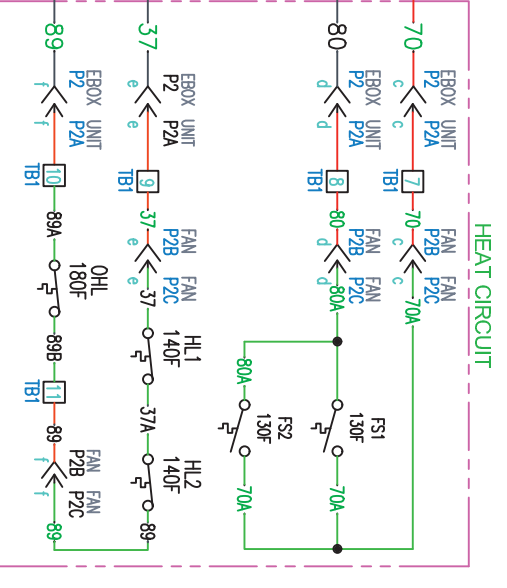
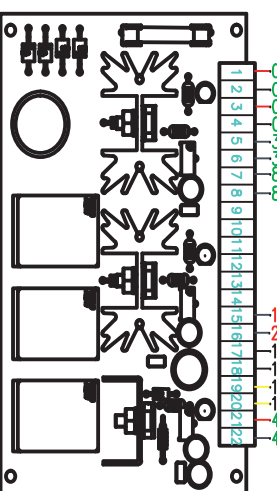


NOTE:
GREEN LED "ON" TERMINAL 4 AND 6
CLOSED WHEN POWER IS WITHIN
SPECIFICATION.

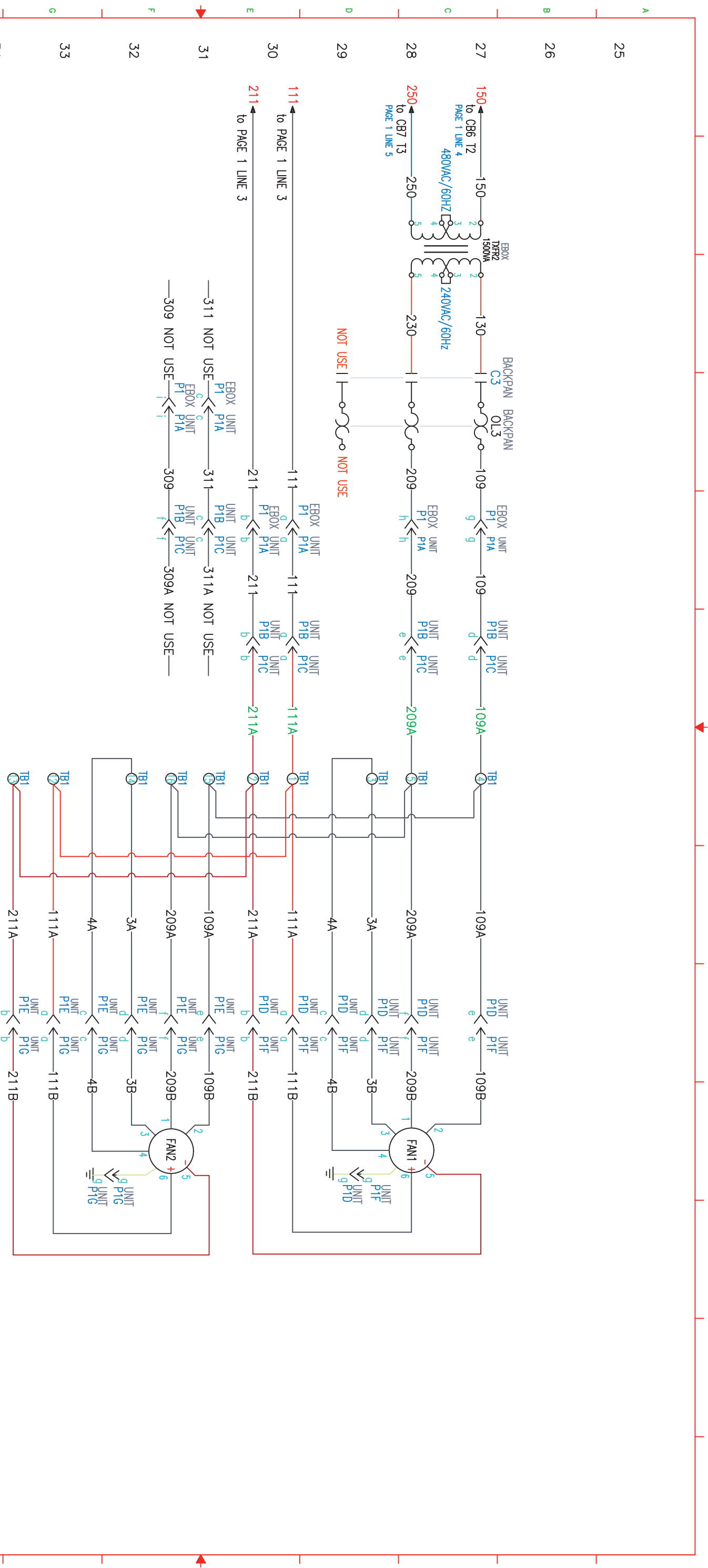


- SYMBOLS USE IN SCHEMATIC**
- TERMINAL COIL
 - NO CONTACT CLOSED
 - FEMALE PIN
 - MALE PIN
 - HIGH LIMIT
 - FAN SWITCH
 - OVERLOAD
 - NO CONTACT CLOSED WHEN ENERGIZE
 - THERMOCOUPLE
 - HIGH PRESSURE SWITCH
 - LOW PRESSURE SWITCH
 - SRB SILICONE CONTROLLED RECTIFIER
 - 3-PHASE VOLTAGE MONITOR
 - TRANSFORMER
 - 3-PHASE MOTOR
 - SUPPLY VARIABLE
 - RUSE W/FUSE BLOCK
 - HEATER ELEMENTS ASSEMBLY
 - SCR 4-20mA ANALOG INPUT SIGNAL

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Mine Air Systems

TITLE		M150-SXH-04 (480VAC SEC) WIRING DIAGRAM	
DWN BY	NH	SHEET	1 OF 6
CHECKED		PRODUCT	MAS-1500 (480VAC 60HZ)
DATE	02-12-2015	DRAWING NO.	ES-M150-SXH-04
SCALE	NO SCALE	SIZE	A2
		REV.	1.2

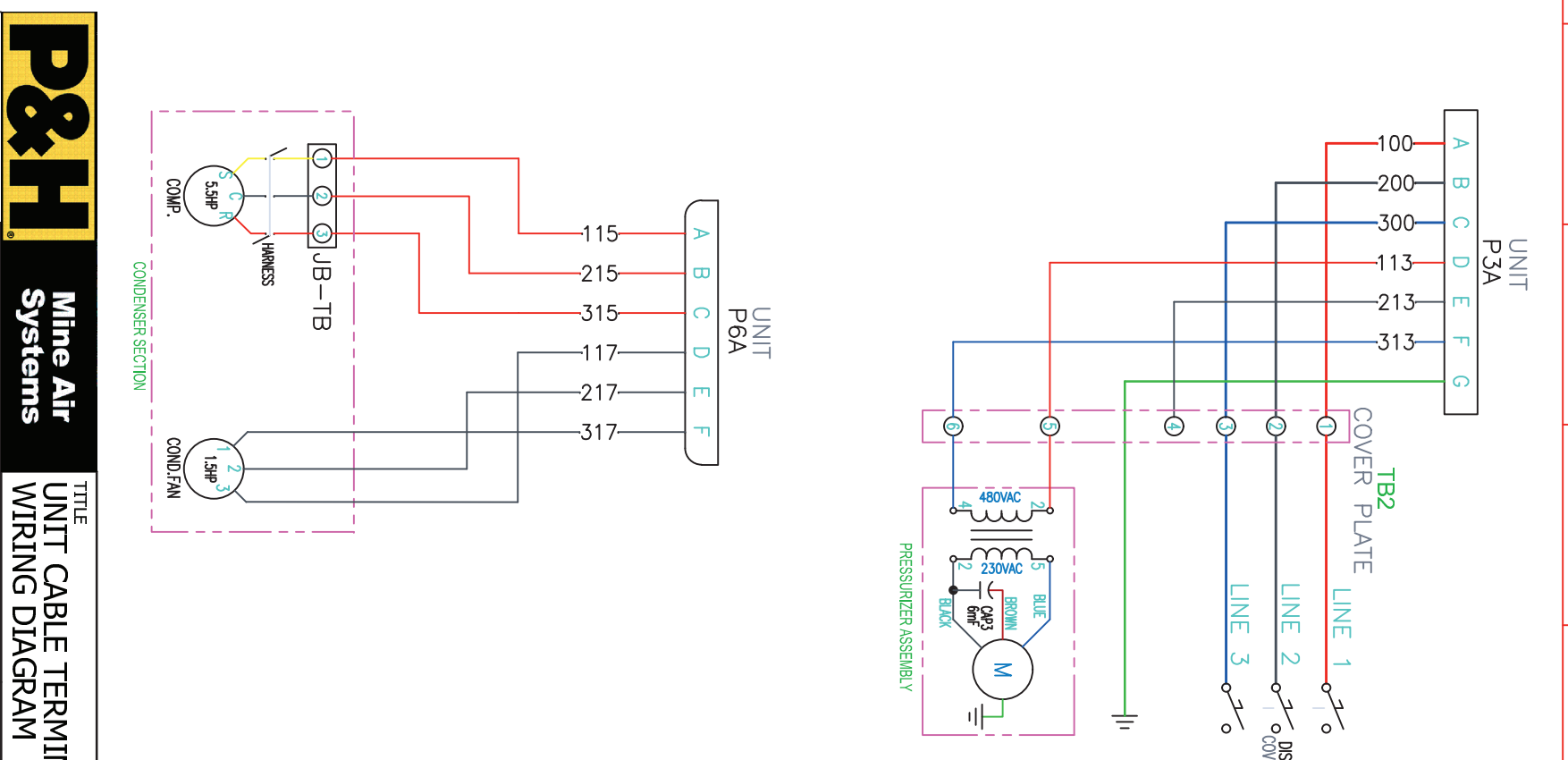
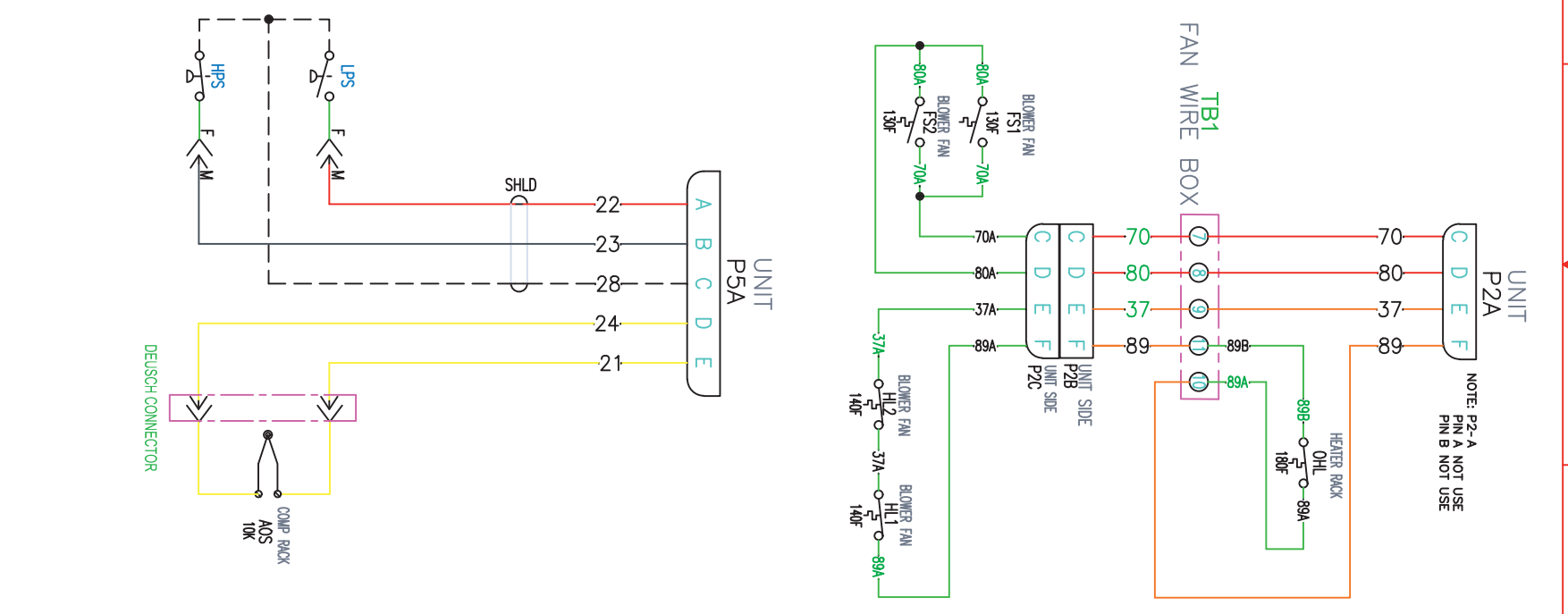
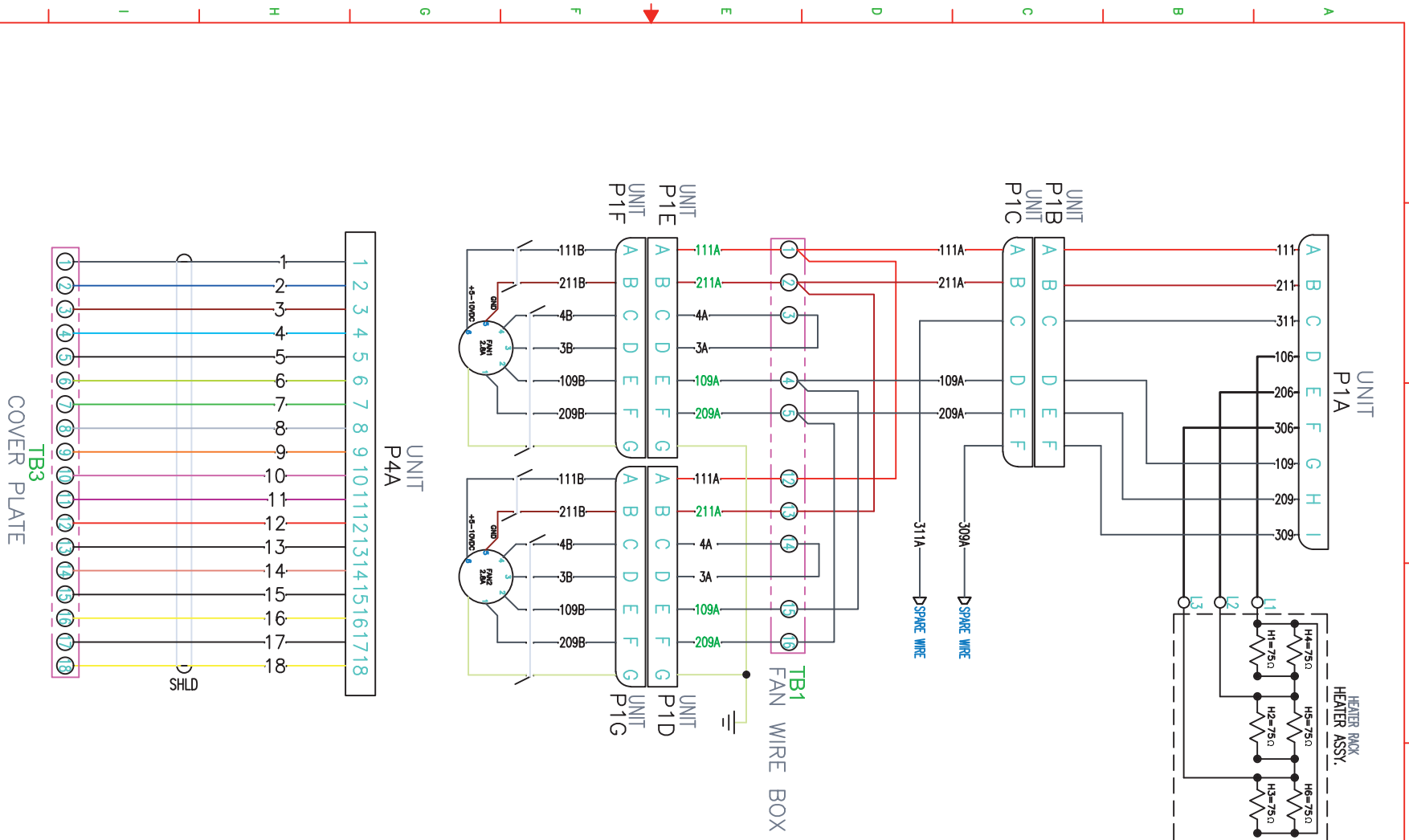
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TITLE
DUAL FAN BLOWER WIRING DIAGRAM

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	CHECKED	DATE 02-12-2015		
	SCALE NO SCALE			DRAWING NO. ES-M150-SXH-04
				SIZE A2
				REV. 1.2

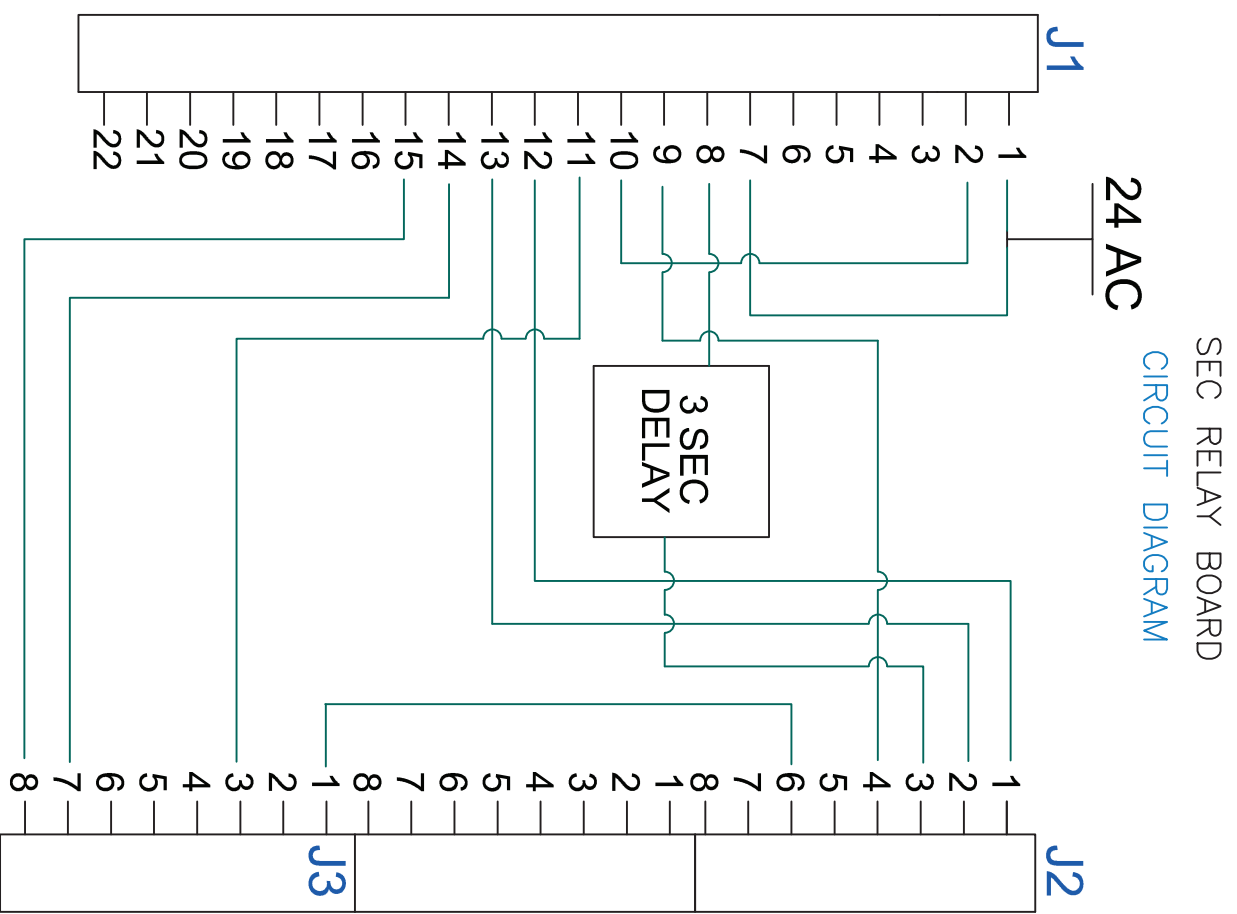
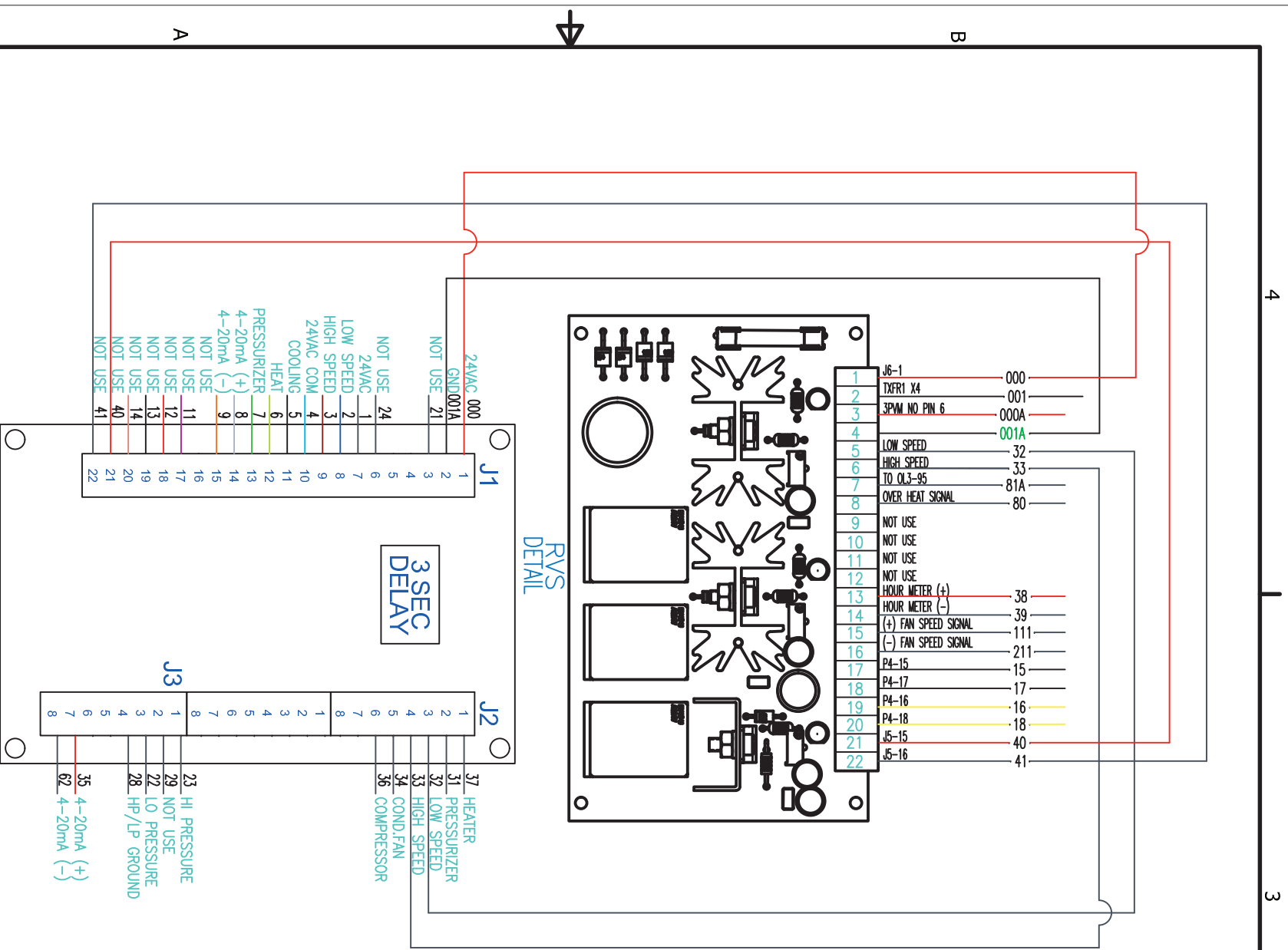


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TITLE
UNIT CABLE TERMINATION
WIRING DIAGRAM

DESIGNED BY	DATE	SCALE	SHEET 3 OF 6	PRODUCT MAS-1500 (480VAC 60HZ)
CHECKED	02-12-2015	NO SCALE	DRAWING NO. ES-M150-SXH-04	SIZE A2
DATE				REV. 1.2

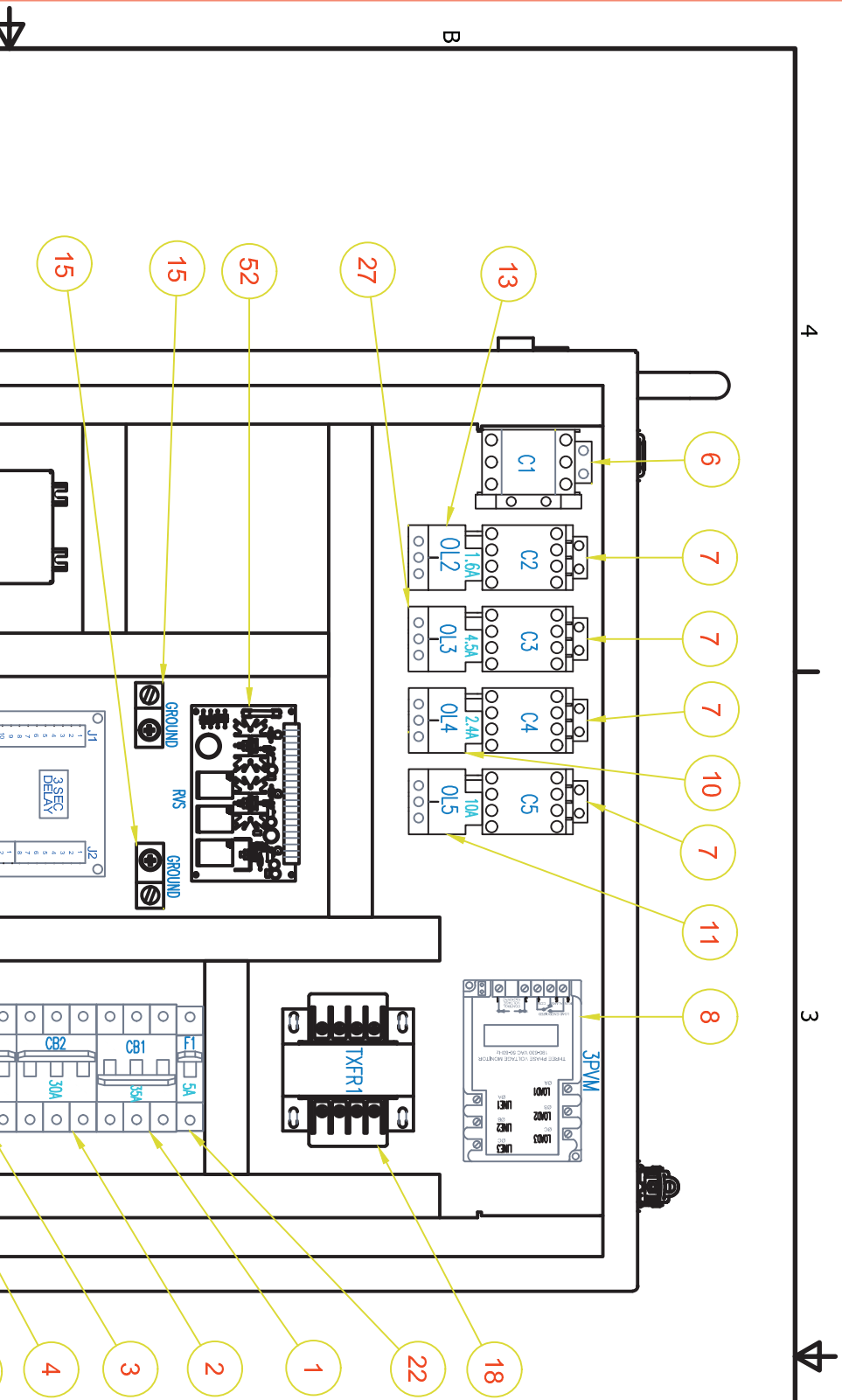
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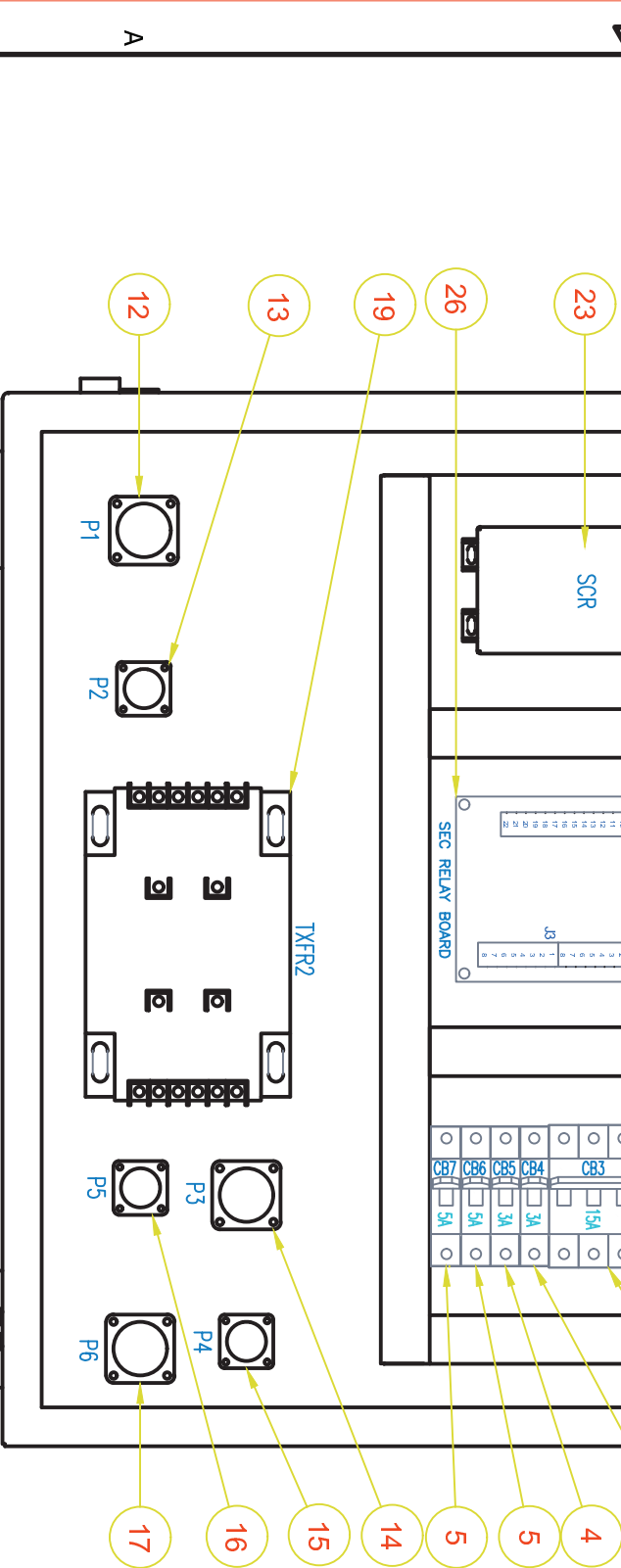
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SEC RELAY BOARD DETAIL
WIRING DIAGRAM

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ITEM	TAGS	QTY	PART NUMBER	DESCRIPTION
1	CB1	1	NPMN40-02-027	35A CIRCUIT BREAKER
2	CB2	1	NPMN40-02-020	30A CIRCUIT BREAKER
3	CB3	1	NPMN40-02-028	15A CIRCUIT BREAKER
4	CB4, CB5	2	NPMN40-02-030	3A CIRCUIT BREAKER
5	CB6, CB7	2	NPMN40-02-029	5A CIRCUIT BREAKER
6	C1	1	MN40-15-003	C37 CONTACTOR
7	C2, C3, C4, C5	4	MN40-15-001	CONTACTOR'S AIR HANDLER/CONDENSER/PRESSURIZER
8	3PVM	1	NPMN40-15-077	3-PHASE VOLTAGE MONITORING RELAY
10	OL4	1	MN40-15-014	CONDENSER OVERLOAD
11	OL5	1	MN40-15-011	COMPRESSOR OVERLOAD
12	P1	1	MN41-013-000-8	EVAP & HEATING POWER CONNECTION
13	OL2	1	MN40-15-012	OVERLOAD
14	P3	1	MN41-11-000	EBOX SIDE MAIN POWER CONNECTION
15	GROUND	2	MN40-04-002	GROUND LUG
17	P6	1	MN41-04-000	CONDENSOR POWER CONNECTION ASSY E-BOX SIDE
18	TXFR1	1	NPMN04-01-032-1	TRANSFORMER, 480VAC TO 24VAC 150VA
19	TXFR2	1	NPMN04-01-030	TRANSFORMER, 480VAC 1.5KVA
22	F1	1	MN40-02-013	FUSE 5 AMP
23	SCR	1	MN40-15-030	HEAT REGULATOR
26	SEC RELAY BOARD	1	MN50-16-000	SEC, RELAY BOARD ASSEMBLY
27	OL3	1	NPMN50-16-054	EVAP FAN OVERLOAD
32	P2	1	MN41-06-000-B	COND./EVAP. CONNECTION ASSY E-BOX SIDE
39	P4	1	MN40-17-010	MINE LOGIC SYSTEM (MLS) E-BOX HARNESS
49	P5	1	MN41-06-000-A	CONDENSER CONNECTION ASSEMBLY E-BOX SIDE
52	RVS	1	NPMN52-23-004	REGULATED VOLTAGE SUPPLY



REV	DESCRIPTION	DATE	REPPD/ECN	BY
1.0	INITIAL REVISION	2/12/2015		NH
1.1	CHANGED WIRE NUMBER OF COMPRESSOR HARNESS AS PER SHOP MARK UP	1/29/2016	ECN#486	NH
1.2	SWITCHED CONDENSER FAN L1 AND L3 AS PER SHOP MARK UP	2/16/2016	ECN#488	NH

P&H Mine Air Systems

TITLE: **EBOX SEC COMPONENT LAYOUT**

SHEET 5 OF 6 PRODUCT: MAS-1500 (480VAC 60HZ)

DRAWING NO. ES-M150-SXH-04

REV	DESCRIPTION	DATE	REPPD/ECN	BY
1.0	INITIAL REVISION	2/12/2015		NH
1.1	CHANGED WIRE NUMBER OF COMPRESSOR HARNESS AS PER SHOP MARK UP	1/29/2016	ECN#486	NH
1.2	SWITCHED CONDENSER FAN L1 AND L3 AS PER SHOP MARK UP	2/16/2016	ECN#488	NH

LEGEND

- CB# CONTACTOR
- OL# THERMAL OVERLOAD RELAY
- CB# CIRCUIT BREAKER
- TXFR# TRANSFORMER
- 3PVM 3-PHASE MONITOR RELAY
- MLC RELAY CIRCUIT BOARD
- SEC RELAY CIRCUIT BOARD
- P# EBOX CONNECTOR
- SCR HEATER REGULATOR
- GROUND GROUND LUG
- RVS REGULATED DC VOLTAGE SUPPLY
- HM HOUR METER
- F1 FUSE BLOCK WITH FUSE

SCHEMATIC BILLS OF MATERIALS

TAGS	QTY	PART NUMBER	DESCRIPTION
F1	1	MN40-02-013	FUSE 5 AMP
TB1	1	MN40-04-003	20 POSITION TERMINAL STRIP
COND.FAN	1	MN40-10-003	1500 CONDENSER FAN MOTOR
C1	1	MN40-15-003	C30 CONTACTOR
C2	1	MN40-15-001	CONTACTOR'S AIR HANDLER/CONDENSER/PRESSURIZER
C3,C4,C5	1	MN40-15-001	CONTACTOR'S AIR HANDLER/CONDENSER/PRESSURIZER
FS1,FS2	2	MN40-15-005	FAN SWITCH 130F
HL1,HL2	2	MN40-15-006	HIGH LIMIT (140F)
SCR	1	MN40-15-030	HEAT REGULATOR
AOS	1	MN40-15-033	AIR OUTSIDE SENSOR
P1	1	MN41-013-000-8	EVAP & HEATING POWER CONNECTION
P1A	1	RMN40-17-051	EVAP/HEATING DOUBLE END PLUG CABLE ASSY.
P1C	1	RMN40-17-052	6 PIN MALE EVAP/HEATING CABLE ASSY.
P1D,P1E	2	RMN40-17-053	7 PIN FEMALE FAN BLOWER CONTROL CABLE ASSY.
P1F,P1G	2	RMN40-17-054	EVAP FAN ASSY. W/CABLE PLUG
P2	1	MN41-06-000-B	COND./EVAP. CONNECTION ASSY E-BOX SIDE
P2A,P2B	2	RMN40-17-057	6 PIN FEMALE FAN BLOWER CONTROL CABLE ASSY.
P2C	1	RMN40-17-058	6 PIN MALE SAFETY CONTROL CABLE ASSY.
P3	1	MN41-11-000	EBOX SIDE MAIN POWER CONNECTION
P3A	1	MN40-12-002	MAIN POWER CONN. ASSY UNIT SIDE
P4	1	MN40-17-010	MINE LOGIC SYSTEM (MLS) E-BOX HARNESS
P4A	1	MN40-17-001	CABLE ASSY 5' (FORM MLC TO CAB)
P5A	1	MN41-05-000	CONDENSOR CONTROL CONNECTION
P5	1	MN41-06-000-A	CONDENSER CONNECTION ASSEMBLY E-BOX SIDE
P6	1	MN41-04-000	CONDENSOR POWER CONNECTION ASSY E-BOX SIDE
P6A	1	MN41-03-000	CONDENSOR POWER CONNECTION ASSY UNIT SIDE
SEC BOARD	1	MN50-16-000	SEC, RELAY BOARD ASSEMBLY
LPS	1	MN60-10-001	LOW PRESSURE SWITCH
HPS	1	MN60-10-003	HIGH PRESSURE SWITCH
PRESS.FAN	1	MN80-01-200	PRESSURIZER FAN
TXFR2	1	NPMN04-01-030	TRANSFORMER 480VAC 1.5KVA
TXFR1	1	NPMN04-01-032-1	TRANSFORMER, 480 TO 24VAC, 150VA
CAP,CAP3	2	NPMN07-01-044	PRESSURIZER STARTING CAPACITOR
CB1	1	NPMN40-02-027	35A CIRCUIT BREAKER
CB2	1	NPMN40-02-020	30A CIRCUIT BREAKER
CB3	1	NPMN40-02-028	15A CIRCUIT BREAKER
CB4	1	NPMN40-02-030	3A CIRCUIT BREAKER
CB5	1	NPMN40-02-030	3A CIRCUIT BREAKER
CB6	1	NPMN40-02-029	5A CIRCUIT BREAKER
CB7	1	NPMN40-02-029	5A CIRCUIT BREAKER
OL2	2	NPMN40-15-012	OVERLOAD
OL3	1	NPMN50-16-054	EVAP. FAN OVERLOAD
OL4	1	MN40-15-014	CONDENSER OVERLOAD
OL5	1	MN40-15-011	COMPRESSOR OVERLOAD
OHL	2	NPMN40-15-037	OPERATING HIGH LIMIT (180F)
HM	1	NPMN50-16-055	HOURLY METER
RVS	1	NPMN52-23-004	REGULATED VOLTAGE SUPPLY
JB-TB	1	NPMNMA-00-006	COMP. JUNCTION BOX ASSY.
HEATER ASSY.	1	NPMNMA-15-075	HEATER ASSEMBLY
COMP.	1	NPMNMA-15-081	M150 COMPRESSOR MOTOR
M	1	PR-PK-251	PRESSURIZER
FAN1,FAN2	2	RMN40-17-054	EVAP FAN ASSY. W/CABLE PLUG



Mine Air
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TITLE
SCHEMATIC BILL OF MATERIALS

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DWN BY NH
CHECKED
DATE 02-12-2015
SCALE NO SCALE

SHEET 6 OF 6
DRAWING NO.
ES-M150-SXH-04

PRODUCT
MAS-1500 (480VAC 60HZ)
SIZE B
REV. 1.2