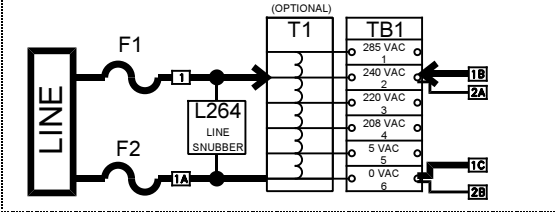


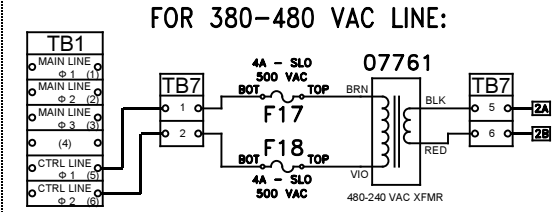
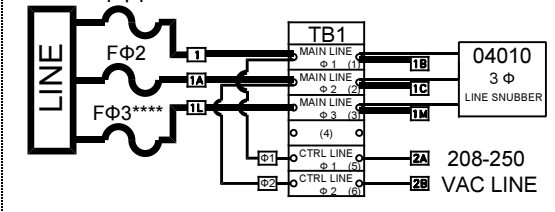
| LTR | ECR  | REVISION   | BY | DATE    | CHKD BY |
|-----|------|--|----|---------|---------|
| F   | 7176 | ADDED TB6 CIRCUITRY, WIRE 4E WAS CONN. TO TB3-11.  | PT | 8/19/11 | DM      |
| G   | 9395 | CHANGED CONNECTIONS OF 2E TO TB2.  | GD | 1/19/17 | SC      |
| H   | 9401 | UPDATED GRAPHIC FOR TB2 TO ADD 277VAC TAP AND WIRE C3 LOTS.  | GD | 1/24/17 | SC      |
| J   | 9965 | UPDATED TB1 CONNECTIONS; ADDED DC BUS CIRCUIT FOR 380-480 VAC; ADDED GRAPHIC FOR K904-01 & -02; UPDATED SYS/CONSOLE CONNECTIONS. | PT | 7/06/18 | SC      |

### TB1 CONNECTIONS

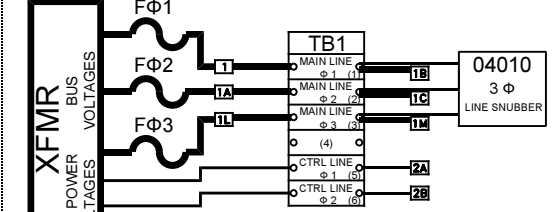
#### CASE 1: 1-PHASE DESIGN 208-277 VAC



#### CASE 2: 3-PHASE DESIGN WITH NO LMT

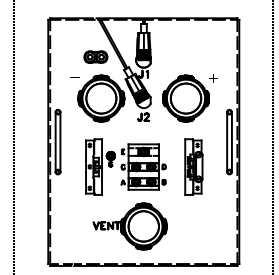
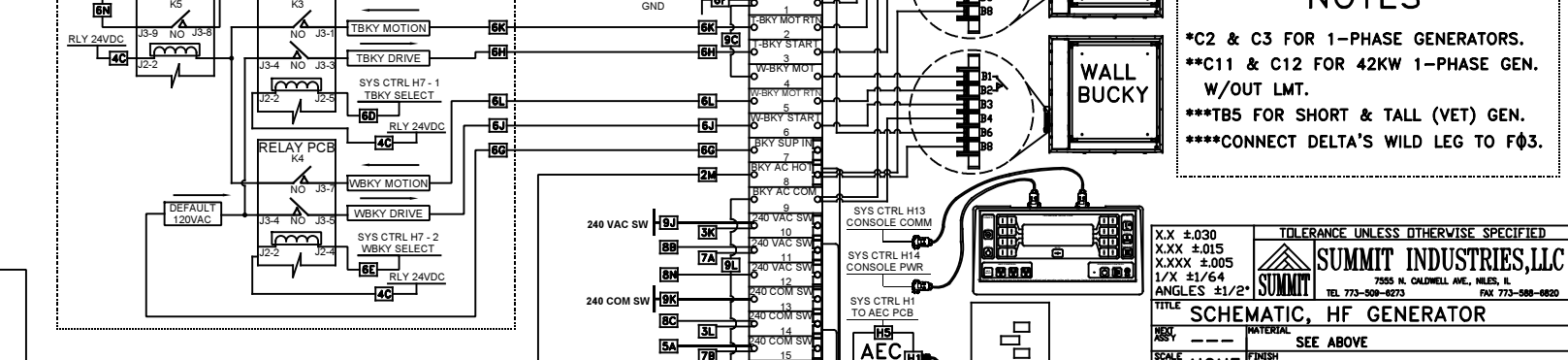
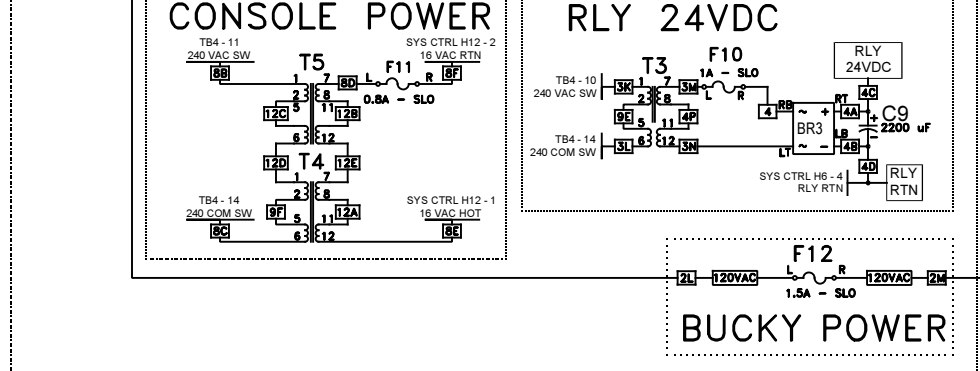
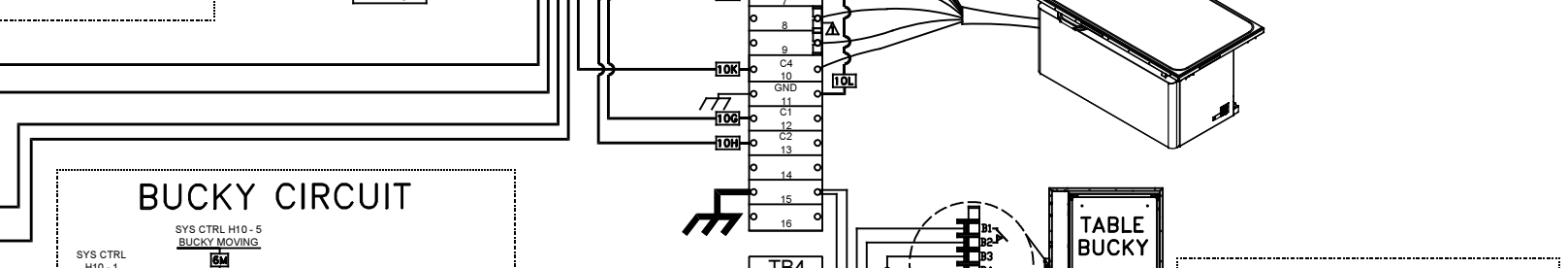
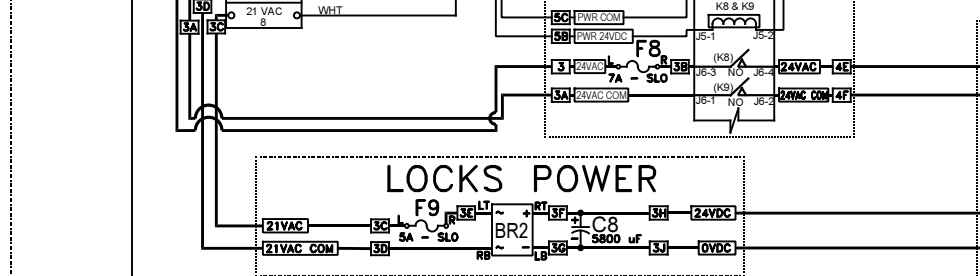
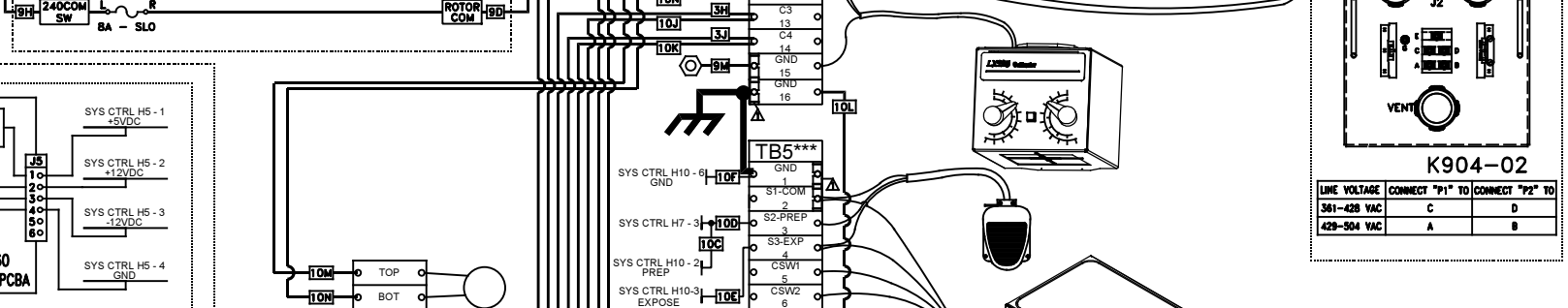
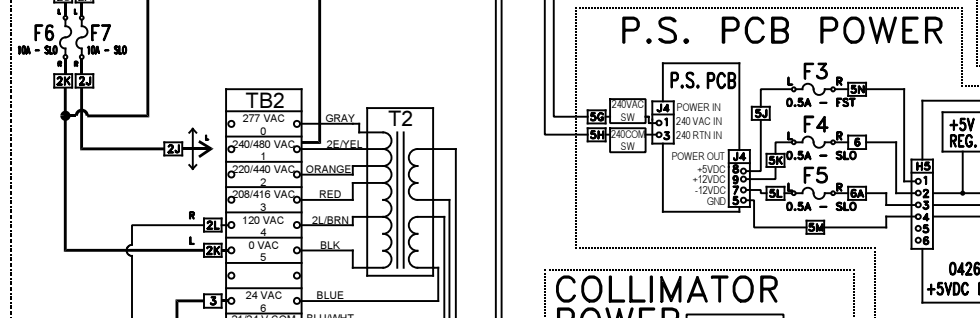
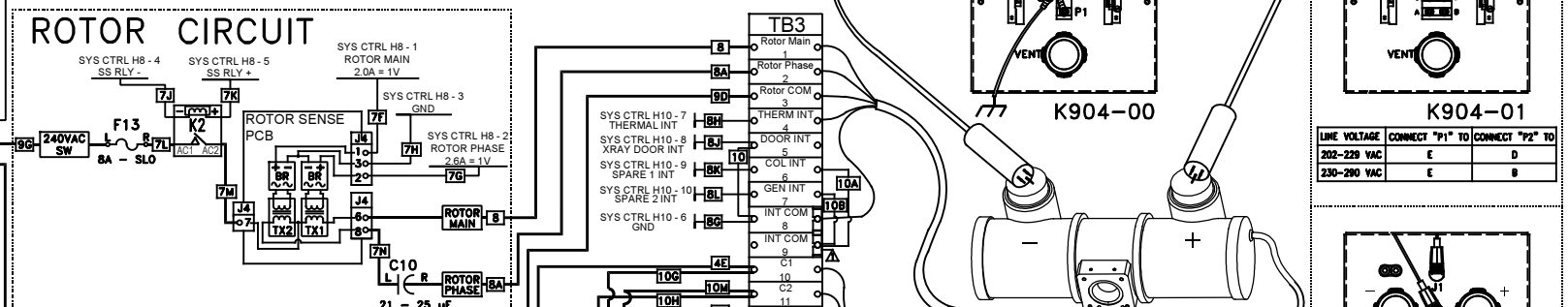
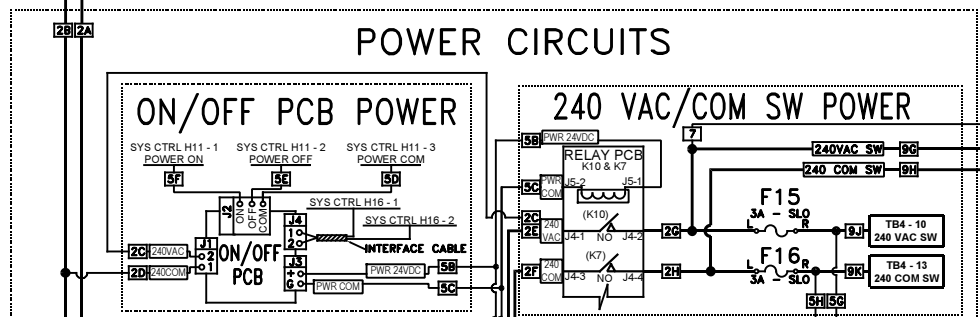
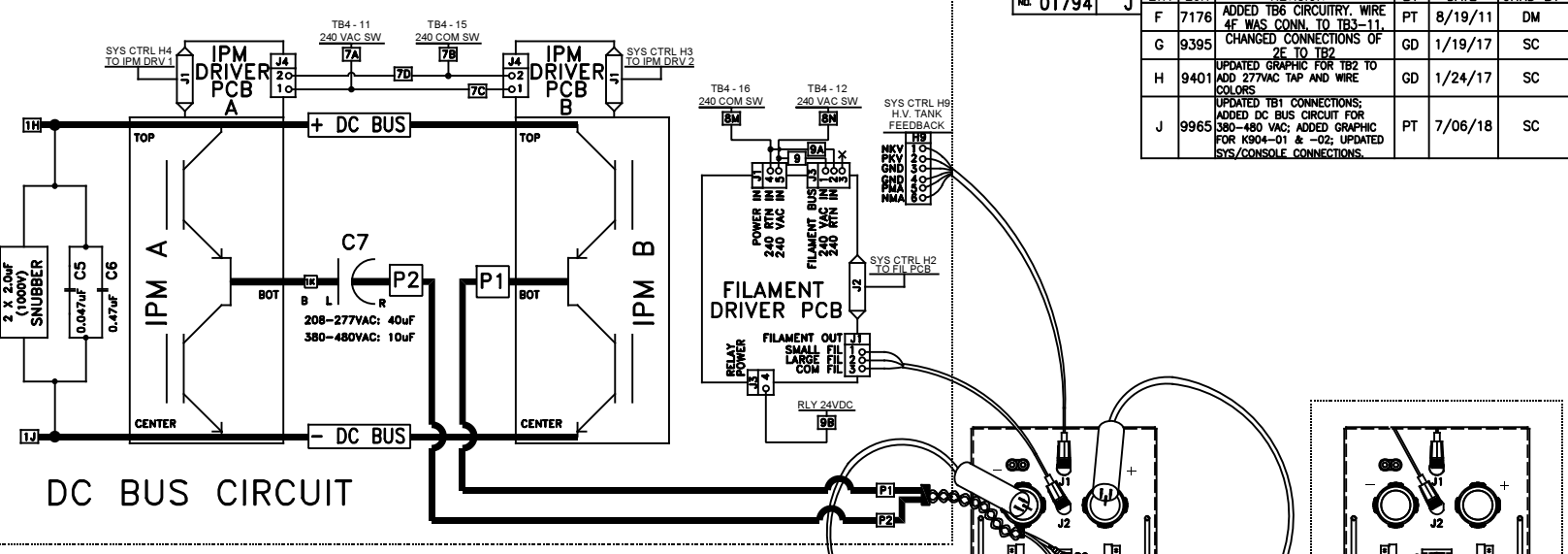
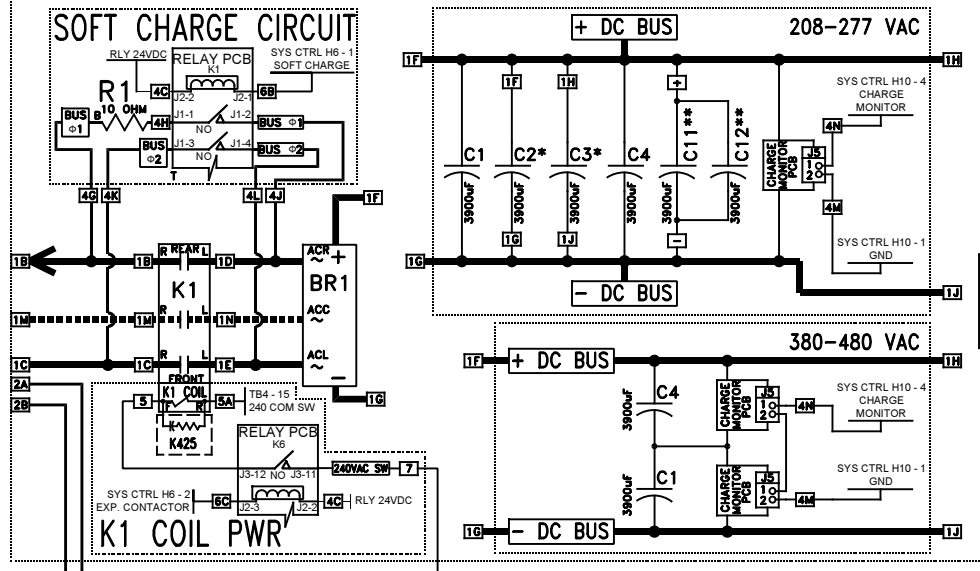


#### CASE 3: 3-PHASE DESIGN WITH 03902 LMT

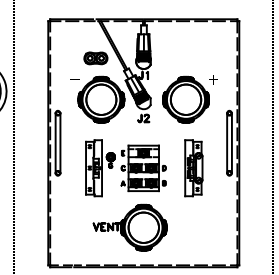


### USEFUL TEST POINTS

| PCB DESCRIPTION   | TP#   | DESCRIPTION  | EQUATION   |
|-------------------|-------|--------------|--|
| POWER ON/OFF      | TP1   | GND          | -  |
| POWER ON/OFF      | TP3   | +24V         | -  |
| POWER ON/OFF      | TP4   | +12VDC       | -  |
| POWER ON/OFF      | TP5   | +5VDC        | -  |
| AEC               | TP12  | GND          | -  |
| AEC               | TP13  | Vout         | -  |
| FILAMENT DRIVER   | TP1   | GND          | -  |
| FILAMENT DRIVER   | TP6   | PWM+         | -  |
| FILAMENT DRIVER   | TP7   | PWM-         | -  |
| ROTOR SENSE PCB   | RTR A | ROTOR MAIN   | 2.6A=1V  |
| ROTOR SENSE PCB   | RTR B | ROTOR PHASE  | 2.0A=1V  |
| SYSTEM CONTROLLER | TP1   | +5V          | -  |
| SYSTEM CONTROLLER | TP2   | GND          | -  |
| SYSTEM CONTROLLER | TP3   | +12V         | -  |
| SYSTEM CONTROLLER | TP6   | -12V         | -  |
| SYSTEM CONTROLLER | TP8   | KVP FEEDBACK | 1V=33.3kVp   |
| SYSTEM CONTROLLER | TP9   | ma FEEDBACK  | FOR 300mA SYS<br>1V=100mA<br>FOR 500mA SYS<br>1V=150mA |



| LINE VOLTAGE | CONNECT "P1" TO | CONNECT "P2" TO |
|--------------|-----------------|-----------------|
| 202-229 VAC  | E               | D               |
| 230-280 VAC  | E               | B               |



| LINE VOLTAGE | CONNECT "P1" TO | CONNECT "P2" TO |
|--------------|-----------------|-----------------|
| 361-428 VAC  | C               | D               |
| 429-504 VAC  | A               | B               |

### NOTES

- \*C2 & C3 FOR 1-PHASE GENERATORS.
- \*\*C11 & C12 FOR 42KW 1-PHASE GEN. W/OUT LMT.
- \*\*\*TB5 FOR SHORT & TALL (VET) GEN.
- \*\*\*\*CONNECT DELTA'S WILD LEG TO Fφ3.

| TITLE                   | SCALE | DATE     | APPROVED | DATE     | REVISION | SHEET | PART  | REV |
|-------------------------|-------|----------|----------|----------|----------|-------|-------|-----|
| SCHEMATIC, HF GENERATOR | NONE  | 03/23/04 | DM       | 03/23/04 | D        | 1     | 01794 | J   |

TOLERANCE UNLESS OTHERWISE SPECIFIED  
**SUMMIT INDUSTRIES, LLC**  
 7555 N. CALDWELL AVE., NILES, IL, U.S.A.  
 TEL: 773-508-8273 FAX: 773-588-8820