

ELEMENTARY WIRING DIAGRAM

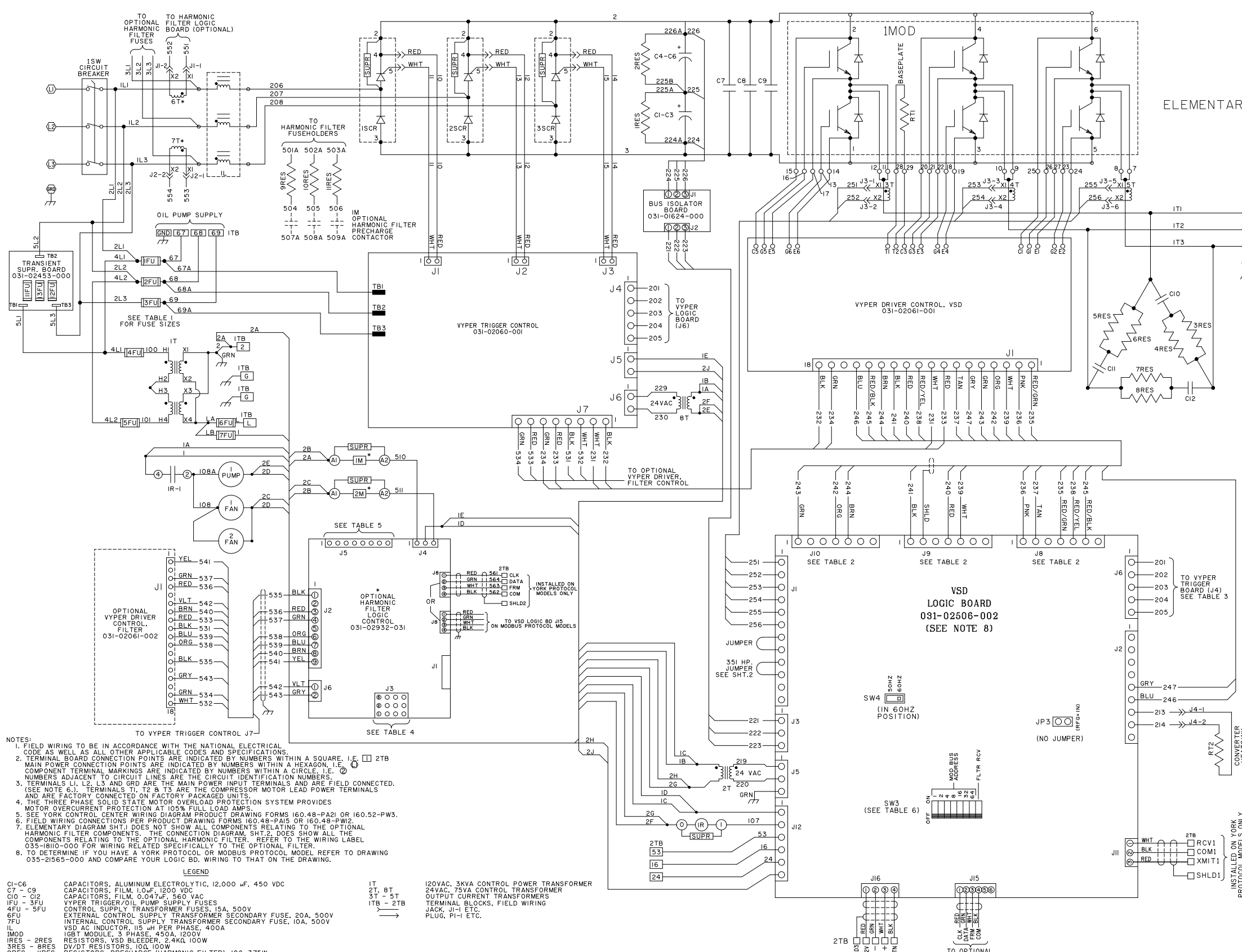


TABLE 1
UNIT STYLE FUSING - IFU, 2FU, 3FU

Y7 Y5	5A	500V FERRAZ-SHAUMUT ATO-5
Y4	7A	500V FERRAZ-SHAUMUT ATO-7

TABLE 2
HYPERLOGIC BOARD - J4, J5, J6 PINOUT

CONNECTOR PIN	FUNCTION
1	FAULT
2	GRD/SHLD
3	5V FEED
4	UPPER PHASE
5	LOWER PHASE
6	PH. 1/2/3
7	GRD/SHLD

NOTE: GRD/SHLD NOT CONNECTED AT DRIVER CONTROL END

TABLE 3
VYPERLOGIC BOARD - J6 PINOUT

CONNECTOR PIN	FUNCTION
1	5V FEED
2	PH LOSS OUT
3	PRECHG IN
4	SCRTRIG IN
5	+5.5V FEED

TABLE 4
OPTIONAL HARMONIC FILTER LOGIC BOARD - J3 PINOUT

CONNECTOR PIN	IDENTIFIER	FUNCTION
1	552	TO 6T-X2 - OPTION
2	551	TO 6T-X1 - OPTION
3	554	TO 7T-X2 - OPTION
4	553	TO 7T-X1 - OPTION
5	WHITE	TO 10CCT - OPTION
6	RED	TO 10CCT - OPTION
7	BLK	TO 10CCT - OPTION
8	-	TO J3 PIN 9
9	-	TO J3 PIN 8
10	RED	TO 20CCT - OPTION
11	BLK	TO 20CCT - OPTION
12	WHITE	TO 20CCT - OPTION

TABLE 5
OPTIONAL HARMONIC FILTER LOGIC BOARD - J5 PINOUT

CONNECTOR PIN	IDENTIFIER	FUNCTION
1	550	TO J2-1, OPTIONAL 2022 BOARD
2	529	TO J2-2, OPTIONAL 2022 BOARD
3	528	TO J2-3, OPTIONAL 2022 BOARD
4	527	TO J2-4, OPTIONAL 2022 BOARD
5	523	TO J2-3, OPTIONAL 1624 BOARD
6	522	TO J2-2, OPTIONAL 1624 BOARD
7	521	TO J2-1, OPTIONAL 1624 BOARD
8	-	NOT USED

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

- 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. □ 2TB MAIN POWER CONNECTION POINTS ARE INDICATED BY NUMBERS WITHIN A HEXAGON, I.E. ⬡ COMPONENT TERMINAL MARKINGS ARE INDICATED BY NUMBERS WITHIN A CIRCLE, I.E. ○ 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 LEAD 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 160.48-PW2.
 - 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 035-1810-000 FOR WIRING RELATED SPECIFICALLY TO THE OPTIONAL FILTER.
 - TO DETERMINE IF YOU HAVE A YORK PROTOCOL OR MODBUS PROTOCOL MODEL REFER TO DRAWING 035-21565-000 AND COMPARE YOUR LOGIC BD. WIRING TO THAT ON THE DRAWING.

- LEGEND
- C1-C6 CAPACITORS, ALUMINUM ELECTROLYTIC, 12,000 μ F, 450 VDC
 - C7 - C9 CAPACITORS, FILM, 1.0 μ F, 1200 VDC
 - C10 - C12 CAPACITORS, FILM, 0.047 μ F, 560 VDC
 - IFU - 5FU VYPER TRIGGER LOGIC FUSES
 - 4FU - 5FU CONTROL SUPPLY TRANSFORMER FUSES, 15A, 500V
 - 6FU EXTERNAL CONTROL SUPPLY TRANSFORMER SECONDARY FUSE, 20A, 500V
 - 7FU INTERNAL CONTROL SUPPLY TRANSFORMER SECONDARY FUSE, 10A, 500V
 - IL VSD AC INDUCTOR, 115 μ H PER PHASE, 400A
 - IMOD IGBT MODULE, 3 PHASE, 450A, 1200V
 - 1RES - 2RES RESISTORS, VSD DRIVER, 2-4K Ω , 100W
 - 3RES - 8RES DV/DI RESISTORS, 10 Ω , 100W
 - 9RES - 1RES RESISTORS, PRECHARGE (HARMONIC FILTER), 10 Ω , 375W
 - RT1 - RT2 THERMISTOR TEMPERATURE SENSORS
 - ISCR - 3SCR SCR/DIODE MODULES, 1200V, 210A
 - IR RELAY, COOLING FANS AND PUMP
 - ISW CIRCUIT BREAKER, 600V, 400A, 100% RATED
 - IT 2T, 8T
 - 2T, 8T 3T - 5T
 - 1TB - 2TB TERMINAL BLOCKS, FIELD WIRING JACK, J1-1 ETC. PLUG, P1-1 ETC.

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	04-20-00	2C WAS 2E & 2H WAS 2F AT C-5; 2E WAS 2C & 2F WAS 2H AT E-5; 2C WAS 2E AT E-7.	0705 0706 0707	JMM	SYS			AT D-6 HARMONIC FILTER LOGIC CONTROL WAS 031-01632-031.	0707 0708	CBH	MMW						
B	04-22-00	ADDED SUPPRESSORS AT H-5 AND H-6; 1RES - 2RES RATING WAS 2K Ω ; ISCR - 3SCR RATING WAS 1400V.	0703 0704	CBH	MST												
C	04-20-00	REMOVED EXTRA PIN FROM J1 AT C-7.	0705	CBH	MST												
D	04-24-00	CHANGED VSD LOGIC BD. TO INCLUDE MODBUS; ADDED NOTE B; ADDED TRANSIENT SUPR. BOARD AT F-8.	0705 0706 0707	XSR	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
ELEMENTARY WIRING DIAG.
VYPER DRIVE
351 HP. V.S.D.

MATERIAL
ENG. STD.
PART NO.
CUT SIZE

NAME DATE
DR. J.W. MECIOWICZ 03-19-00
APPR. H.SCHNETZKA 03-27-00
SCALE: N.T.S.

SIZE CAGE NO. DRAWING NUMBER
E 66935 035-17889-000

WT. = LBS. ORG. NO. SHEET 1 OF 2