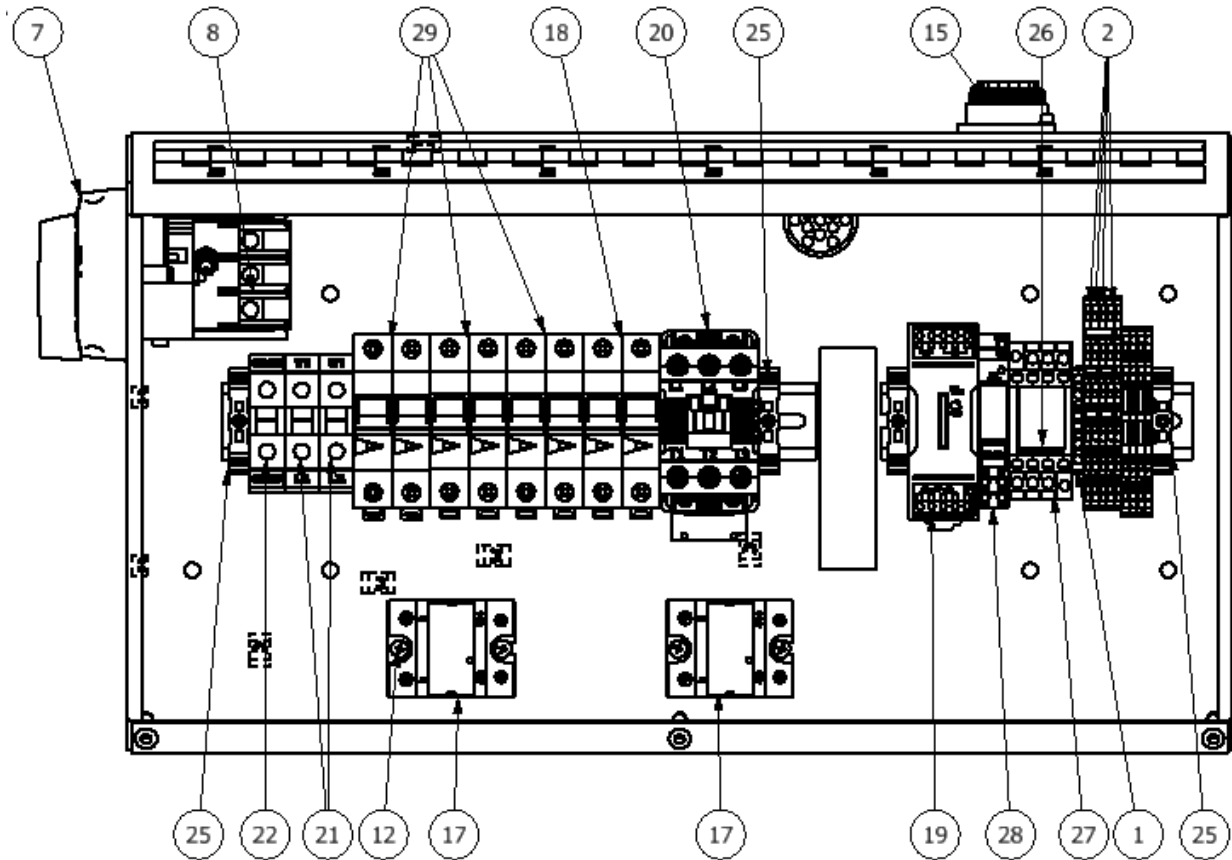
Error! Reference source not found. **Rev** Error! Reference source not found.

Heater Circuit



220 VAC-1 PHASE CONSOLE BOTTOM

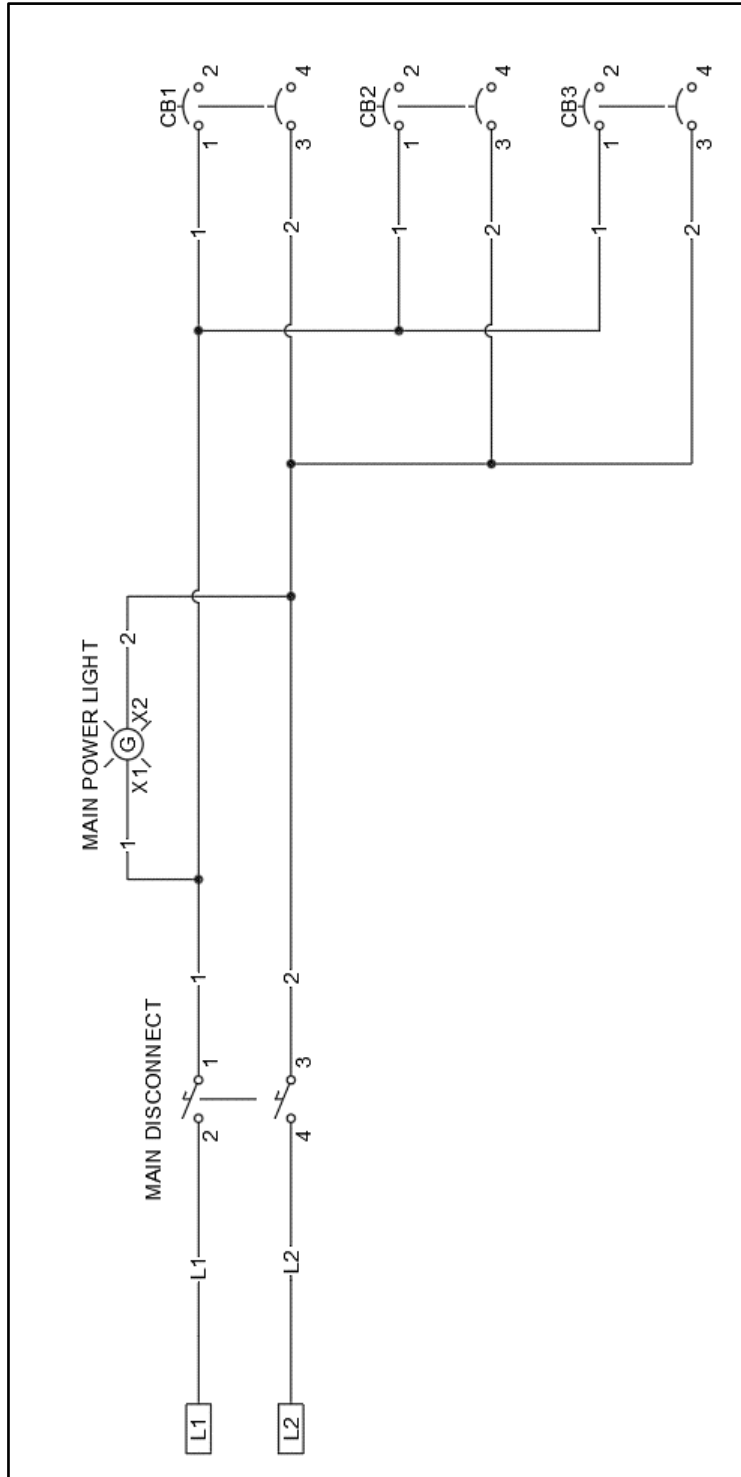
Component Identification



ITEM	PART NUMBER	DESCRIPTION	QTY
1	201045	TERMINAL BLOCK GROUND, PTC	1
2	201046	TERMINAL BLOCK 3 TIER, PTC	5
3	201047	TERMINAL BLOCK 2 TIER, PTC	4
4	201263	JUMPER, 2 POSITION	4
5	201264	JUMPER, 4 POSITION	1
6	201266	MARKER, STRIP, 3.5mm WIDTH	48
7	201303	DOOR MOUNTING KIT, ROTARY DISCONNECT	1
8	201304	DISCONNECT, ROTARY, 80A, 3 POLE	1
9	201895	STRAIN RELIEF, W/NUT, 0.590-1.00 ID	1
10	202861	MARKER, TERMINAL BLOCK, 12mm	1
11	202862	MARKER, TERMINAL BLOCK, 16mm	8
12	202863	PHCS, #8-32 x 0.375, ZP	4
13	202864	WASHER, FLAT, SAE, #8, ZP	8
14	202869	CONSOLE, 12 X 20 X 9.15	1
15	202911	CABLE ASSY, 24 SUPPLY	1
16	203067	CABLE MEMBRANE, 38mm, 13 x 5.2mm	1
17	EL-34	RELAY, 50A, 480V	2
18	EL-114	CIRCUIT BREAKER, 3A, 2 POLE, TYP	1
19	EL-122	POWER SUPPLY, 24VDC	1
20	EL-125-CARLOS	CONTACTOR, 40A, 24V, w/ SURGE	1
21	EL-143	TERMINAL BLOCK; 16MM	3
22	EL-146	TERMINAL BLOCK; 16MM, GRND	1
23	EL-147	DIN RAIL, 35 X 7.5mm	16.375 in
24	EL-149	WIRE DUCT, 1.0 X 2.25, GREY	4.000 in
25	EL-152	END STOP, 35mm	4
26	EL-154	LATCHING RELAY; 24V	1
27	EL-155	RELAY SOCKET	1
28	EL-174	SS Relay, 24VDC	1
29	EL-188	CIRCUIT BREAKER, 32A, 2 POLE	3
30	203130	PHCS, #8-32 x 0.250, ZP	7
31	203129	NUT, K-LOCK, #10-32, ZP	2
32	201898	SHCS, #6-32 X 0.625, 18-8 SS	1
33	201063	WASHER, LOCK, #6, 18-8 SS	1
34	201064	NUT, HEX, #6-32, 18-8 SS	1

Schematics

Incoming Power



Heater Circuit

