



**A JOHNSON CONTROLS COMPANY
PRODUCT DRAWING**

YORK INTERNATIONAL CORPORATION
P.O. Box 1592, York, PA 17405
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Supersedes: Nothing

FORM 160.00-PW5 (306)

**WIRING DIAGRAM
MEDIUM VOLTAGE SOLID STATE STARTER**

CONTRACTOR _____
ORDER NO. _____
YORK CONTRACT NO. _____
YORK ORDER NO. _____

PURCHASER _____
JOB NAME _____
LOCATION _____
ENGINEER _____

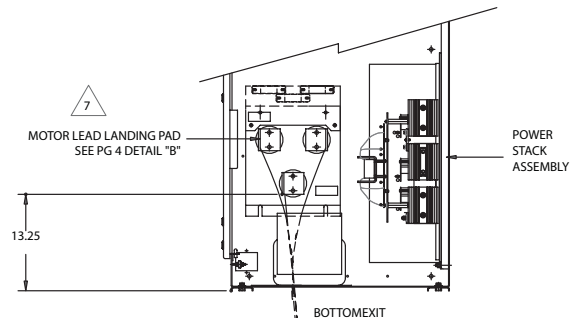
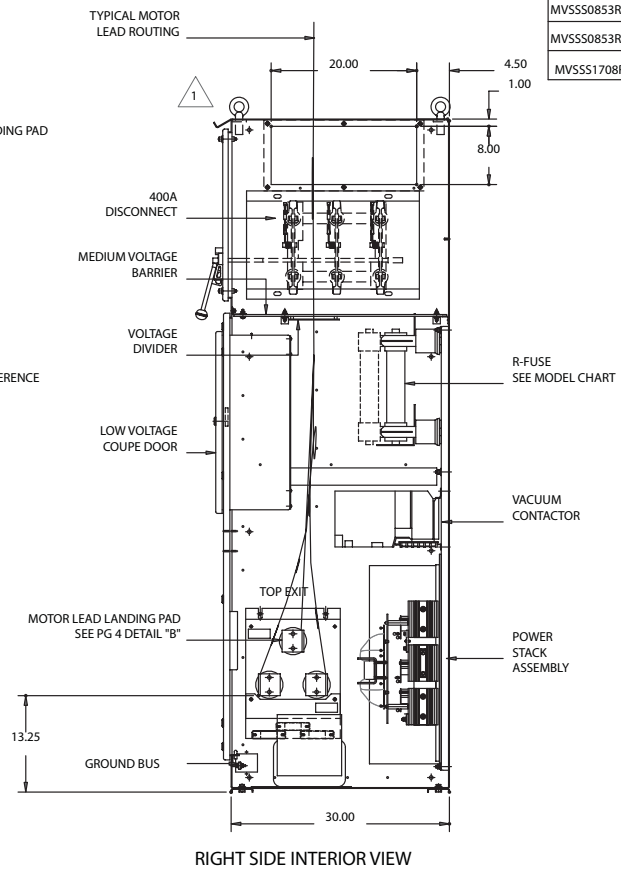
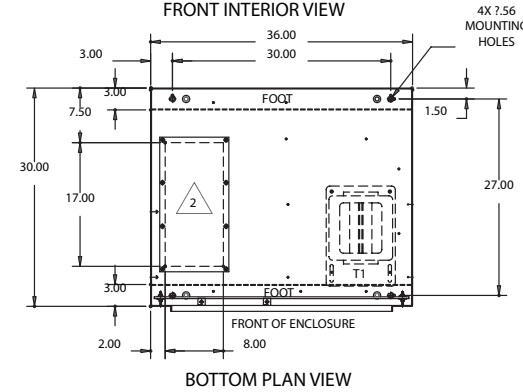
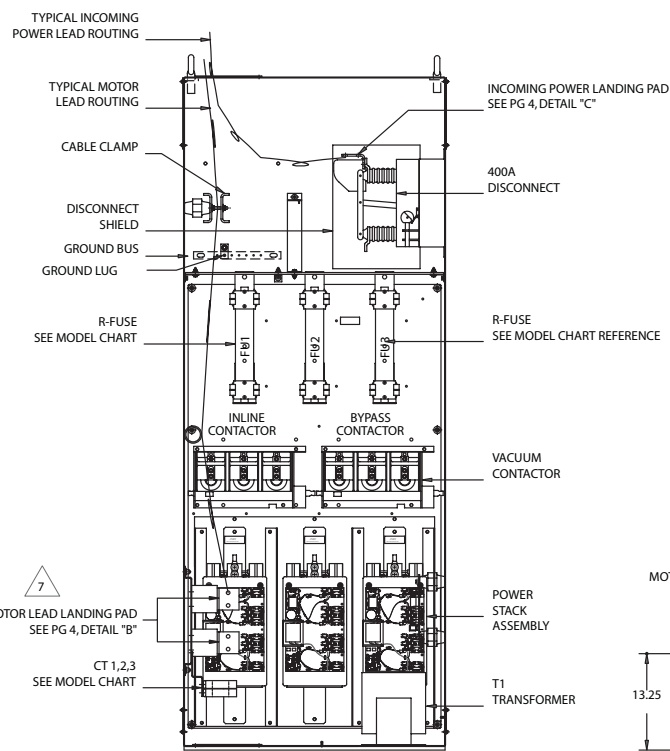
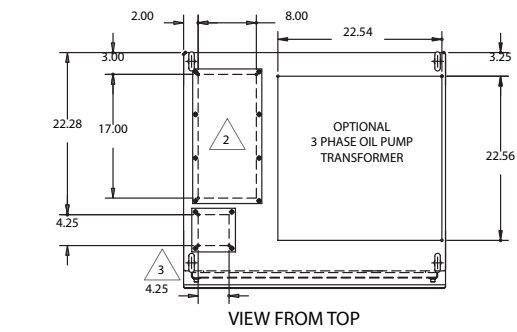
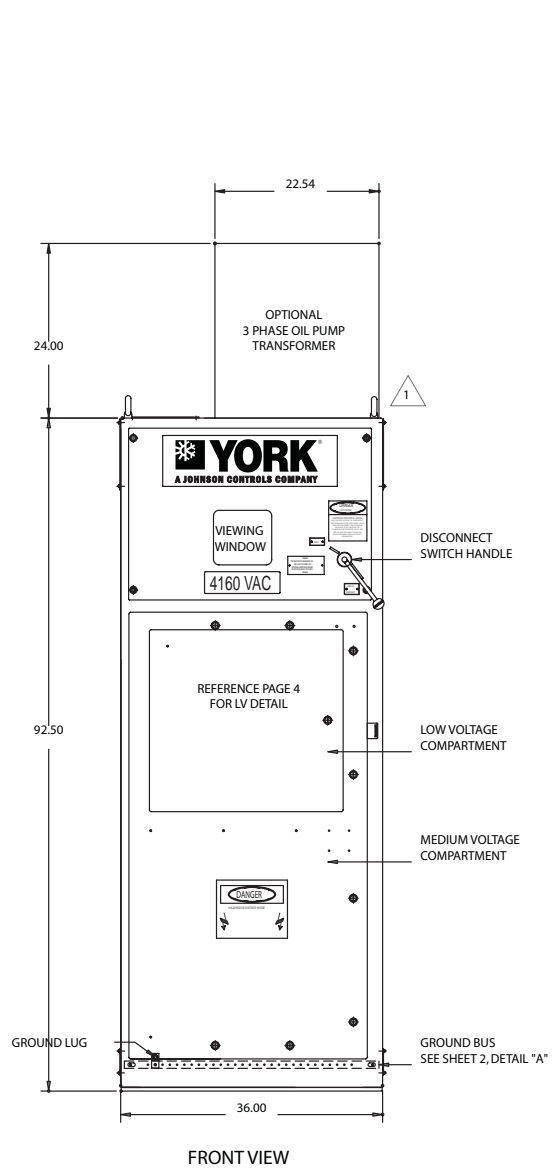
REFERENCE DATE _____

APPROVAL DATE _____

CONSTRUCTION DATE _____

NOTES

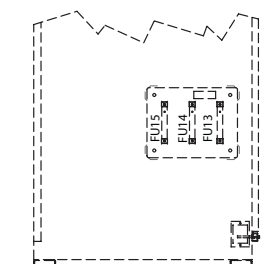
1. Field wiring to be in accordance with the National Electrical Code as well as all other applicable codes and specifications.
2. Terminal board connection points are indicated by numbers within a square i.e. $\square 1$. 1TB main power connection points are indicated by numbers within a hexagon i.e. $\hexagon L1$. Component terminal markings are indicated by numbers within a circle i.e. $\circledast 2$. Numbers adjacent to circuit lines are the circuit identification numbers.
3. Terminals L1, L2, L3 and GRD are the main power input terminals and are field connected (see note 6). Terminals T1, T2 and T3 are the compressor motor load power terminals and are field connected.
4. The three-phase solid state motor overload protection system provides motor overcurrent protection at 105% full load amps.
5. See YORK Control Center wiring diagram Product Drawing Forms 160.48-PA21.
6. Field wiring connections per Product Drawing Forms 160.48-PA15.



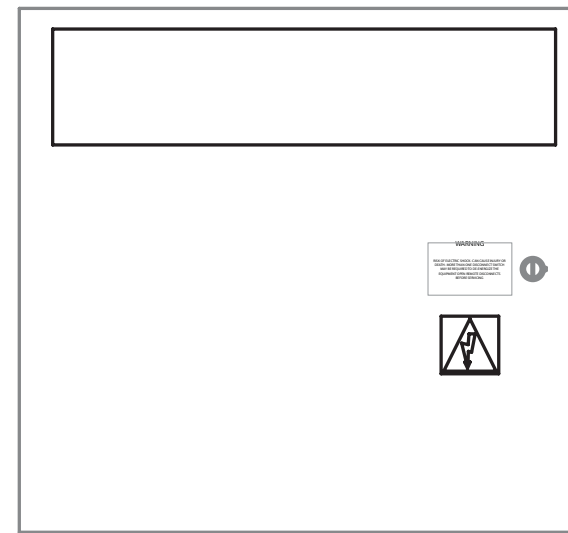
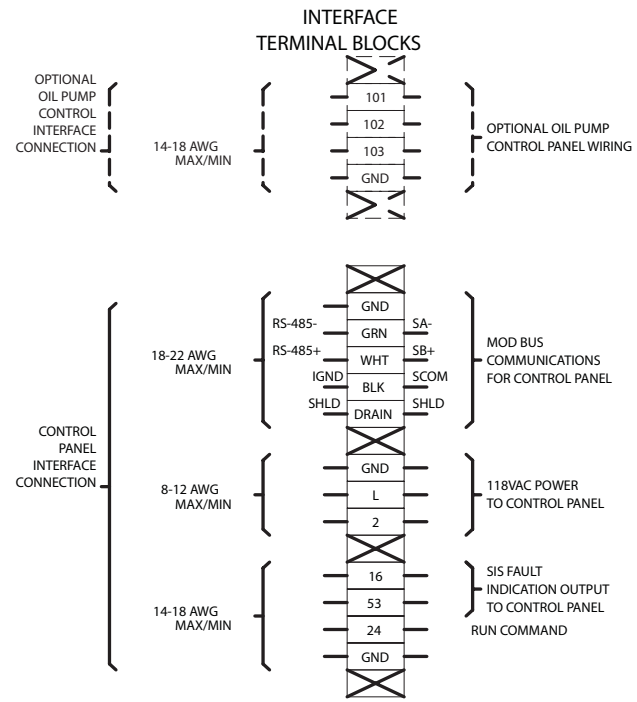
MODEL REFERENCE CHART

MODEL # PREFIX	CT 1,2,3	FU 1,2,3	MAX. FLA	MAX. LRA	45% LRA
MVSS0853R_K042-VV	864:1	3R,*V	42	1896	853
MVSS0853R_K050-VV	864:1	4R,*V	50	1896	853
MVSS0853R_K065-VV	864:1	6R/4R,*V	65	1896	853
MVSS0853R_K095-VV	864:1	9R/6R,*V	95	1896	853
MVSS0853R_K105-VV	864:1	9R,*V	105	1896	853
MVSS0853R_K140-VV	864:1	12R/9R,*V	140	1896	853
MVSS0853R_K190-VV	864:1	12R,*V	190	1896	853
MVSS0853R_K280-VV	2640:1	18R,*V	280	1896	853
MVSS0853R_K310-VV	2640:1	24R,*V	310	1896	0853
MVSS0853R_K360-VV	2640:1	24R,*V	360	1896	0853
MVSS1708R_K360-VV	2640:1	24R,*V	360	3796	1708

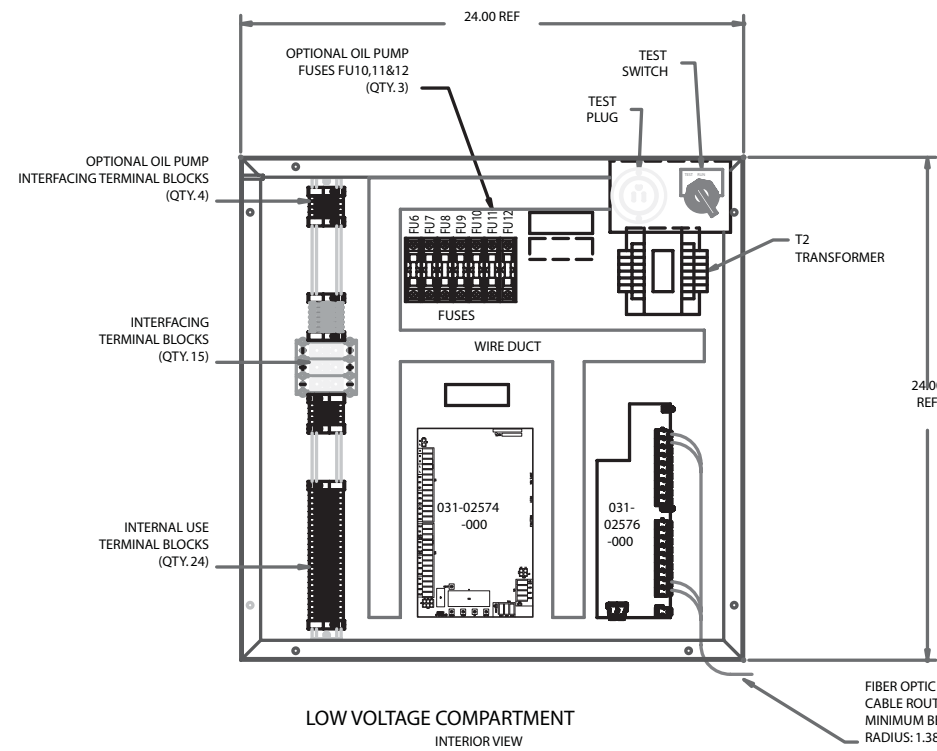
-VV	80	92	84
VOLTAGE	2300VAC	3300VAC	4160VAC
FREQUENCY	60HZ	50HZ	60HZ
FU1,2,3 *V	2600VAC	5080VAC	5080VAC



- NOTES:**
- 1 REMOVABLE LIFTING EYEBOLTS, PLUG HOLES IF REMOVED.
 - 2 CABLE ENTRY/EXIT AREA. CUTOUT AND COVERPLATE SUPPLIED.
 - 3 CABLE ENTRY/EXIT AREA. CUTOUT AND COVER PLATE SUPPLIED FOR LOW VOLTAGE CONTROL.
 4. TIGHTEN BOLTS PER CHART BELOW
- | 1/4-20 | 5/16-18 | 3/8-16 | 1/2-13 | 5/8-11 |
|--------|---------|--------|--------|--------|
| 5 | 12 | 20 | 50 | 95 |
5. MAXIMUM STARTER WEIGHT: 1200 LBS.
 6. UNIT SET UP FOR MOTOR LEAD EXIT THROUGH TOP OF ENCLOSURE. FOR BOTTOM MOTOR LEAD EXIT, SEE MANUAL FIGURE AT LEFT.



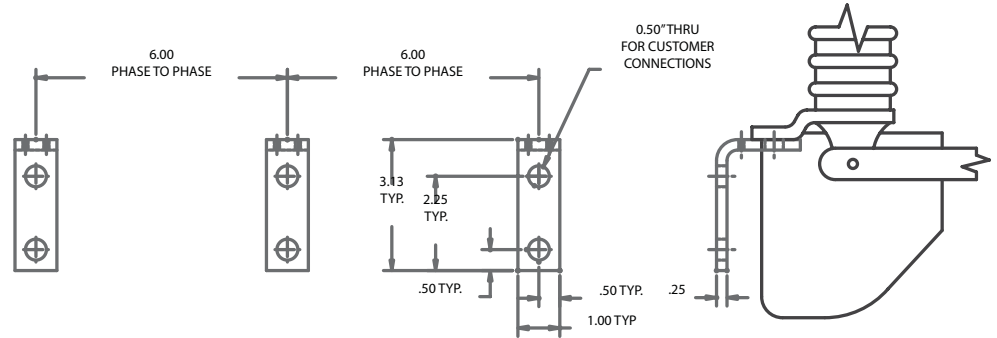
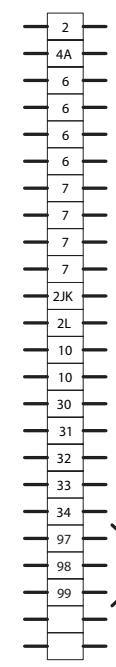
LOW VOLTAGE COMPARTMENT DOOR



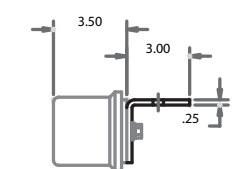
LOW VOLTAGE COMPARTMENT INTERIOR VIEW

INTERNAL USE CONTROL WIRING

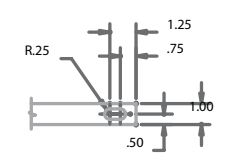
FIBER OPTIC CABLE ROUTING: MINIMUM BEND RADIUS: 1.38"



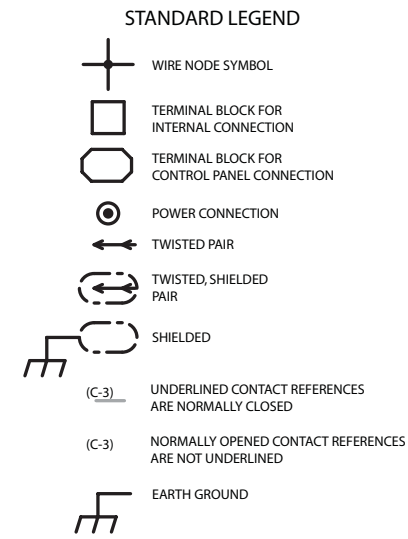
INCOMING POWER LANDING PAD DETAIL "C"

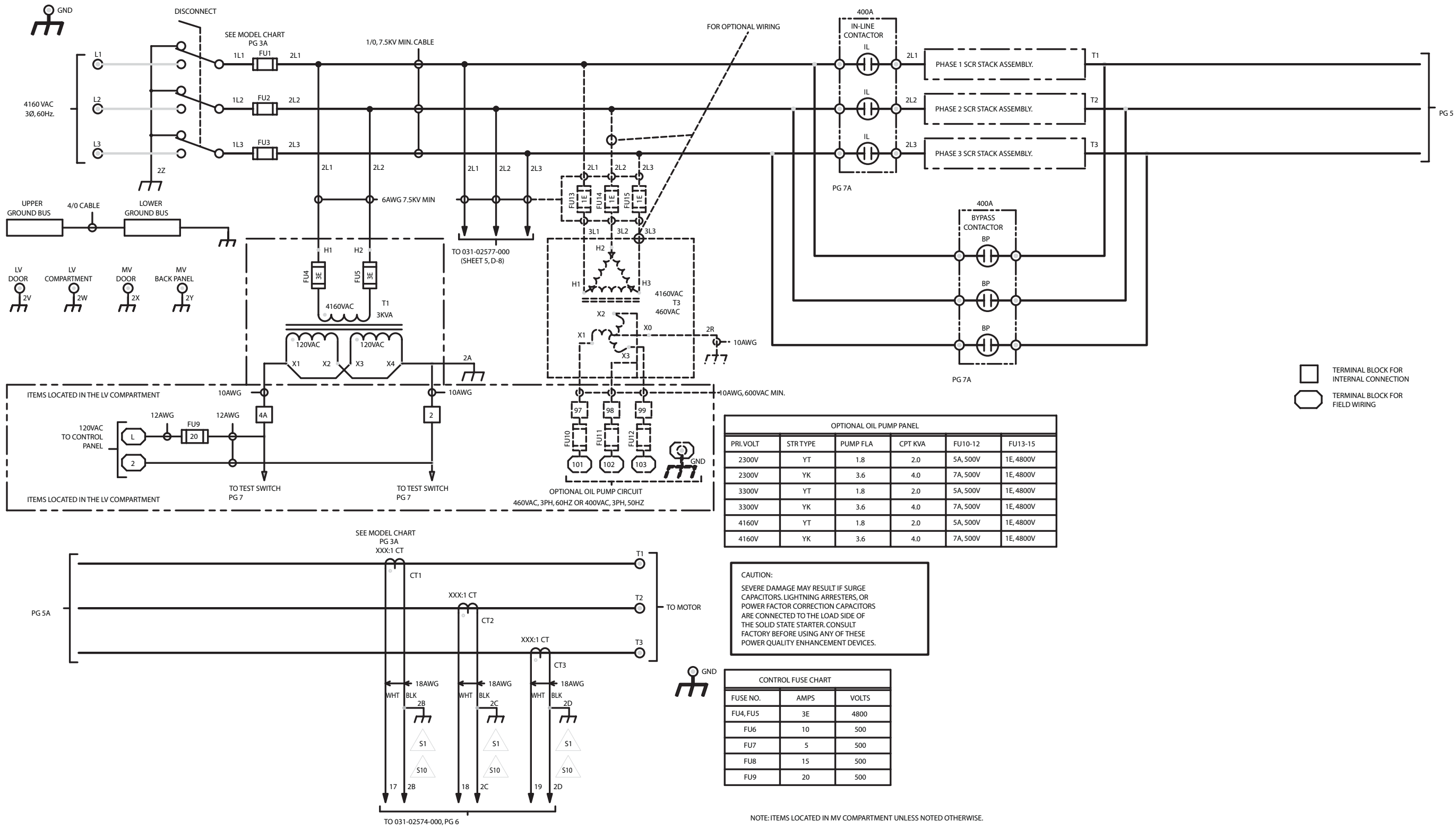


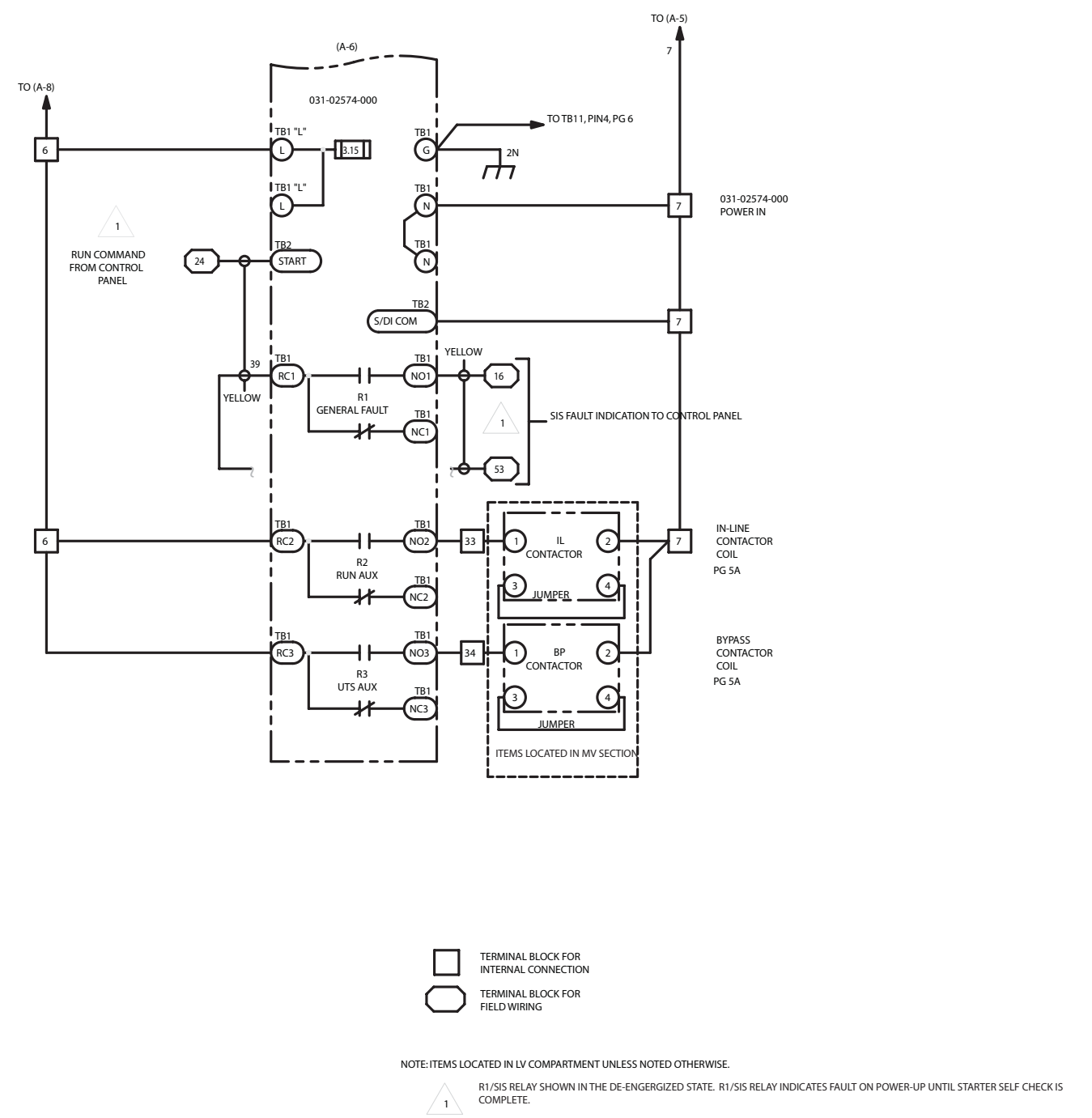
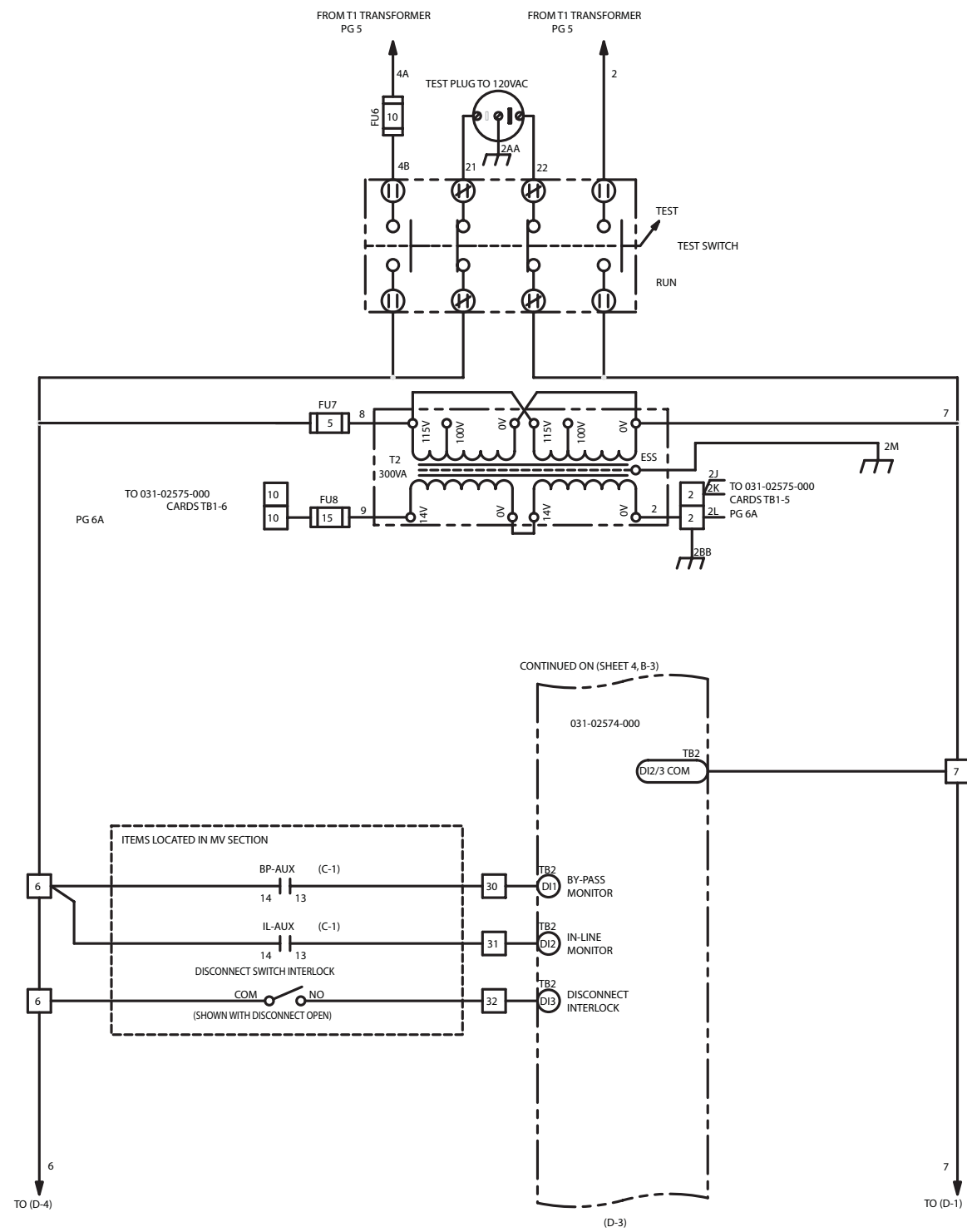
MOTOR LEAD LANDING PAD DETAIL "B"

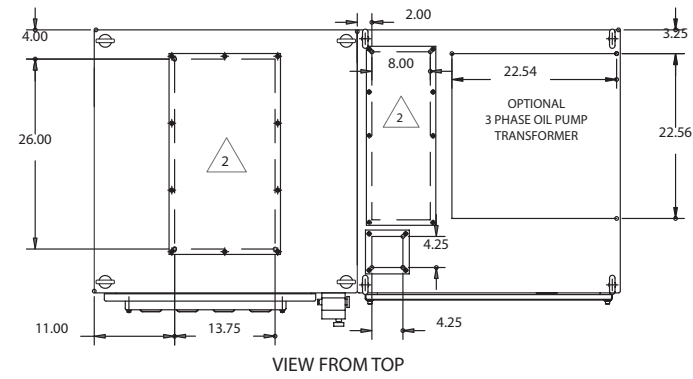


GROUND BUS DETAIL "A"

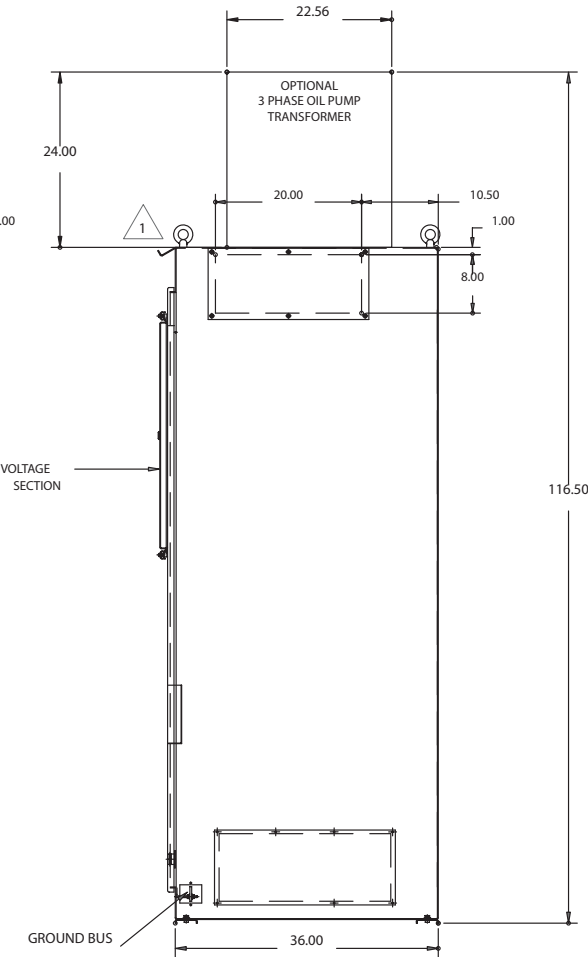
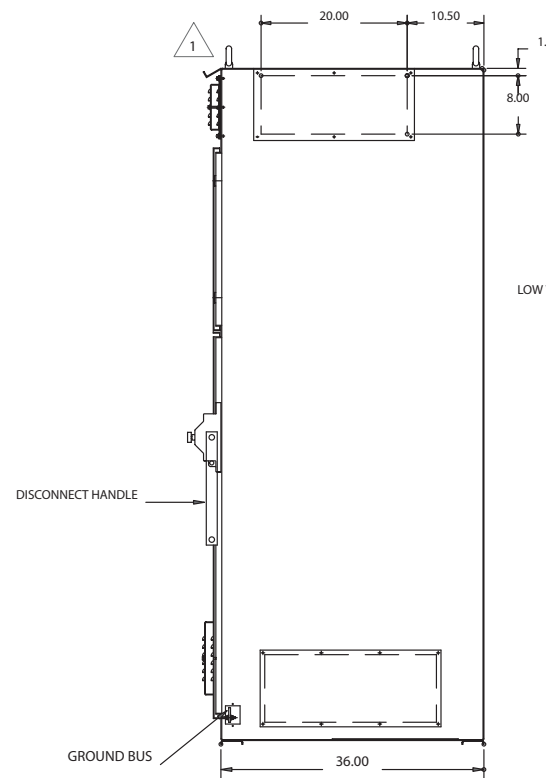
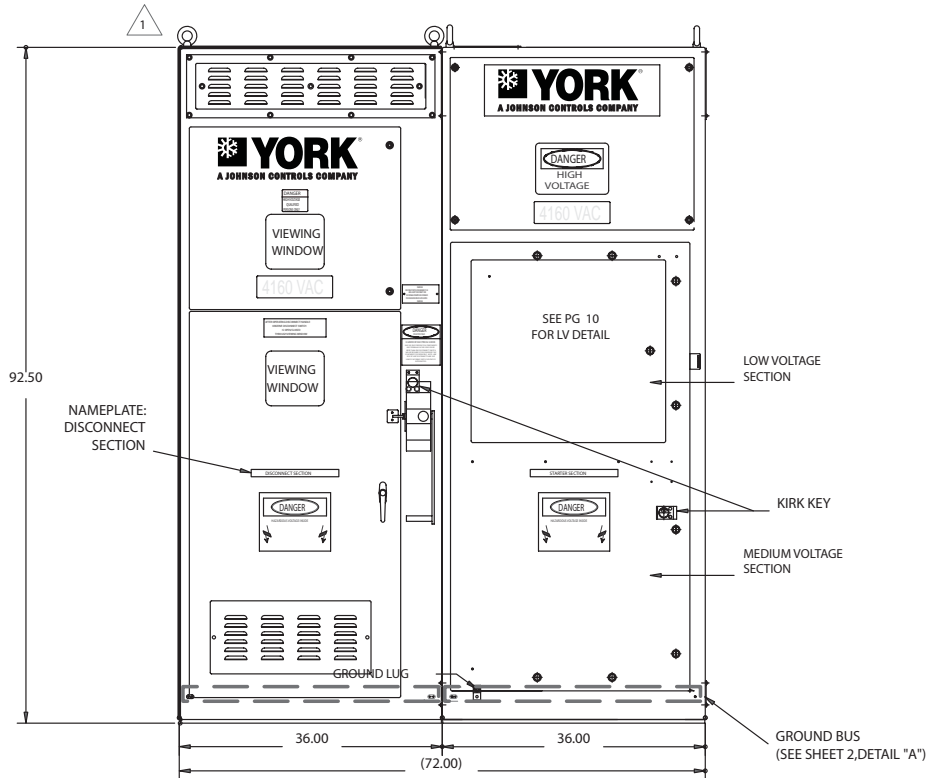




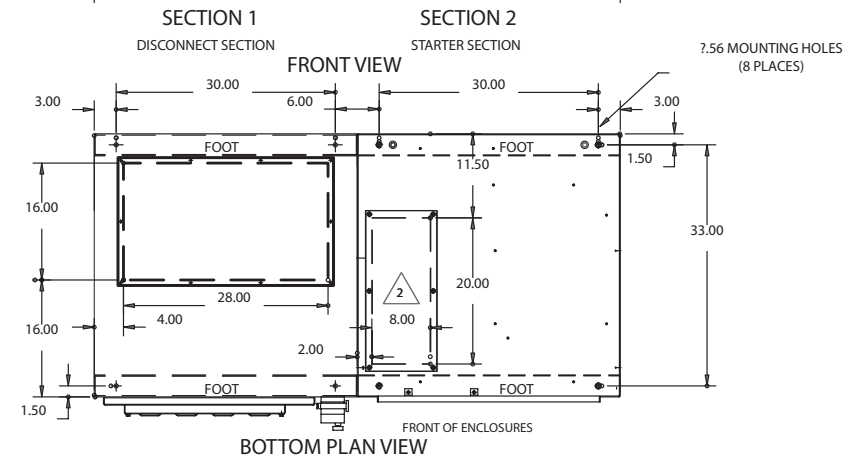
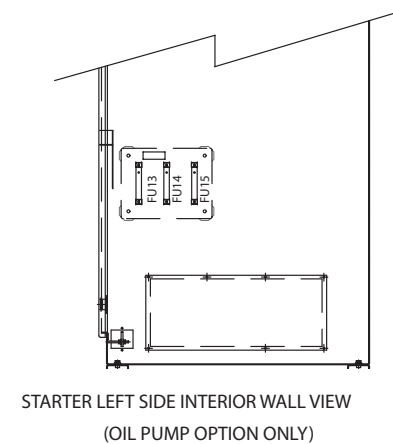




MODEL REFERENCE CHART					
MODEL # PREFIX	CT 1,2,3	FU 1,2,3	MAX. FLA	MAX. LRA	45% LRA
MVSS170BRK_550-VV	2640:1	38R, 5500V	550	3796	1708



-V V	80	92	84
VOLTAGE	2300VAC	3300VAC	4160VAC
FREQUENCY	60HZ	50HZ	60HZ



DISCONNECT SECTION SIDE VIEW

STARTER SECTION SIDE VIEW

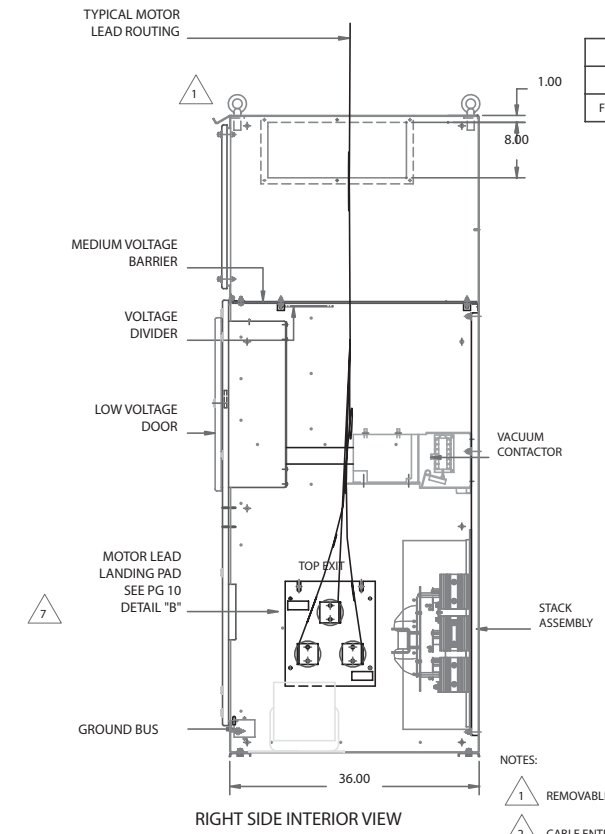
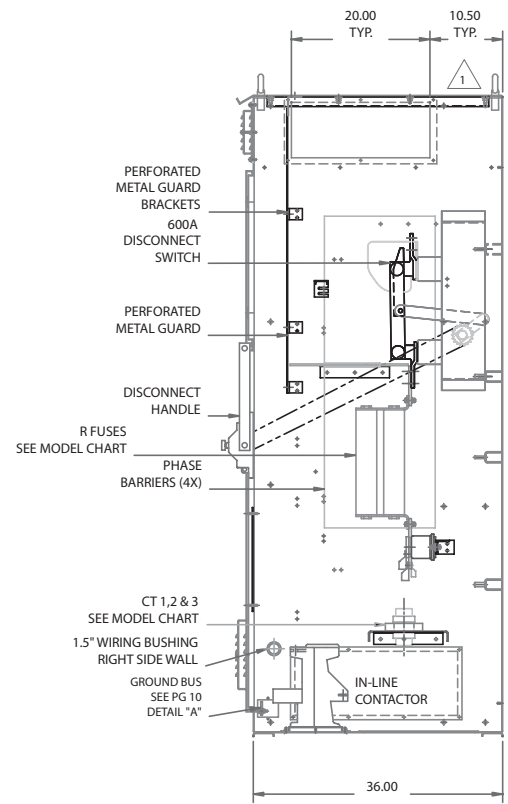
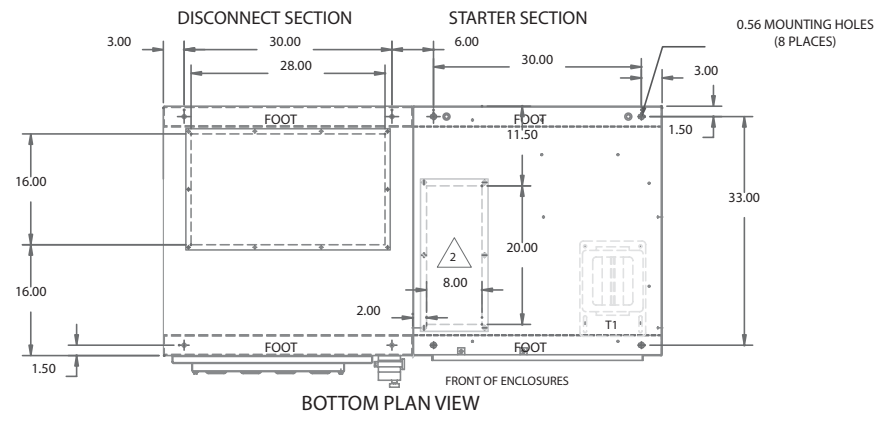
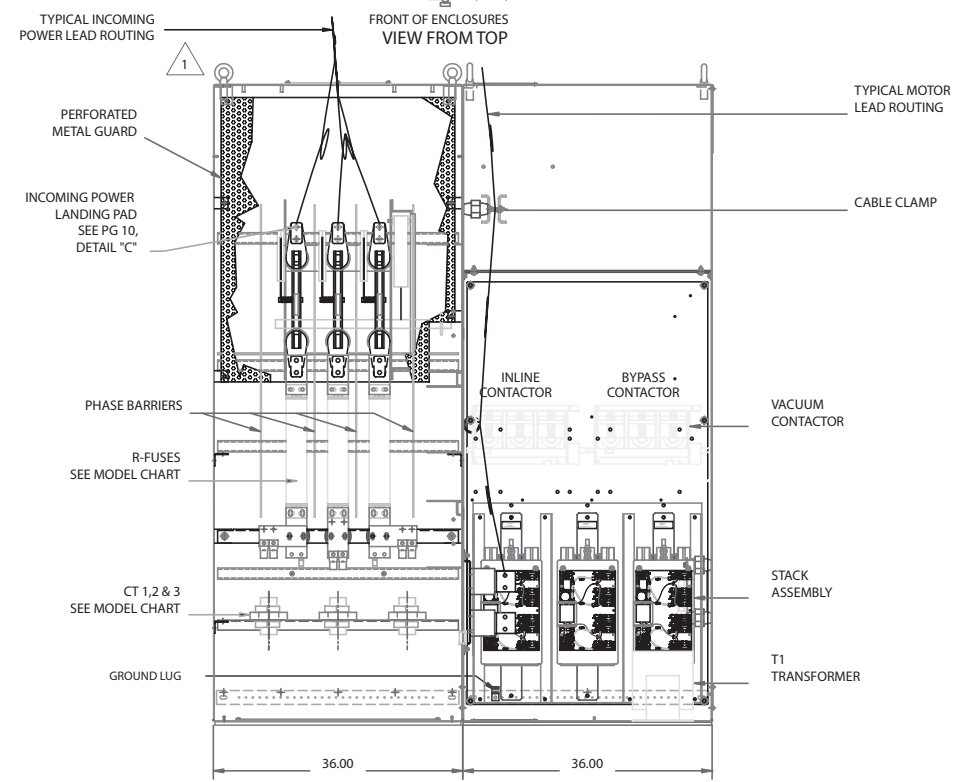
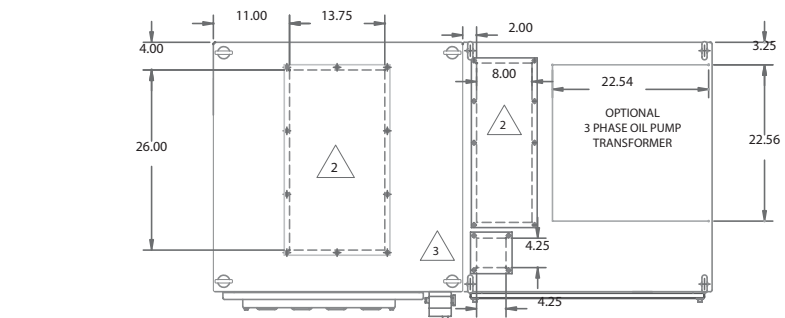
STARTER LEFT SIDE INTERIOR WALL VIEW (OIL PUMP OPTION ONLY)

NOTES:

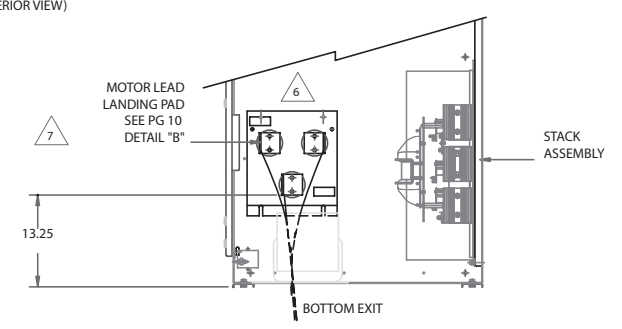
- 1 REMOVABLE LIFTING EYEBOLTS, PLUG HOLES IF REMOVED.
- 2 CABLE ENTRY/EXIT AREA. CUTOUT AND COVERPLATE SUPPLIED.
- 3 ENCLOSURE COLOR: MUNSELL CODE 4.65 BG 4.50/2.85
- 4 TIGHTEN BOLTS PER CHART BELOW

STEEL BOLT TORQUE IN FOOT-POUNDS				
1/4-20	5/16-18	3/8-16	1/2-13	5/8-11
5	12	20	50	95

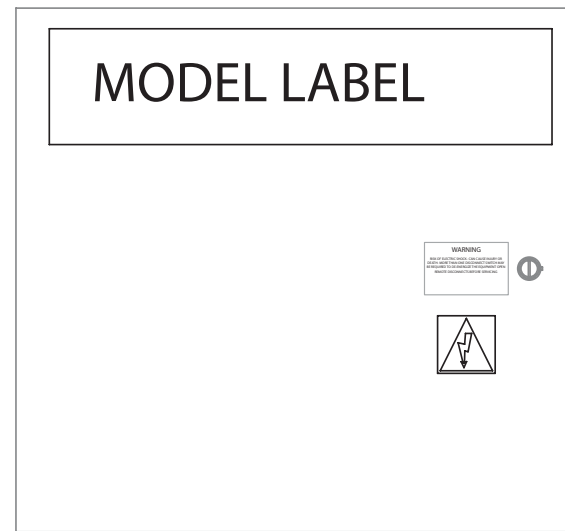
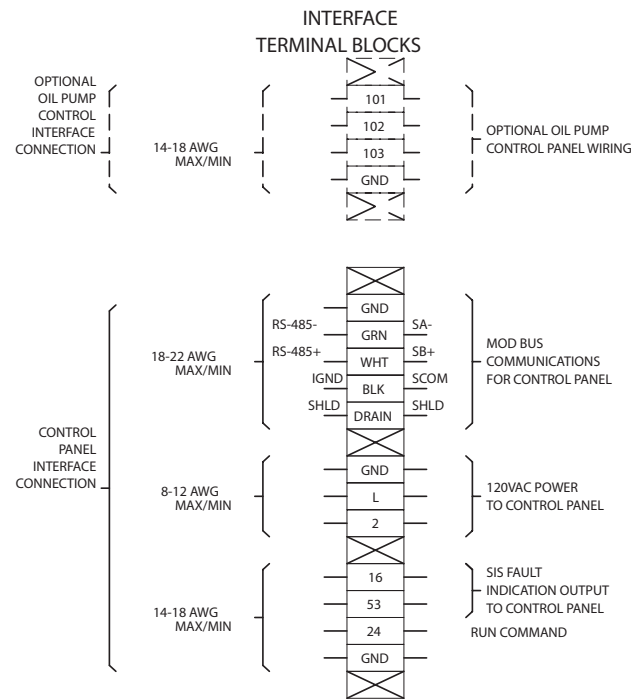
- 5. MAXIMUM STARTER WEIGHT: 2400 LBS.



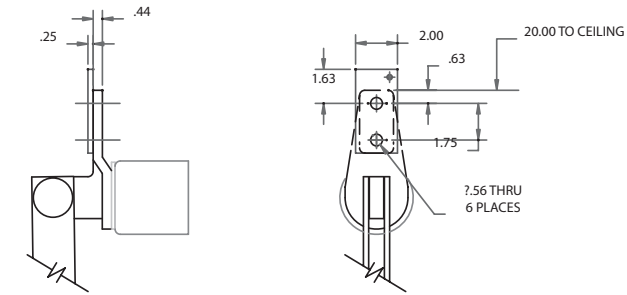
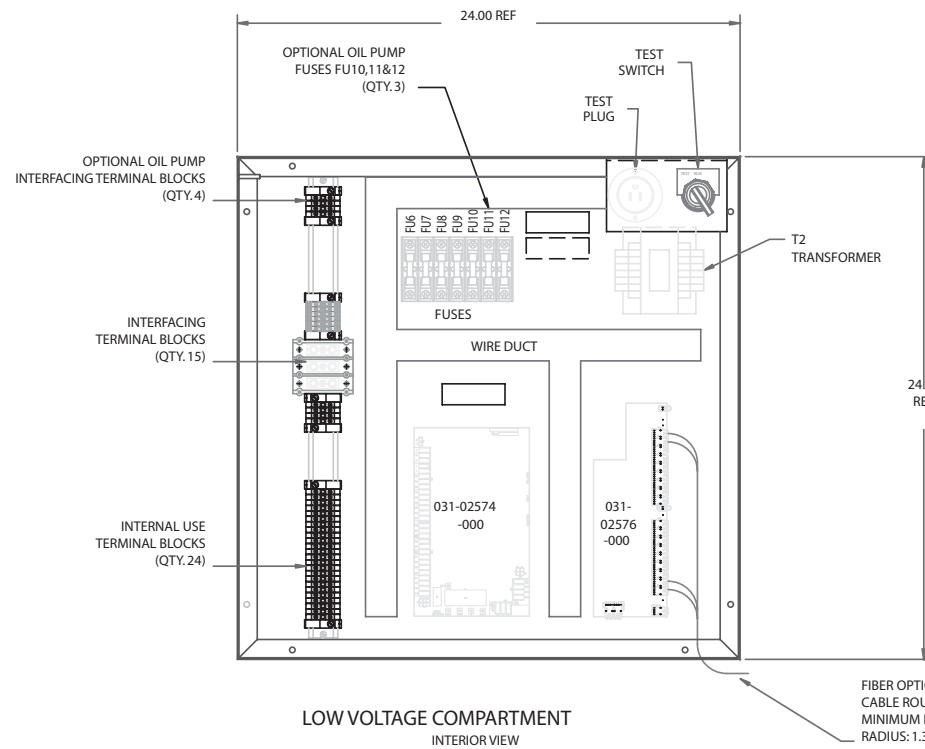
-V-V	80	92	84
VOLTAGE	2300VAC	3300VAC	4160VAC
FREQUENCY	60HZ	50HZ	60HZ



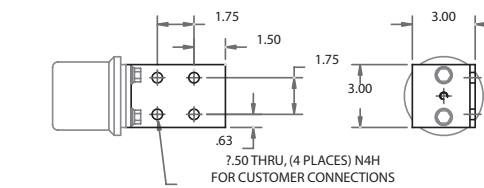
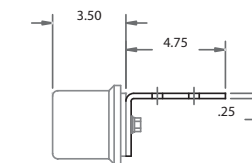
- NOTES:
- 1 REMOVABLE LIFTING EYEBOLTS, PLUG HOLES IF REMOVED.
 - 2 CABLE ENTRY/EXIT AREA, CUTOUT AND COVERPLATE SUPPLIED.
 - 3 CABLE ENTRY/EXIT AREA, CUTOUT AND COVER PLATE SUPPLIED FOR LOW VOLTAGE CONTROL.
 - 4 ENCLOSURE COLOR: MUNSELL CODE 4.65 BG 4.50/2.85
 - 5 TIGHTEN BOLTS PER CHART BELOW
- | STEEL BOLT TORQUE IN FOOT-POUNDS | | | | |
|----------------------------------|---------|--------|--------|--------|
| 1/4-20 | 5/16-18 | 3/8-16 | 1/2-13 | 5/8-11 |
| 5 | 12 | 20 | 50 | 95 |
- 6. MAXIMUM STARTER WEIGHT: 2400 LBS.
 - 7 UNIT SET UP FOR MOTOR LEAD EXIT THROUGH TOP OF ENCLOSURE. FOR BOTTOM MOTOR LEAD EXIT, SEE MANUAL FIGURE AT LEFT.



LOW VOLTAGE COMPARTMENT DOOR

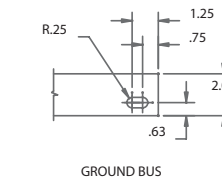


INCOMING POWER LANDING PAD DETAIL "C"

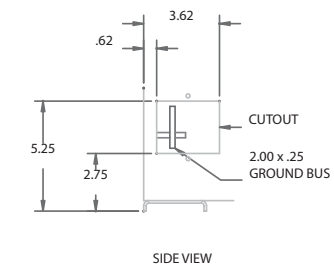
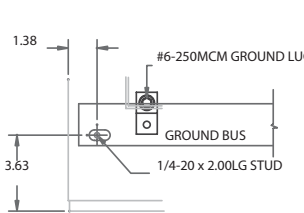


MOTOR LEAD LANDING PAD DETAIL "B"

MATERIAL: .25" THICK TIN PLATED COPPER

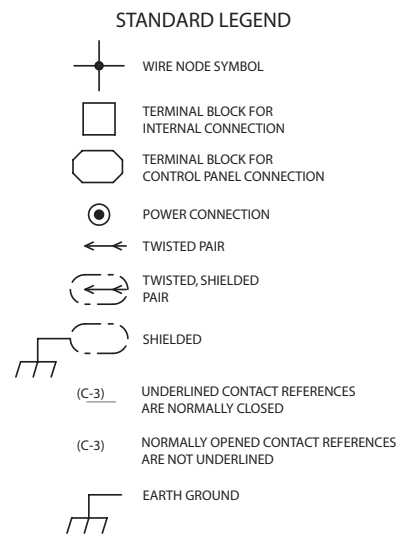
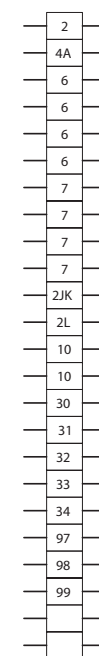


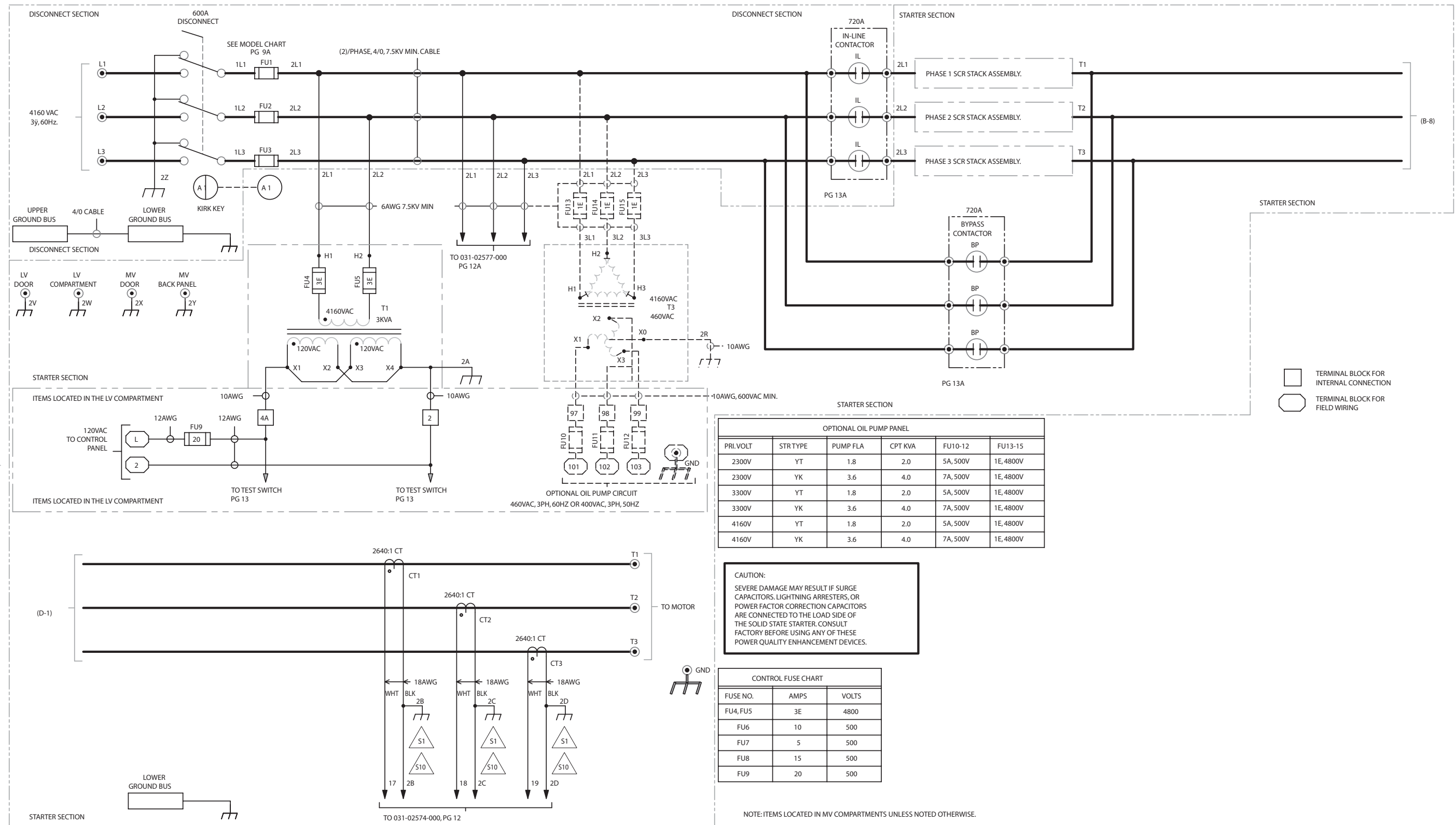
NOTE: GROUND BUS MAY BE MOVED 1/4" UP, DOWN, OR SIDE TO SIDE.



GROUND BUS DETAIL "A"

MATERIAL: .25 THK. BARE COPPER





OPTIONAL OIL PUMP PANEL					
PRI.VOLT	STR TYPE	PUMP FLA	CPT KVA	FU10-12	FU13-15
2300V	YT	1.8	2.0	5A, 500V	1E, 4800V
2300V	YK	3.6	4.0	7A, 500V	1E, 4800V
3300V	YT	1.8	2.0	5A, 500V	1E, 4800V
3300V	YK	3.6	4.0	7A, 500V	1E, 4800V
4160V	YT	1.8	2.0	5A, 500V	1E, 4800V
4160V	YK	3.6	4.0	7A, 500V	1E, 4800V

CAUTION:
SEVERE DAMAGE MAY RESULT IF SURGE CAPACITORS, LIGHTNING ARRESTERS, OR POWER FACTOR CORRECTION CAPACITORS ARE CONNECTED TO THE LOAD SIDE OF THE SOLID STATE STARTER. CONSULT FACTORY BEFORE USING ANY OF THESE POWER QUALITY ENHANCEMENT DEVICES.

CONTROL FUSE CHART		
FUSE NO.	AMPS	VOLTS
FU4, FUS	3E	4800
FU6	10	500
FU7	5	500
FU8	15	500
FU9	20	500

NOTE: ITEMS LOCATED IN MV COMPARTMENTS UNLESS NOTED OTHERWISE.

