

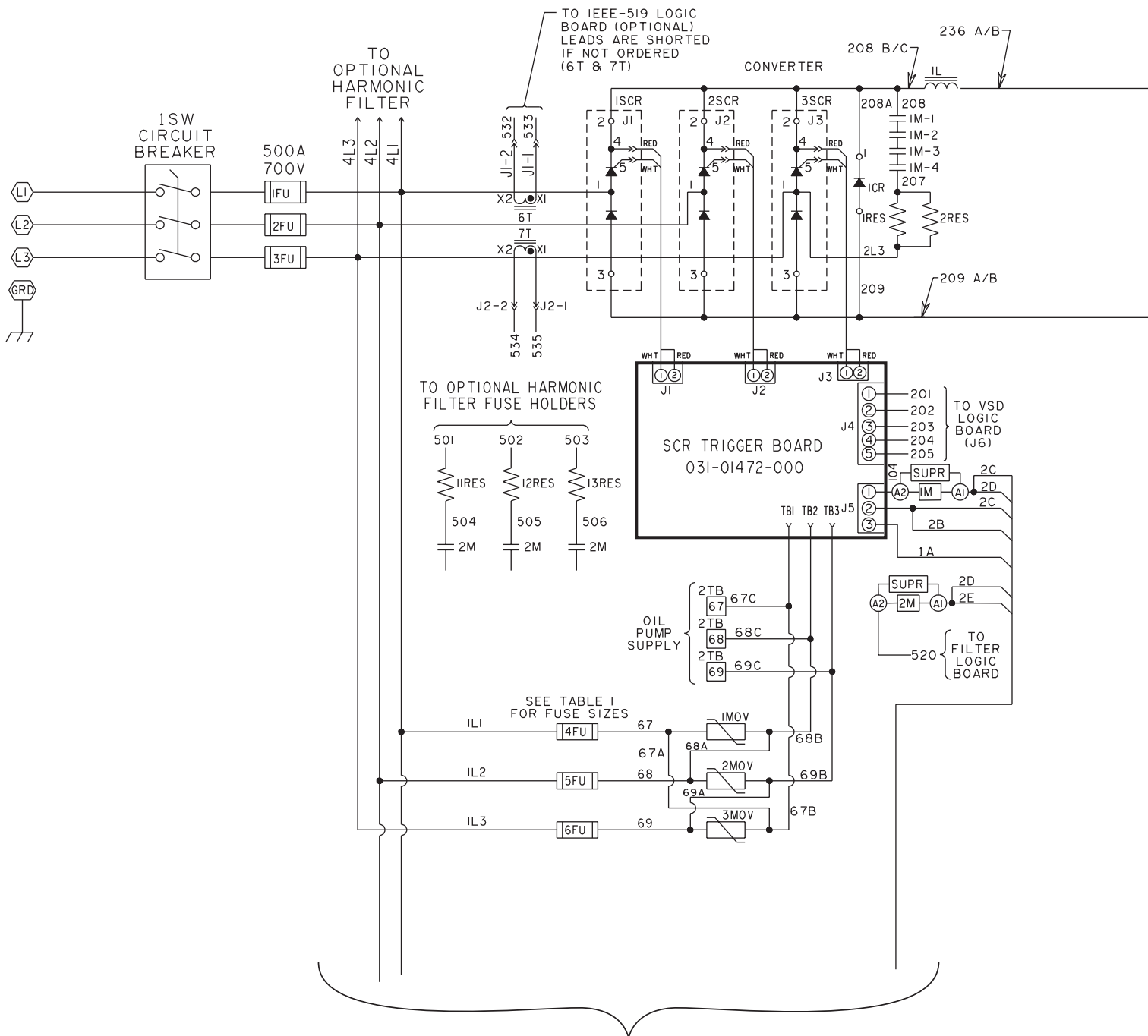
 PRODUCT DRAWING	Supersedes: Nothing FORM 160.00-PW1 (398) <b style="text-align: center;">WIRING DIAGRAM, MILLENNIUM VARIABLE SPEED DRIVE CF-CN, 5CC-5CI WITH OPTIONAL HARMONIC FILTER
YORK INTERNATIONAL CORPORATION P.O. Box 1592, York, PA 17405	
CONTRACTOR _____ ORDER NO. _____ YORK CONTRACT NO. _____ YORK ORDER NO. _____	PURCHASER _____ JOB NAME _____ LOCATION _____ ENGINEER _____
<input type="checkbox"/> REFERENCE DATE _____	<input type="checkbox"/> APPROVAL DATE _____
<input type="checkbox"/> 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. 1. 1TB main power connection points are indicated by numbers within a hexagon i.e. L1. Component terminal markings are indicated by numbers within a circle i.e. 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 factory connected on factory packaged units.
4. The three-phase solid state motor overload protection system provides motor overcurrent protection at 105% full load amps.
5. See the applicable YORK Control Center wiring diagram Product Drawing Forms:
 YT Style H - 160.48-PA21
 YK Style C - 160.49-PW9
 YK Style D - 160.52-PW3
6. Field wiring connections per Product Drawing Forms:
 YT Style H - 160.48-PA15
 YK Style C - 160.49-PW12
 YK Style D - 160.49-PW12
7. Elementary Diagram does not show all components relating to the optional harmonic filter components. The Connection Diagram does show all the components relating to the optional harmonic filter. Refer to pages 10, 11 & 11A for wiring related specifically to the optional filter.

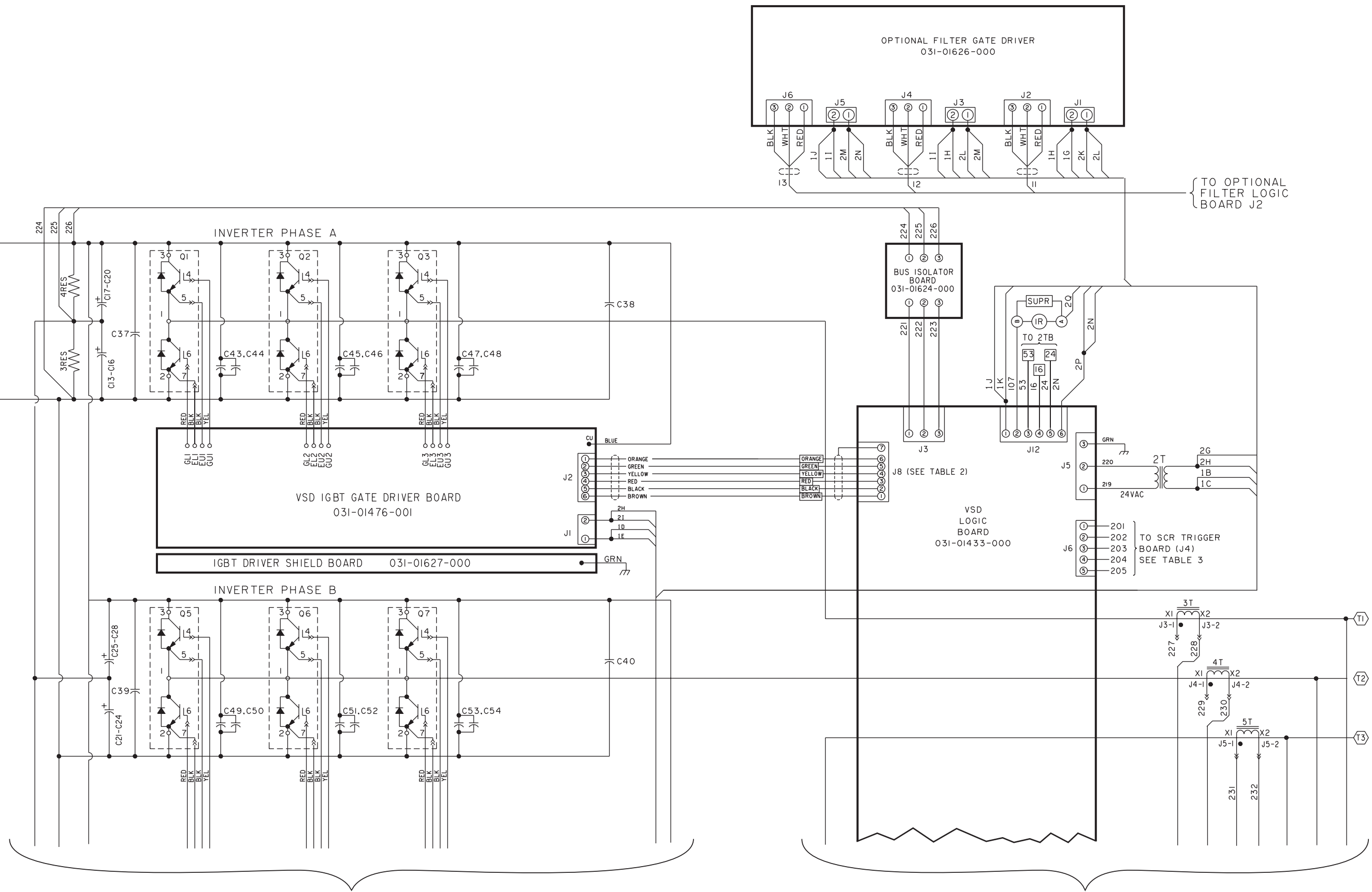
LEGEND FOR VARIABLE SPEED DRIVE (See pages 1 - 9)

C13 - C36	CAPACITORS, FILTER, 5000 μ f, 450 VDC
C37 - C42	CAPACITORS, FILM, 1.0 μ f, 1200 VDC
C43 - C60	CAPACITORS, FILM, 0.1 μ f, 1000 VDC
C61 - C66	CAPACITORS, DV/DT, 0.047 μ f, 1600 VDC
1FU - 3FU	SEMI-CONDUCTOR FUSES, 500A, 700V: GOULD SHAWMUT *A3-66C 500TS OR FERRAZ -6.6URD33TTF0500
4FU - 6FU	SCRTRIGGER / OIL PUMP MOTOR FUSES
7FU - 8FU	CONTROL SUPPLY TRANSFORMER PRIMARY FUSES
9FU	EXTERNAL CONTROL SUPPLY TRANSFORMER SECONDARY FUSE
10FU	INTERNAL CONTROL SUPPLY TRANSFORMER SECONDARY FUSE
1L	INDUCTOR, DCLINK, 532 A, 470 μ H
1M, 2M	CONTACTORS, PRECHARGE, 600 VAC, 25 A
Q1 - Q3, Q5 - Q7	DUAL 1GBT MODULES, 1200 V, 200 A
Q8 - Q11	
1RES - 2 RES	RESISTOR, PRECHARGE, 35 Ω , 500 W
3RES - 4RES	RESISTORS, BLEEDER, 750 Ω , 225 W
5RES - 10RES	DV/DT RESISTORS, 10 Ω , 50 W
11RES - 13RES	RESISTORS, PRECHARGE (HARMONIC FILTER) 10 Ω , 375 W
RT1 - RT4	HEATSINK THERMISTOR TEMPERATURE SENSORS
1SCR - 3SCR	SCR / DIODE MODULES, 1200 V, 250 A
1R	RELAY, COOLING FANS AND PUMP
1SW	ELECTRONIC CIRCUIT BREAKER W/ GRD FAULT, 600 V, 600 A
1T	120 VAC, 3 KVA CONTROL POWER TRANSFORMER
2T	24 VAC, 75VA CONTROL TRANSFORMER
3T - 5T	OUTPUT CURRENT TRANSFORMERS
6T - 7T	INPUT CURRENT TRANSFORMERS
2TB - 3TB	TERMINAL BLOCKS, FIELD WIRING
	JACK J1 - 1 ETC...
	PLUG, P1 - 1 ETC...



CONTINUED ON PAGE 3B

FIG. 1 – ELEMENTARY DIAGRAM (TOP)
035-12688 (REV. C)



CONTINUED ON PAGE 4

CONTINUED ON PAGE 5

LD02265a

CONTINUED FROM PAGE 2

UNIT STYLE	FUSING - 4FU, 5FU, 6FU
YT	5A, 500V, BUSS FNO-5
YK	7A, 500V, BUSS FNO-7

CONNECTOR PIN	SHIELDED CABLE WIRE COLOR	FUNCTION
1	BRN	FAULT
2	BLK	GROUND
3	RED	+5V
4	YEL	UPPER PHASE, IN
5	GRN	LOWER PHASE, IN
6	ORG	SW. +7.5V
7	DRAIN WIRE **	SHIELD

** NOT CONNECTED AT GATE DRIVER BOARD END

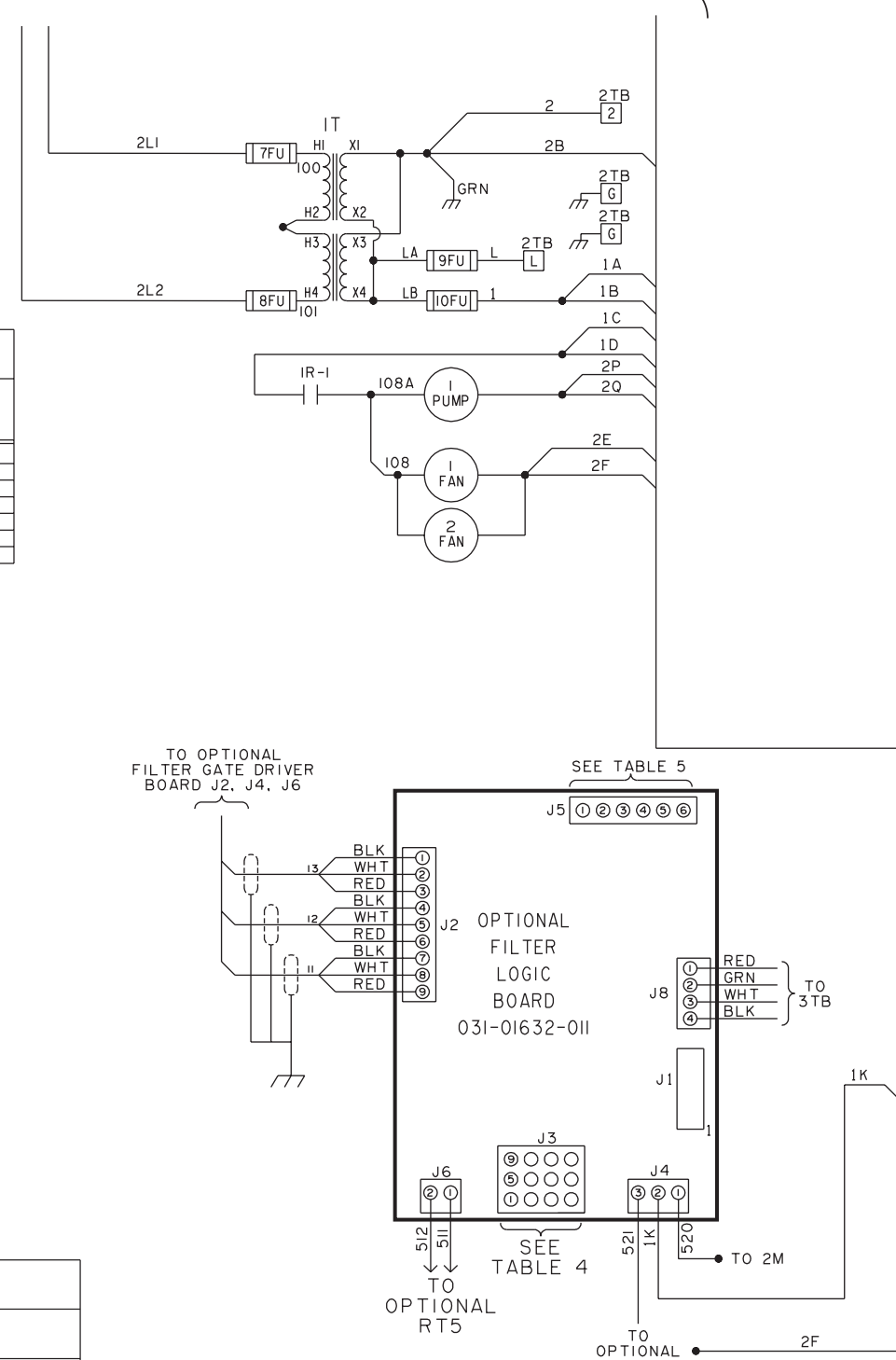
CONNECTOR PIN	FUNCTION
1	+5V FEED
2	PH LOSS OUT
3	PRECHG IN
4	SCRTRIG IN
5	7.5V FEED

CONNECTOR PIN	IDENTIFIER	FUNCTION
1	*532	TO 6T-X2
2	*533	TO 6T-X1
3	*534	TO 7T-X2
4	*535	TO 7T-X1
5	WHITE	TO 1DCCT - OPTION
6	RED	TO 1DCCT - OPTION
7	BLK	TO 1DCCT - OPTION
8	-	TO J3 PIN 9
9	-	TO J3 PIN 8
10	RED	TO 2DCCT - OPTION
11	BLK	TO 2DCCT - OPTION
12	WHITE	TO 2DCCT - OPTION

CONNECTOR PIN	IDENTIFIER	FUNCTION
1	*522	TO J2-1, OPTIONAL I625 BOARD
2	*523	TO J2-2, OPTIONAL I625 BOARD
3	*524	TO J2-3, OPTIONAL I625 BOARD
4	*528	TO J2-3, OPTIONAL I624 BOARD
5	*527	TO J2-2, OPTIONAL I624 BOARD
6	*526	TO J2-1, OPTIONAL I624 BOARD

* SAME PIN NUMBERS ARE USED AT BOTH ENDS OF CABLE

LD02265c



CONTINUED FROM PAGE 3

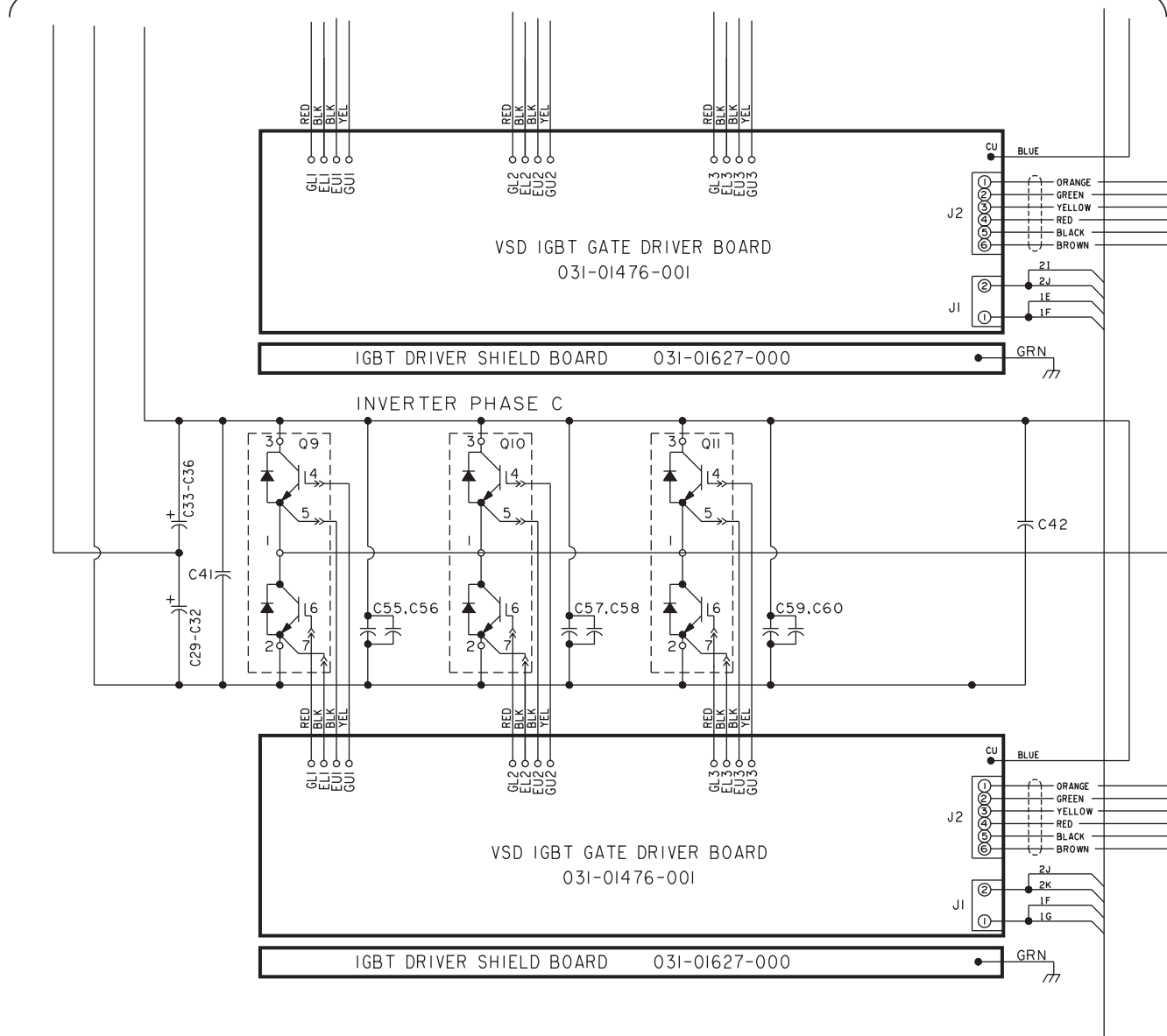
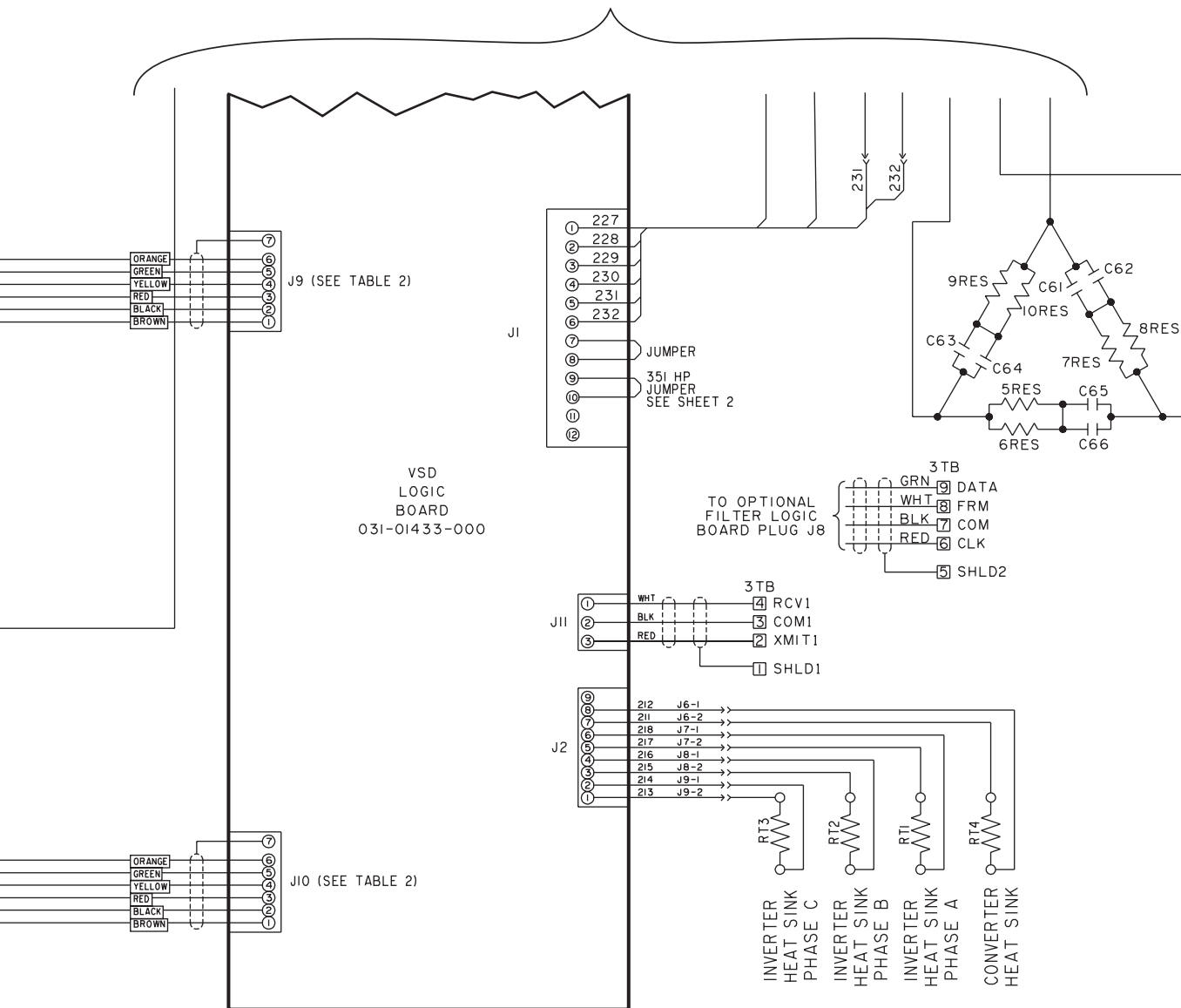
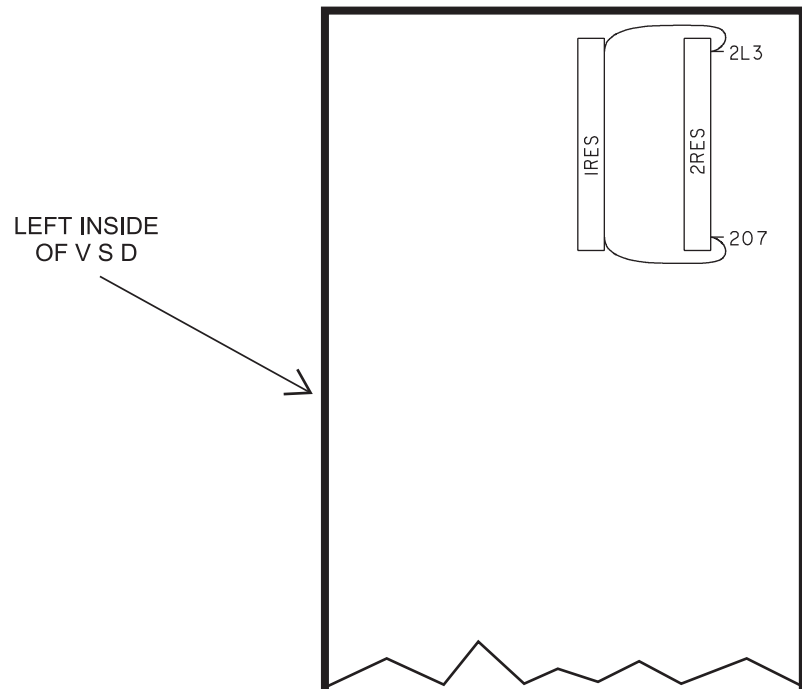
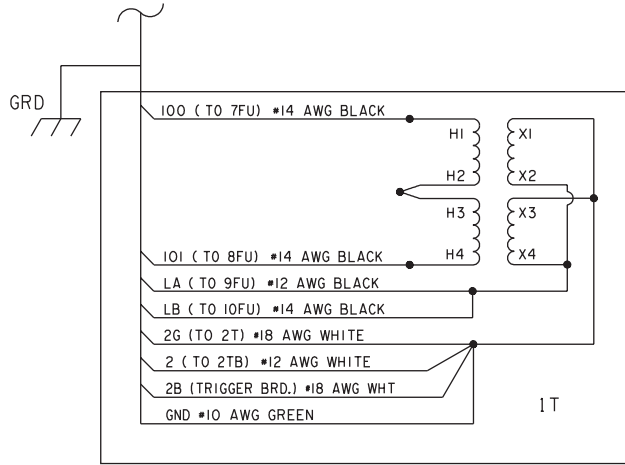


FIG. 1 (Cont'd) – ELEMENTARY DIAGRAM (BOTTOM)
035-12688 (REV. C)

CONTINUED FROM PAGE 3A



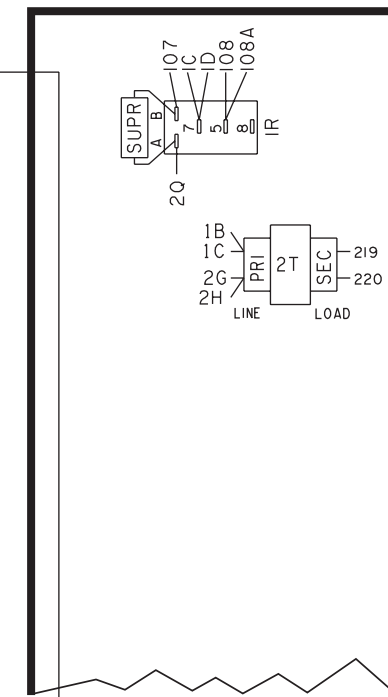
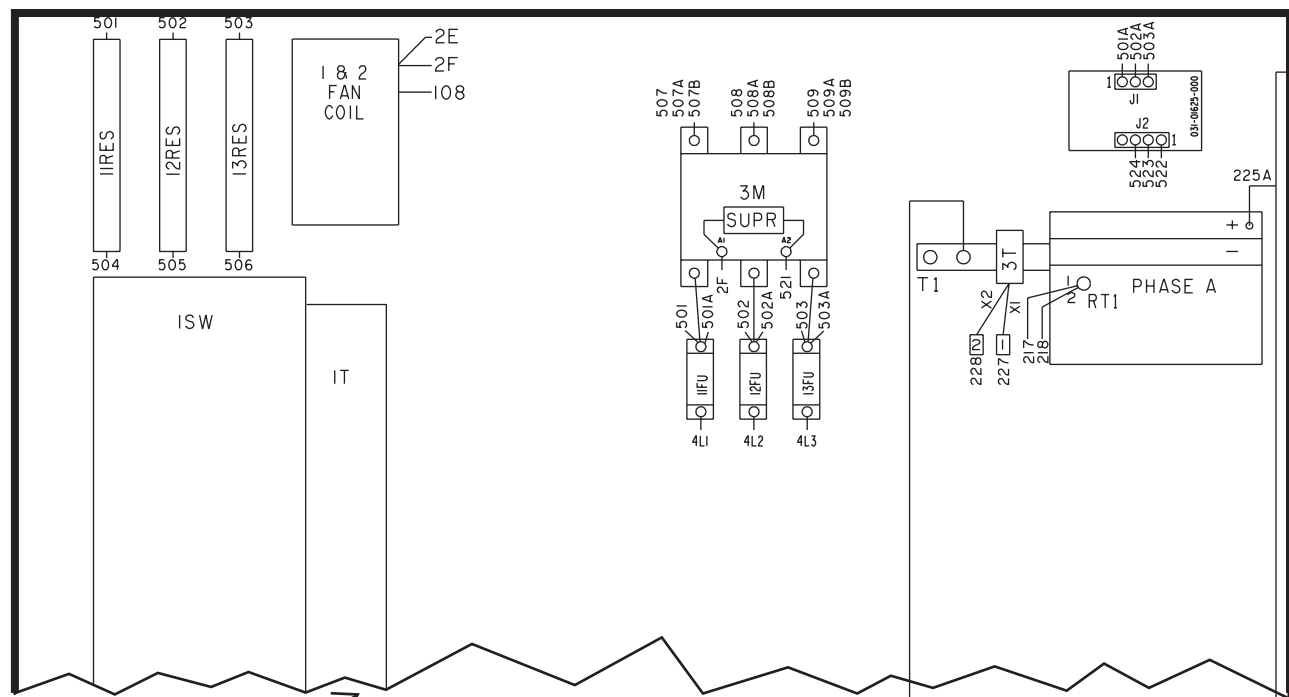
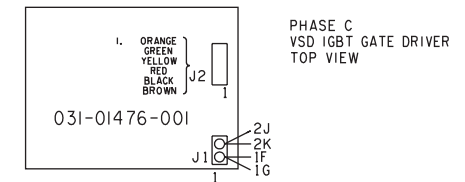
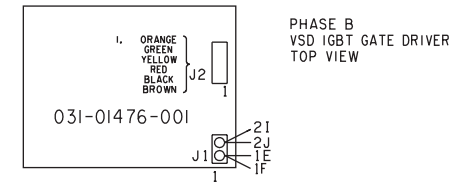
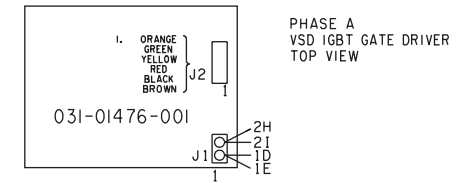
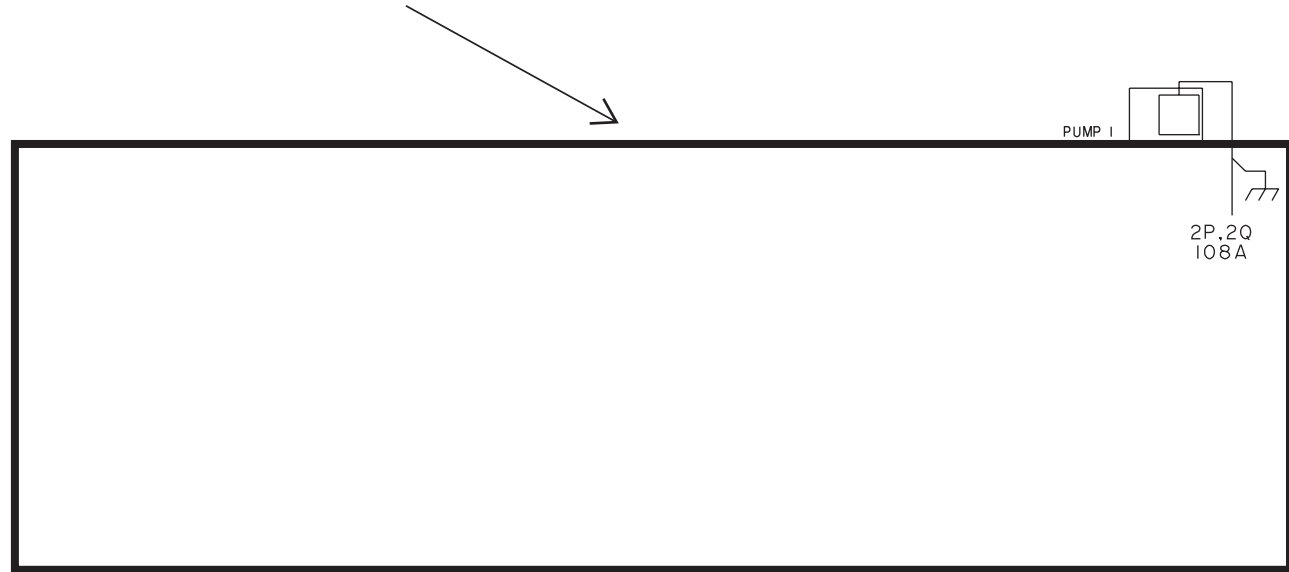
LD02265b



CONTINUED ON PAGE 7B

FIG. 2 – CONNECTION DIAGRAM (TOP)
035-12688 (REV. C)

TOP OF V S D



RIGHT INSIDE OF V S D

INSIDE OF V S D

CONTINUED ON PAGE 8

CONTINUED ON PAGE 9

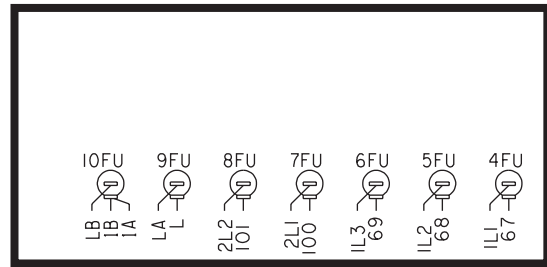
LD02266a

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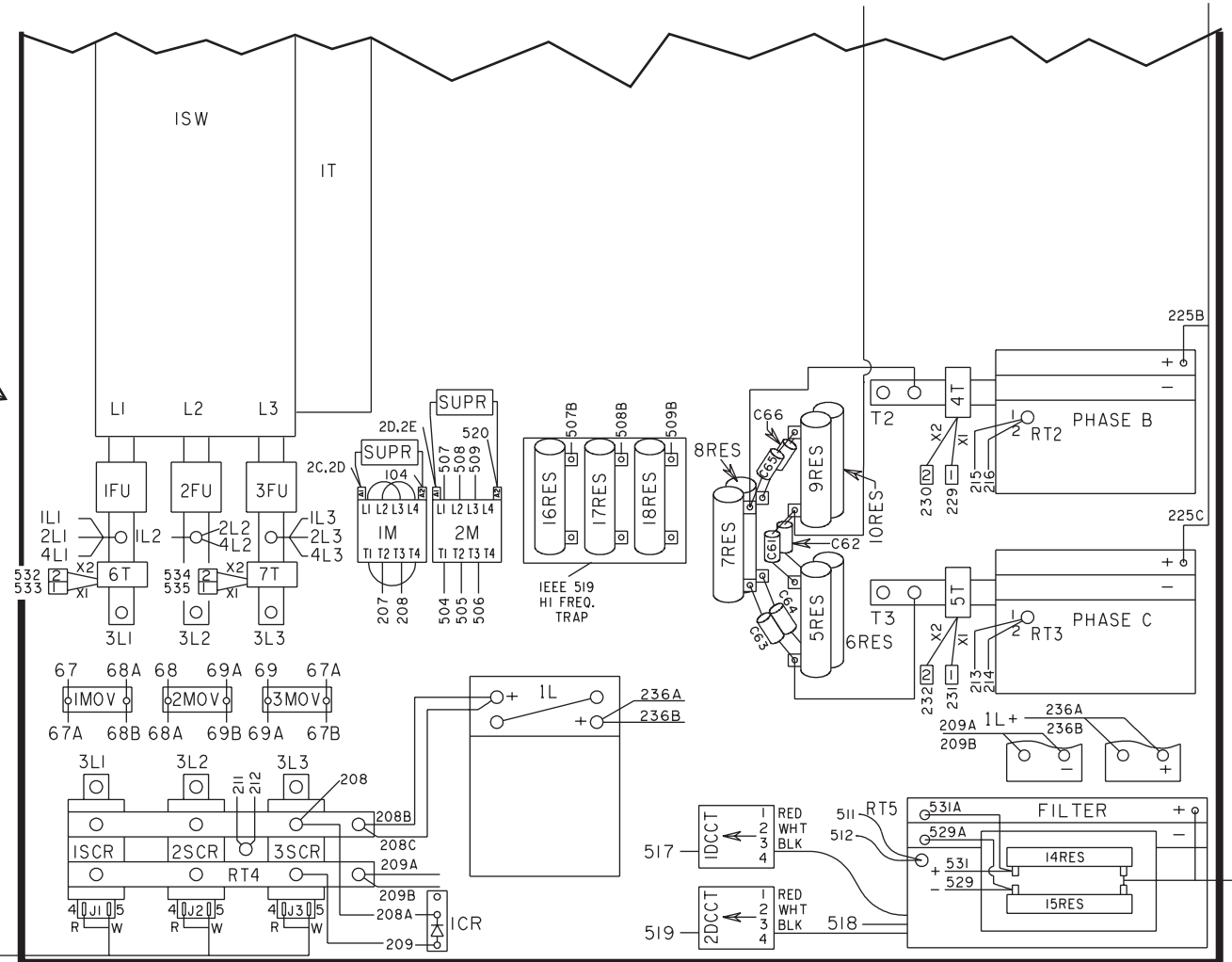
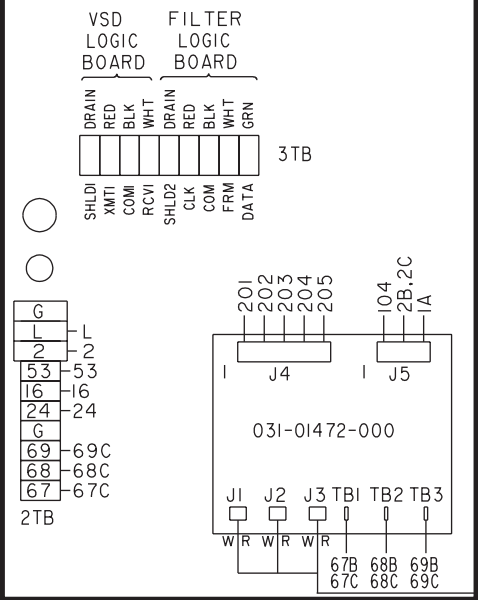
CONTINUED FROM PAGE 7

LEFT INSIDE OF VSD

INSIDE OF VSD



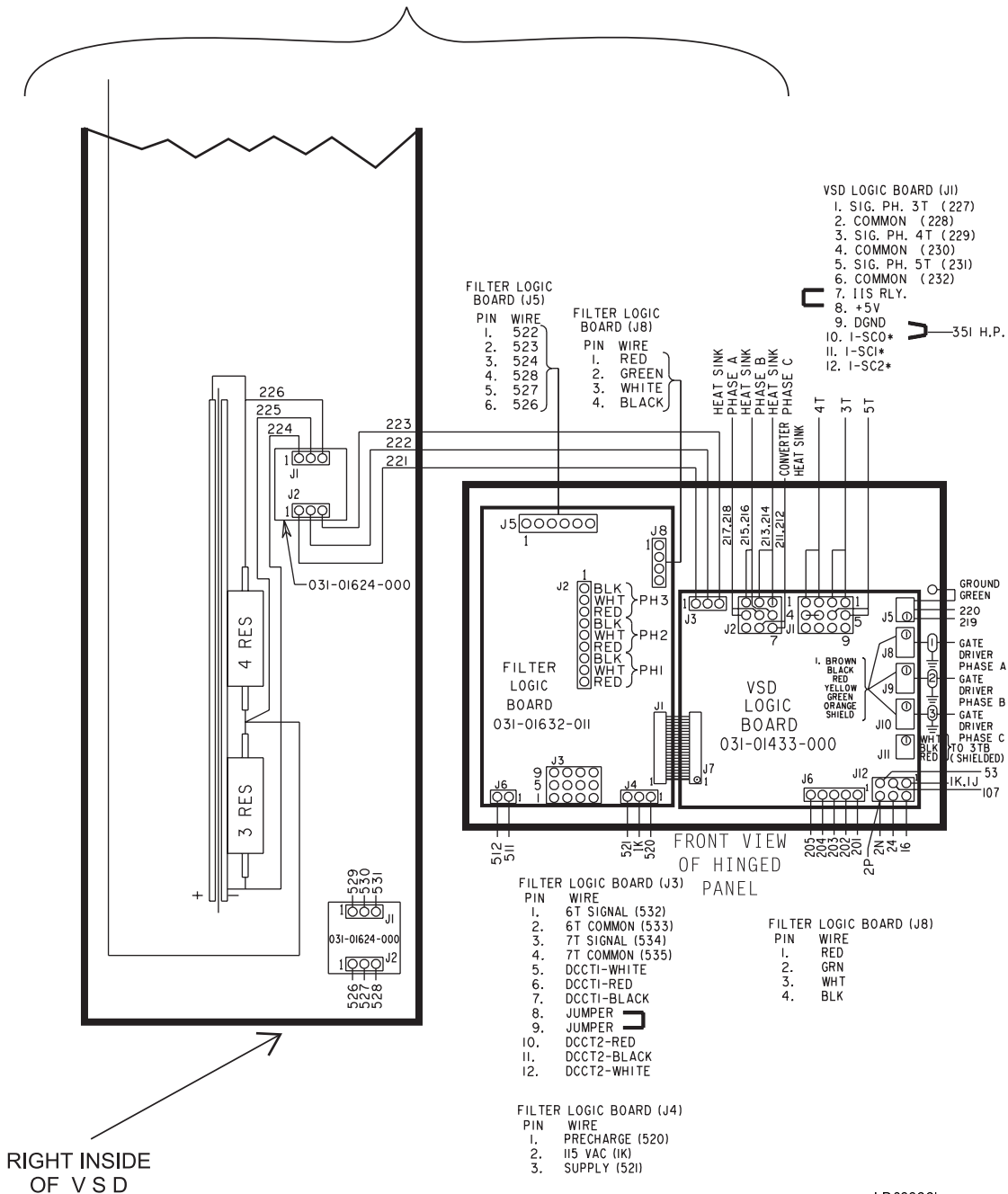
REAR VIEW OF HINGED PANEL



BOTTOM OF VSD

FIG. 2 (Cont'd) - CONNECTION DIAGRAM (BOTTOM)
 035-12688 (REV. C)

CONTINUED FROM PAGE 7A



LD02266b

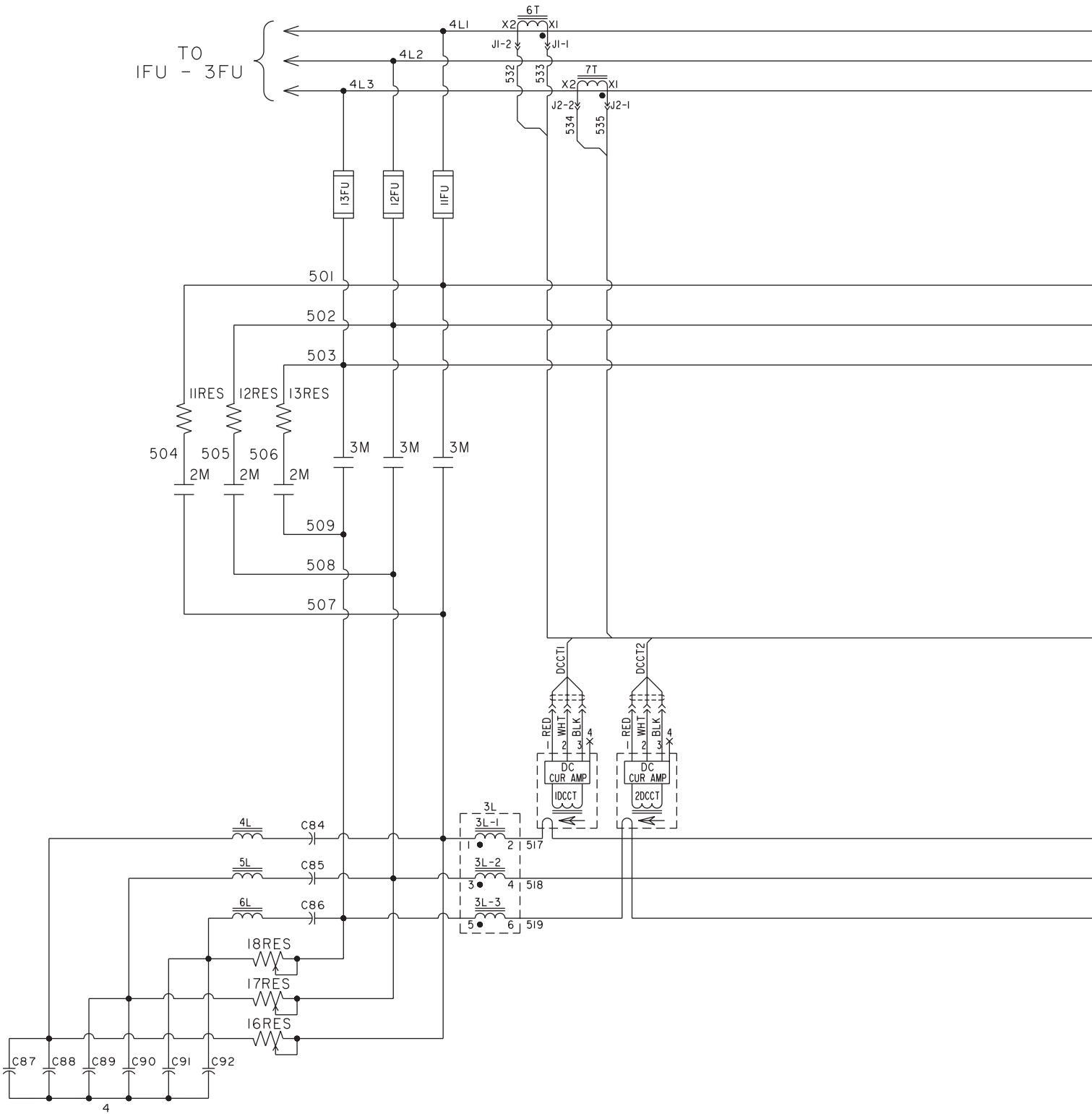
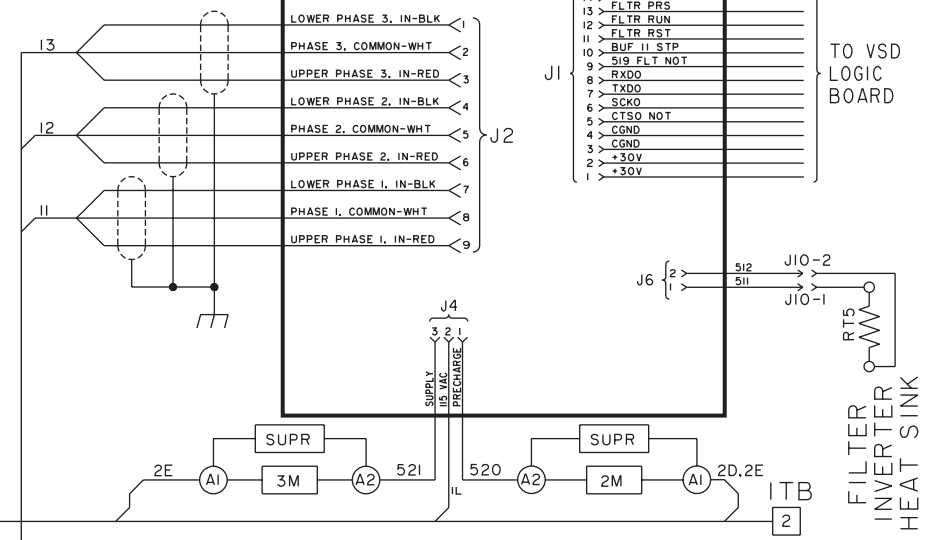
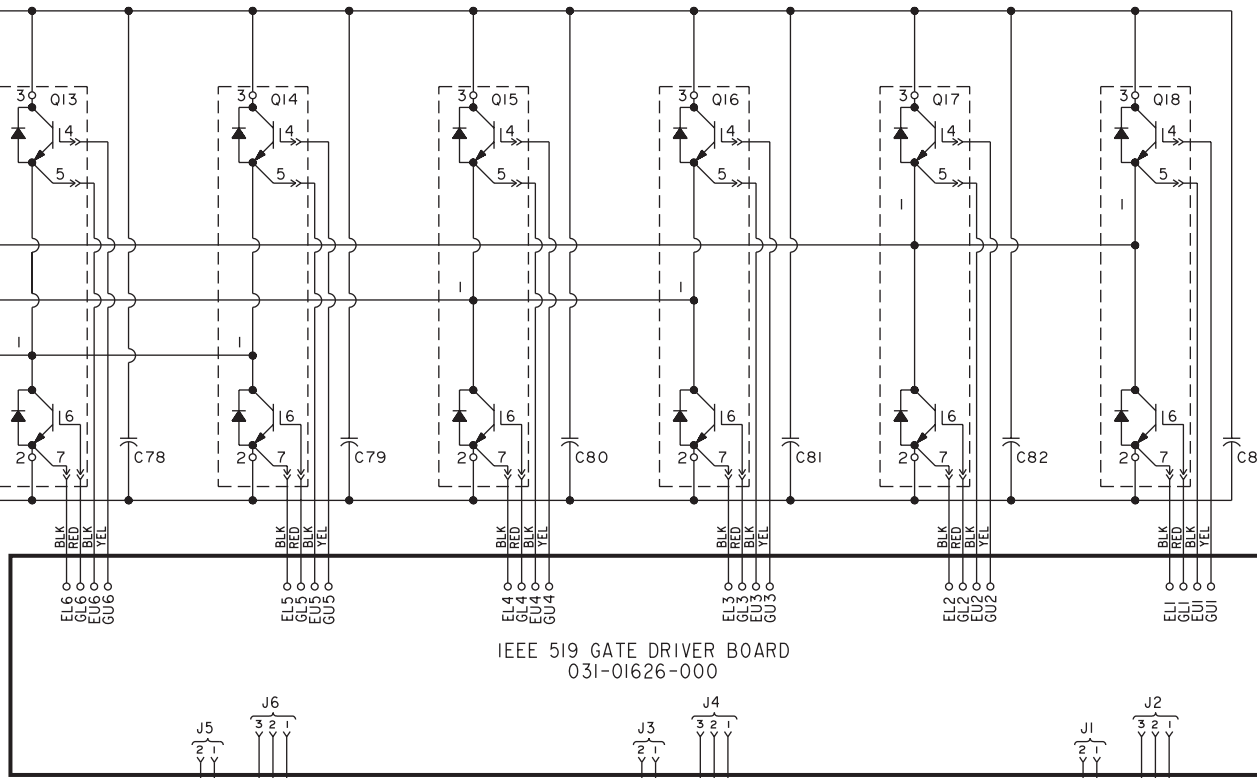
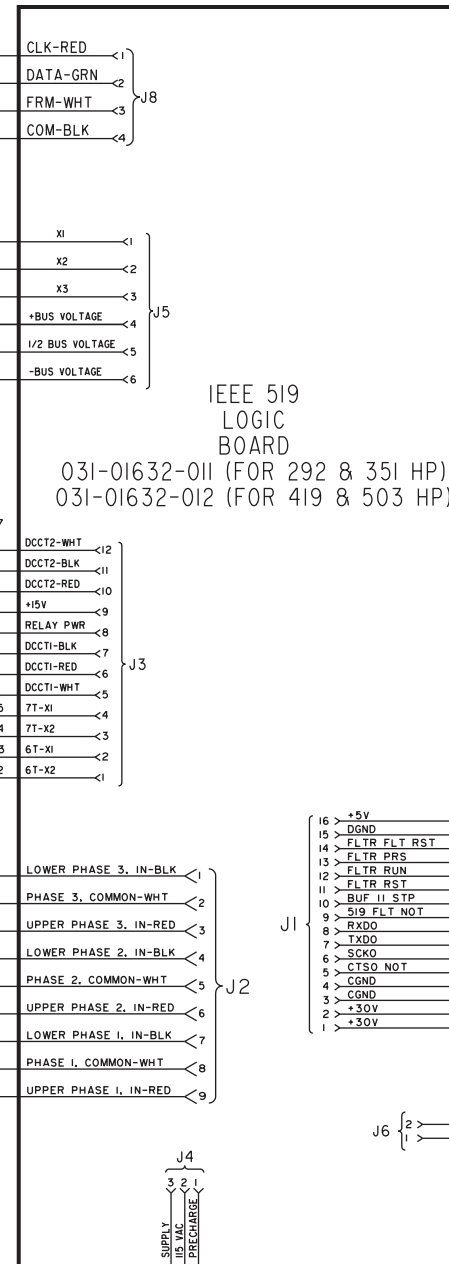
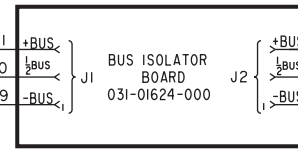
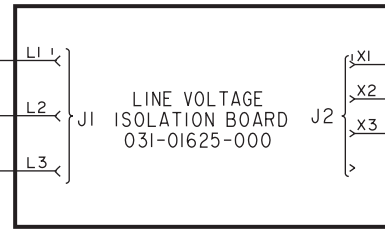
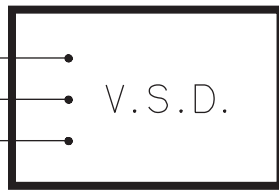




FIG. 3 – OPTIONAL HARMONIC FILTER ELEMENTARY DIAGRAM
035-12669 (REV. D)



LEGEND FOR OPTIONAL HARMONIC FILTER (See pages 10 - 11A)

C67 - C76	CAPACITORS, FILTER, 500 μ f, 450 VDC
C77 - C83	CAPACITORS, FILM, 0.1 μ f, 1200 VDC
C84 - C86	CAPACITORS, FILM, 3.0<F14 μ f, 1000 VDC
C87 - C92	CAPACITORS, FILM, 25.0 μ f, 450 VAC
1DCCT, 2DCCT	FILTER CURRENT TRANSDUCERS
11FU - 13FU	SEMICONDUCTOR FUSES, 150 A, 500 V: BUSSMANN FWH150B FERRAZ A050F150
3L	THREE PHASE INDUCTOR, 100 - 110 μ h, 280 A
4L - 6L	INDUCTORS, 24 μ h, 15 A
2M	CONTACTOR, PRECHARGE, 600 VAC, 25 A
3M	CONTACTOR, SUPPLY, 600 VAC, 85 A
Q13 - Q18	DUAL IGBT MODULES, 1200 V, 200 A
11RES - 13RES	RESISTORS, PRECHARGE (HARMONIC FILTER), 10 Ω , 375 W
14RES - 15RES	RESISTORS, BLEEDER, 3000 Ω , 225 W
16RES - 18 RES	RESISTORS, TRAP, ADJUSTABLE, 2.0 Ω , 225 W (1.7 Ω)
6T, 7T	INPUT CURRENT TRANSFORMER
1TB	TERMINAL BLOCK, FACTORY WIRING
3TB	TERMINAL BLOCK, FIELD WIRING
	JACK J1 - 1 ETC...
	PLUG, P1 - 1 ETC...

