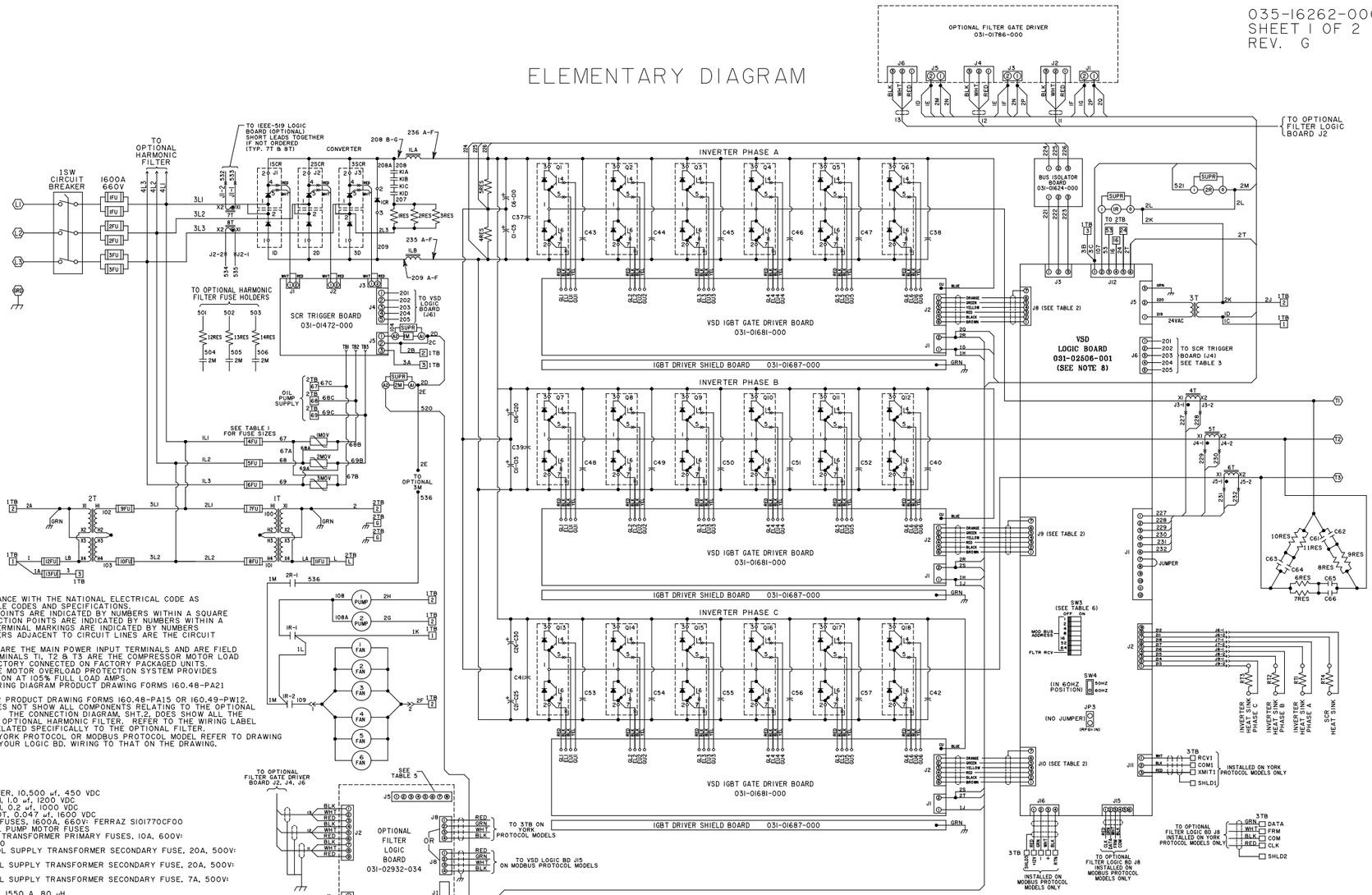
035-16262-000
SHEET 1 OF 2
REV. G

ELEMENTARY DIAGRAM



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] TB. MAIN POWER CONNECTION POINTS ARE INDICATED BY NUMBERS WITHIN A HEXAGON I.E. ⑥. 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 & 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 YORK CONTROL CENTER WIRING DIAGRAM PRODUCT DRAWING FORMS 160.48-PA21 OR 160.52-PW3.
6. FIELD WIRING CONNECTIONS PER PRODUCT DRAWING FORMS 160.48-PA15 OR 160.49-PW12.
7. ELEMENTARY DIAGRAM SHT.1 DOES NOT SHOW ALL COMPONENTS RELATING TO THE OPTIONAL HARMONIC FILTER COMPONENTS. THE CONNECTION DIAGRAM, SHT.2, DOES SHOW ALL THE COMPONENTS RELATING TO THE OPTIONAL HARMONIC FILTER. REFER TO THE WIRING LABEL 035-16263-000 FOR WIRING RELATED SPECIFICALLY TO THE OPTIONAL FILTER.
8. TO DETERMINE IF YOU HAVE A YORK PROTOCOL OR MODBUS PROTOCOL MODEL REFER TO DRAWING 035-21563-000 AND COMPARE YOUR LOGIC BD. WIRING TO THAT ON THE DRAWING.

LEGEND

C1 - C30	CAPACITORS, FILTER, 10,500 µf, 450 VDC
C37 - C42	CAPACITORS, FILM, 1.0 µf, 1200 VDC
C43 - C57	CAPACITORS, FILM, 0.2 µf, 1000 VDC
C61 - C66	CAPACITORS, DV/DT, 0.047 µf, 1600 VDC
1FU - 3FU	SEMI-CONDUCTOR FUSES, 1600A, 660V: FERRAZ SIO1770CF00
4FU - 6FU	SCRTRIGGER / OIL PUMP MOTOR FUSES
7FU - 10FU	CONTROL SUPPLY TRANSFORMER PRIMARY FUSES, 10A, 600V: BUSS FNQ-R-10
11FU	EXTERNAL CONTROL SUPPLY TRANSFORMER SECONDARY FUSE, 20A, 500V: BUSS FNQ-20
12FU	INTERNAL CONTROL SUPPLY TRANSFORMER SECONDARY FUSE, 20A, 500V: BUSS FNQ-20
13FU	INTERNAL CONTROL SUPPLY TRANSFORMER SECONDARY FUSE, 7A, 500V: BUSS FNQ-7
IL	INDUCTOR, DCLINK, 1550 A, 80 µH
1M - 2M	CONTACTORS, PRECHARGE, 600 VAC, 25 A
Q1 - Q18	DUAL IGBT MODULES, 1200 V, 300 A
1RES - 3RES	RESISTORS, PRECHARGE, 35 Ω, 500 W
4RES - 5RES	RESISTORS, BLEEDER, 750 Ω, 225 W
6RES - 11RES	DV/DT RESISTORS, 10 Ω, 50 W
12RES - 14RES	RESISTORS, PRECHARGE (HARMONIC FILTER), 10 Ω, 375 W
RT1 - RT6	HEATSINK THERMISTOR TEMPERATURE SENSORS
1D - 3D	DIODE MODULES, 1200 V, 600 A
1SCR - 3SCR	SCR MODULES, 1200 V, 600 A
1R	RELAY, COOLING FANS AND PUMP
2R	RELAY, CONTROL
1SW	CIRCUIT BREAKER, 600 V, 1200 A, 100% RATED
1T - 2T	120 VAC, 2 KVA CONTROL POWER TRANSFORMER
3T	24 VAC, 75VA CONTROL TRANSFORMER
4T - 6T	OUTPUT CURRENT TRANSFORMERS
7T - 8T	INPUT CURRENT TRANSFORMERS
1TB	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 FNQ-R5
YK	7A, 600V, BUSS FNQ-R7

TABLE 2
VSD LOGIC BOARD - J8, J9, J10 PINOUT

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. +15V
7	DRAIN WIRE **	SHIELD

TABLE 3
VSD LOGIC BOARD - J6 PINOUT

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

TABLE 4
OPTIONAL FILTER LOGIC BOARD - J3 PINOUT

CONNECTOR PIN	IDENTIFIER	FUNCTION
1	+532	TO 7T-X2
2	+533	TO 7T-X1
3	+534	TO 8T-X2
4	+535	TO 8T-X1
5	WHITE	TO 1DCCT - OPTION
6	RED	TO 1DCCT - OPTION
7	BLK	TO 1DCCT - OPTION
8	JUMPER	RELAY POWER
9	JUMPER	+15V
10	RED	TO 2DCCT - OPTION
11	BLK	TO 2DCCT - OPTION
12	WHITE	TO 2DCCT - OPTION

TABLE 5
OPTIONAL FILTER LOGIC BOARD - J5 PINOUT

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	+526	TO J2-5, 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
SW3 POSITIONS

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

REV. LEV.	DATE	REVISION RECORD	CHG. NO.	DR.	CK.
-		NEW	0798 3061		
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.	0709 3027	JWM	ARD
B	03-16-04	SEE SHEET 2 FOR REVISION: WAS REV A AT H-1.	0703 3018	JWM	MJT
C	08-2-06	REVISED PIN NUMBERS OF ID, 2D, 3D AND ICR AT G-6.	0706 0055	KSR	MST
D	10-04-06	CHANGED LOGIC BD. TO INCLUDE MODBUS, ADDED NOTE 8.	0706 0067	KSR	MST
E	12-12-07	FILTER LOGIC BD. P/N WAS 031-01632-034 AT C-6.	0708 0023	CBH	MWM
F	01-23-09	SEE SHEET 2 FOR REVISIONS.	0708 0045	KFS	MST
G	09-14-09	ADDED INDUCTOR ILB AT G-6.	0709 0026	KFS	MST

YORK INTERNATIONAL CORPORATION
YORK, PA. 17405

DIMENSIONS ARE IN INCHES
DO NOT SCALE
TOLERANCES PER ENG. STD. M-282
WELDING PER ENG. STD. M-30
REF. DWG.

LABEL, WIRING DIAGRAM
1100 HP.
V.S.D.
STYLE D

MATERIAL
TYPE _____ ENG. STD. _____
PART NO. _____
CUT SIZE _____

NAME	DATE
DR. J.W.MEDWICK	01-07-99
APPR. H.R.SCHNETZKA	03-15-99
SCALE: N.T.S.	

SIZE E | CAGE NO 66935 | DRAWING NUMBER 035-16262-000

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

01-12-10 III-24

CK.200.10.LABEL.WIRING.DIAGRAM.035-16262E.SHT1