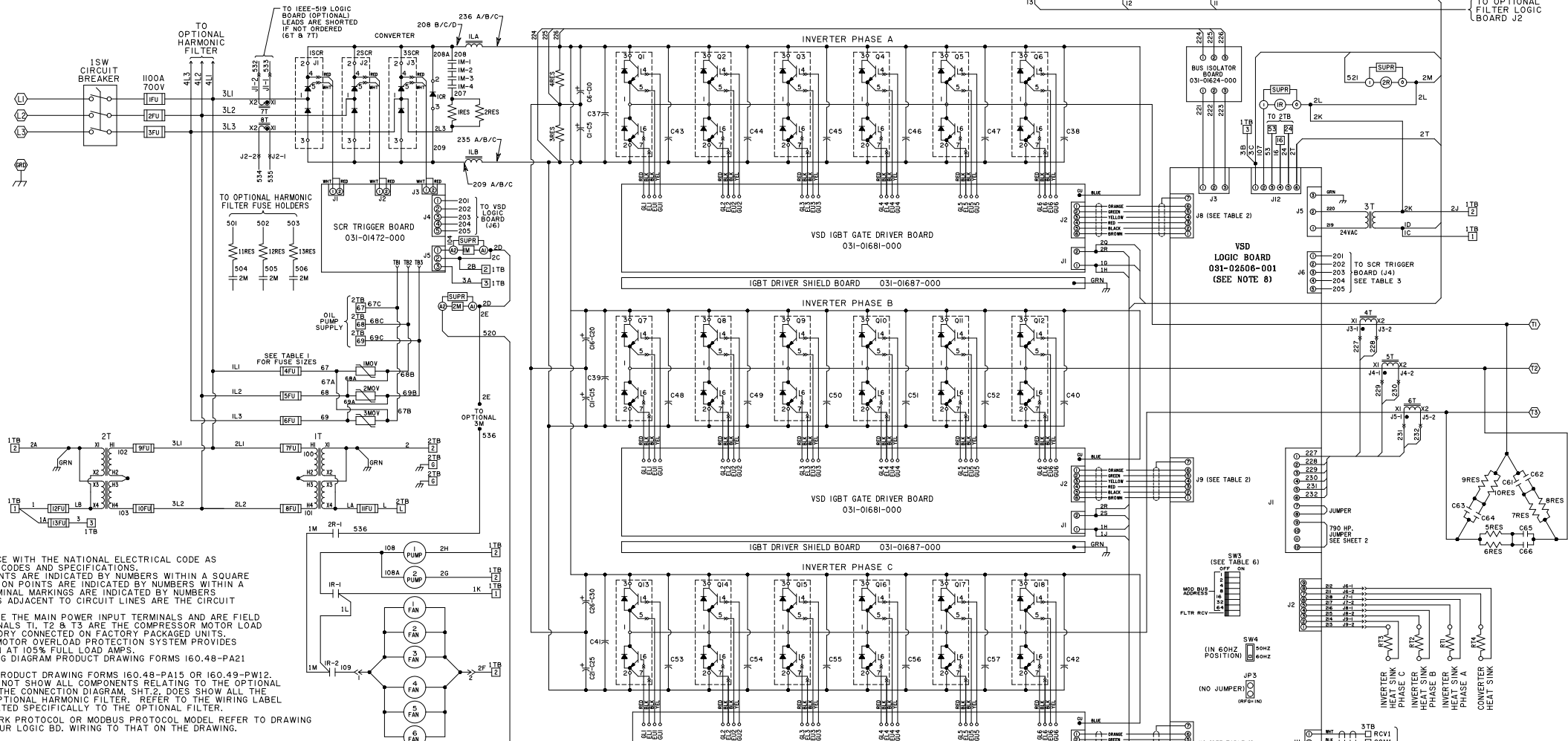


ELEMENTARY DIAGRAM



- NOTES:
- FIELD WIRING TO BE IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE AS WELL AS ALL OTHER APPLICABLE CODES AND SPECIFICATIONS.
 - 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. (3). COMPONENT TERMINAL MARKINGS ARE INDICATED BY NUMBERS WITHIN A CIRCLE I.E. (2). NUMBERS ADJACENT TO CIRCUIT LINES ARE THE CIRCUIT IDENTIFICATION NUMBERS.
 - TERMINALS L1, L2, L3 AND GRD ARE THE MAIN POWER INPUT TERMINALS AND ARE FIELD CONNECTED (SEE NOTE 6). TERMINALS T1, T2 & T3 ARE THE COMPRESSOR MOTOR LOAD POWER TERMINALS AND ARE FACTORY CONNECTED ON FACTORY PACKAGED UNITS.
 - THE THREE PHASE SOLID STATE MOTOR OVERLOAD PROTECTION SYSTEM PROVIDES MOTOR OVERCURRENT PROTECTION AT 105% FULL LOAD AMPS.
 - SEE YORK CONTROL CENTER WIRING DIAGRAM PRODUCT DRAWING FORMS 160.48-PA21 OR 160.52-PW3.
 - FIELD WIRING CONNECTIONS PER PRODUCT DRAWING FORMS 160.48-PA15 OR 160.49-PW12.
 - ELEMENTARY DIAGRAM SHIT1 DOES NOT SHOW ALL COMPONENTS RELATING TO THE OPTIONAL HARMONIC FILTER COMPONENTS. THE CONNECTION DIAGRAM, SHIT2, DOES SHOW ALL THE COMPONENTS RELATING TO THE OPTIONAL HARMONIC FILTER. REFER TO THE WIRING LABEL 035-16265-000 FOR WIRING RELATED SPECIFICALLY TO THE OPTIONAL FILTER.
 - TO DETERMINE IF YOU HAVE A YORK PROTOCOL OR MODBUS PROTOCOL MODEL REFER TO DRAWING 035-2163-000 AND COMPARE YOUR LOGIC BD. WIRING TO THAT ON THE DRAWING.

- LEGEND
- C1 - C30 CAPACITORS, FILM, 8800 uF, 450 VDC
 - C37 - C42 CAPACITORS, FILM, 1.0 uF, 1200 VDC
 - C43 - C57 CAPACITORS, FILM, 0.2 uF, 1000 VDC
 - C61 - C66 CAPACITORS, DV/DT, 0.047 uF, 1600 VDC
 - IFU - 3FU SEMI-CONDUCTOR FUSES, 1100A, 700V; GOULD SHAWMUT #A3-66C 1100TS OR FERRAZ - 6.6UR33T1F100
 - 4FU - 6FU SCR/TRIGGER / OIL PUMP MOTOR FUSES
 - 7FU - 10FU CONTROL SUPPLY TRANSFORMER PRIMARY FUSES, 10A, 600V; BUS FNG-10
 - 11FU EXTERNAL CONTROL SUPPLY TRANSFORMER SECONDARY FUSE, 20A, 500V; BUS FNG-20
 - 12FU INTERNAL CONTROL SUPPLY TRANSFORMER SECONDARY FUSE, 20A, 500V; BUS FNG-20
 - 13FU INTERNAL CONTROL SUPPLY TRANSFORMER SECONDARY FUSE, 7A, 500V; BUS FNG-10
 - IL INDUCTOR, DCLINK, 1125 A, 145 uH
 - IM - 2M CONTACTORS, PRECHARGE, 600 VAC, 25 A
 - Q1 - Q18 DUAL IGBT MODULES, 1200 V, 150 A
 - 1RES - 2RES RESISTORS, PRECHARGE, 35 Ohm, 500 W
 - 3RES - 4RES RESISTORS, BLEEDER, 750 Ohm, 225 W
 - 5RES - 10RES DV/DT RESISTORS, 10 Ohm, 50 W
 - 11RES - 13RES RESISTORS, PRECHARGE (HARMONIC FILTER), 10 Ohm, 375 W
 - RT1 - RT6 HEATSINK THERMISTOR TEMPERATURE SENSORS
 - ISCR - 3SCR SCR / DIODE MODULES, 1200 V, 500 A
 - IR RELAY, COOLING FANS AND PUMP
 - 2R CIRCUIT BREAKER, 600 V, 1200 A
 - 12VAC 24 VAC 2 KVA CONTROL POWER TRANSFORMER
 - 24 VAC 75VA CONTROL TRANSFORMER
 - 4T - 6T OUTPUT CURRENT TRANSFORMERS
 - 7T - 8T INPUT CURRENT TRANSFORMERS
 - ITB TERMINAL BLOCK, FACTORY WIRING
 - 2TB - 3TB TERMINAL BLOCKS, FIELD WIRING
 - JACK, J1-1 ETC...
 - PLUG, P1-1 ETC...

TABLE 1

UNIT STYLE	FUSING - 4FU, 5FU, 6FU
YT	5A, 600V, BUSS FNG-R3
YK	7A, 600V, BUSS FNG-R7

TABLE 2

CONNECTOR PIN	SHIELDED CABLE WIRE COLOR	FUNCTION
1	SPR	FAULT
2	BLK	GROUND
3	RED	UPPER PHASE IN
4	BLK	LOWER PHASE IN
5	GRN	SCRTRIG IN
6	GRN	SCRTRIG IN
7	DRN WIRE **	SHIELD

TABLE 3

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

TABLE 4

CONNECTOR PIN	IDENTIFIER	FUNCTION
1	+522	TO J2-1, OPTIONAL 2022 BOARD
2	+523	TO J2-2, OPTIONAL 2022 BOARD
3	+524	TO J2-3, OPTIONAL 2022 BOARD
4	+525	TO J2-4, OPTIONAL 2022 BOARD
5	+528	TO J2-3, OPTIONAL 1624 BOARD
6	+527	TO J2-2, OPTIONAL 1624 BOARD
7	BLK	TO J2-1, OPTIONAL 1624 BOARD
8	GRN	TO J2CC1 - OPTION
9	GRN	TO J2CC2 - OPTION
10	RED	TO J2CC3 - OPTION
11	GRN	TO J2CC4 - OPTION
12	WHITE	TO J2CC5 - OPTION

TABLE 5

CONNECTOR PIN	IDENTIFIER	FUNCTION
1	+522	TO J2-1, OPTIONAL 2022 BOARD
2	+523	TO J2-2, OPTIONAL 2022 BOARD
3	+524	TO J2-3, OPTIONAL 2022 BOARD
4	+525	TO J2-4, OPTIONAL 2022 BOARD
5	+528	TO J2-3, OPTIONAL 1624 BOARD
6	+527	TO J2-2, OPTIONAL 1624 BOARD
7	+526	TO J2-1, OPTIONAL 1624 BOARD
8		NOT USED

* SAME PIN NUMBERS ARE USED AT BOTH ENDS OF CABLE
** NOT CONNECTED AT GATE DRIVER BOARD END

TABLE 6

POSITION NUMBER	YORK PROTOCOL MODELS	MODBUS PROTOCOL MODELS
1	OFF	ON
2	OFF	OFF
4	OFF	OFF
8	OFF	OFF
16	OFF	OFF
32	OFF	OFF
64	OFF	OFF
FLTR RCV	OFF	ON

YORK INTERNATIONAL CORPORATION
YORK, PA. 17405

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NAME: DR. J. MCDONALD
DATE: 02-10-99
SCALE: N.T.S.

SIZE: E
CAGE NO: 66935
DRAWING NUMBER: 035-16264-000

WT. = LBS. ORG. NO. 035-15968E SHEET 1 OF 2

REV. NO.	DATE	REVISION RECORD	CHG. NO.	DR.	CK.	REV. NO.	DATE	REVISION RECORD	CHG. NO.	DR.	CK.	REV. NO.	DATE	REVISION RECORD	CHG. NO.	DR.	CK.
NEW																	
A	03-28-00	IN TABLE 1 - YT FUSE WAS 480V & BUSS SC-5, YK FUSE WAS 480V & BUSS SC-7 AT B-4.5; IN LEGEND - 7FU-10FU WAS 480V & BUSS SC-10 AT C-7.8; REV A WAS REV AT H-1.	0708 0709 0710 0711	JMM	ARD	F	03-28-00	ADDED INDUCTOR ILB AT G-6.	0708 0709 0710 0711	KFS	MST						
B	06-29-06	REVISED PIN NUMBERS ON ICR AT G-6.	0708 0709 0710 0711						0708 0709 0710 0711	KSR	MST						
C	04-06	ADDED NOTE 8 AND REVISED VSD LOGIC BD. TO INCLUDE MODBUS.	0708 0709 0710 0711						0708 0709 0710 0711	KSR	MST						
D	02-16-07	FILTER LOGIC BD. P/N WAS 031-01632-033 AT C-6.	0708 0709 0710 0711	CBH	MMW				0708 0709 0710 0711								