



**Read the
separate
safety
manual
before
installing,
operating,
or servicing**

Published Manual Number/ECN: ME6HF8W1CE/2022145A

- Publishing System: TPAS2
- Access date: 04/01/2022
- Document ECNs: Latest

Schematic/Electrical Parts

48040F7N, H7N, H7W

68036F5N, H5N

MARK VI CONTROLS



Table of Contents

ME6HF8W1CE/22145A

Page	Description	Document
1	Component Parts List	W6F3WSPL/2022145N
11	Limited Standard Warranty	BMP720097/2019036
12	How to Get the Necessary Repair Components	BIUUUD19/20081231
13	How to Use Milnor® Electrical Schematic Diagrams	BIUUUK01/20130308
26	Sample Schematic	BMP010012/2018343
28	3 Phase Motor Connection Diagram	BMP850029/1999362B
29	3P Motor Diagram-Multivolt	W80008/2001253A
30	Control Box Layouts Sheet 1	W6F3WSTG1A/2012316B
32	Control Box Layouts 48040	W6F3WSTG4/2012134B
34	Control Box Layouts Sheet 5	W6F3WSTG5/2012316B
36	Board to Board Wiring	W6F3WSBWA/2006084B
38	Flushing Supplies	W6F3WSCF/2006084B
40	Liquid Supply-Interpret Relays	W6F3WSCP/2007092B
42	Chemical Save + Timer Stop Input	W6F3WSCS/2006413B
44	Central Liquid Supply	W6F3WSCX/1997101B
46	Flat Panel Display Wiring	W6F3WSDF/2008043B
48	Alternate Drain Valve Air Operated	W6F3WSDR/1997101B
50	Extract Commands Satisfied	W6F3WSEA/1997101B
52	Electronic Level / RPM	W6F3WSEC/1997101B
54	Electircal Valves	W6F3WSEV/2008105B
56	Electrical Valves for 48H7N / 68H5N	W6F3WSEVA/2012134B
58	Hydraulic Door Wiring	W6F3WSHD/2008105B
60	Hydraulic Door Wiring Hydraulic Tilt Only	W6F3WSHDA/2012134B
62	Microprocessor Inputs	W6F3WSI1A/2009484B
64	Keypad	W6F3WSKP/2007248B
66	Control Circuit Transformer	W6F3WSLV/2017294B
68	600V to 480V Buck Boost Transformer	W6F3WSMT6/2003124B
70	20 Programable Outputs Optional	W6F3WSOP/1998243B
72	Raise House Circuits	W6F3WSRH/2008105B
74	Raise House Circuits 6836F5N only	W6F3WSRHA/2008105B
76	Raise House Hydraulic Tilt Only	W6F3WSRHC/2012243B
78	Raise House Circuits with French Mods	W6F3WSRHF/2005174B
80	Start Circuit for 48040F-H7N / 68036F-H5N	W6F3WSS+F/2012134B
82	Start Circuit for 48F7N / 68F5N w/ French Mods	W6F3WSS+FF/2009163B
84	Start Circuit for 48F7W / 68F5W	W6F3WSS+G/2009163B
86	Inverter wiring	W6F3WSVP/2019424B

COMPONENT PARTS LIST

W6F3WSPL/2022145N

<u>COMPONENT NUMBER</u>	<u>FUNCTION OF THIS COMPONENT NUMBER</u>	<u>WHERE TO FIND THIS COMPONENT</u>	<u>MIL/NOR P/N</u>	<u>DESCRIPTION</u>	<u>LOCATION</u>
	>>>CONTROL BOX LAYOUTS				
001	DETAIL-186 PROCESSOR CONTROL BOX	W6F3WSTG1A	B2TAG98040	186 PROCESSOR BOX	SEE FUNCTION
002	DETAIL-36+42 VALVE BOX	W6F3WSTG1A	B2TAG95056	TAG: 42032F7 VALVE ASSEMBLY	SEE FUNCTION
003	DETAIL-INPUT AND OUTPUT BOARDS	W6F3WSTG1A	B2TAG96034	CONTROL BOARDS INPUTS/OUTPUTS	SEE FUNCTION
004	DETAIL-VALVE SET 48/68 F5N/W	W6F3WSTG1A	B2T2000019	TAG:4840 F7N VALVE SET	SEE FUNCTION
005	DETAIL-48040 LOW VOLTAGE CONTROL BX	W6F3WSTG4	B2T2000022	48040F7W/H7N LOW VOLT CONTROL BX	SEE FUNCTION
006	DETAIL-48040 HIGH VOLTAGE CONTROL BX	W6F3WSTG4	B2T2000021	48040F-H7J/B/P HIGH VOLT CNTL BX	SEE FUNCTION
007	DETAIL-68036 LOW VOLTAGE CONTROL BX	W6F3WSTG5	B2T2011020	68036H5N LOW VOLT C-BOX	SEE FUNCTION
008	DETAIL-68036 HIGH VOLTAGE CONTROL BX	W6F3WSTG5	B2T2012024	F5W/H5N HIGH VOLT CNTRL BX	SEE FUNCTION
BA	>>>PRINTED CIRCUIT BOARDS				
BAD-1	BOARD-ANALOG TO DIGITAL CONVERTER	W6F3WSBWA	08BSADCT	BD: SERIAL A-D CONVERT->TEST	CONTROL BOX
BAD-1	BOARD-ANALOG TO DIGITAL CONVERTER	W6F3WSEC	08BSADCT	BD: SERIAL A-D CONVERT->TEST	CONTROL BOX
BAS	BOARD-16 SNUBBER CIRCUITS	W6F3WSCF	08BNCMBT	COIN MACHINE SNUBBER->TESTED	CONTROL BOX
BAS	BOARD-16 SNUBBER CIRCUITS	W6F3WSEV	08BNCMBT	COIN MACHINE SNUBBER->TESTED	CONTROL BOX
BAS	BOARD-16 SNUBBER CIRCUITS	W6F3WSEVA	08BNCMBT	COIN MACHINE SNUBBER->TESTED	CONTROL BOX
BBB-1	BOARD-MEMORY BATTERY BACKUP	W6F3WSBWA	08BSBB1T	BOARD: SER BATT BACKUP-TEST	PROCESSOR BX
BDA-1	BOARD-DIGITAL TO ANALOG CONVERTOR	W6F3WSBWA	08BSDACHT	BD:HI-RES SERIAL D-A->TEST	CONTROL BOX
BDFP	DISPLAY-MICROPROCESSOR-COLOR FP	W6F3WSDF	08EFD320A	DISPLAY#AV05114KIT#BT057PM	SWITCH PANEL
BDVFD	DISPLAY-MICROPROCESSOR-VFD	W6F3WSBWA	08BSEVFD5V	BD: SERIAL VFD 2LINE 186-19200B-TEST	SWITCH PANEL
BFPC	BOARD-FLAT PNL CONTROLLER	W6F3WSDF	MESSAGE EW	INCLUDED IN KIT FOR BDFP ABOVE	SWITCH PANEL
BFPI	BOARD-FLAT PNL INTERFACE	W6F3WSDF	08BSAT3AT	BD:FLAT PNL DISP INF->TESTED	SWITCH PANEL
BIO-1	BOARD-8OUTPUT/16INPUT #1	W6F3WSBWA	08BS816CHT	BD 8OUT-16IN HIGH SPD->TEST	CONTROL BOX
BLB	BOARD-LEVEL TRANSDUCER	W6F3WSEC	08BNLTT	LEVEL TRANSDUCER BD->TEST	CONTROL BOX
BMTH	BOARD-5 CHANNEL MOTHER	W6F3WSBWA	08BS5MTHAT	BD:SERIAL 5 CARD MOTHER->TEST	CONTROL BOX
BO24-1	BOARD-24 OUTPUT #1	W6F3WSBWA	08BSO24AT	BD:SERIAL 24 OUTPUT->TEST	CONTROL BOX
BO24-2	BOARD-24 OUTPUT #2	W6F3WSBWA	08BSO24AT	BD:SERIAL 24 OUTPUT->TEST	CONTROL BOX
BPB	BOARD-186 PROCESSOR	W6F3WSBWA	08BSPE2T	SERIAL 186 PROC BD+FP->TEST	PROCESSOR BX
BSP	BOARD-SPEED SENSING	W6F3WSBWA	08BNDSRAT	BD DRY SAFETY ROTATION->TEST	CONTROL BOX
CDDH	DELAY-HDRAULIC DOOR OPEN	W6F3WSRHC	09CF001071	TDR F1S 2PDT 11PIN 240V60C	CONTROL BOX
CL	>>>RELAY-LATCH				
CLA	LATCH-DOOR SEAL	W6F3WSS+H	09CL2C-C71	RELAY-LATCH DPDT 240V 2-COIL	CONTROL BOX
CLA	LATCH-DOOR SEAL	W6F3WSS+HF	09CL2C-C71	RELAY-LATCH DPDT 240V 2-COIL	CONTROL BOX
CLA	LATCH-DOOR SEAL	W6F3WSS+G	09CL2C-C71	RELAY-LATCH DPDT 240V 2-COIL	CONTROL BOX

COMPONENT PARTS LIST

<u>COMPONENT</u>	<u>FUNCTION OF THIS</u>	<u>WHERE TO FIND</u>	<u>MIL NOR P/N</u>	<u>DESCRIPTION</u>	<u>LOCATION</u>
<u>NUMBER</u>	<u>COMPONENT NUMBER</u>	<u>THIS COMPONENT</u>			
CLA-CHOKE	CHOKE-DOOR SEAL LATCH	W6F3WSS+F	10YCLCHOKE	LATCH HARNES: RF CHOKE	CONTROL BOX
CLA-CHOKE	CHOKE-DOOR SEAL LATCH	W6F3WSS+FF	10YCLCHOKE	LATCH HARNES: RF CHOKE	CONTROL BOX
CP	>>>PHOTOEYE				
CPSP	PHOTOEYE-SPEED LESS THAN 48"	W6F3WSBWA	09RPE013	SENSOR E-Z BEAM DC	MAIN PULLEY
CPSP	PHOTOEYE-SPEED 48" DIA. AND GREATER	W6F3WSBWA	09RPE013Q	SENSOR E-Z BEAM QUICK CONN DC	MAIN PULLEY
CR	>>>RELAY-PILOT OR CONTROL				
CRA	RELAY-DOOR SEALED	W6F3WSS+F	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	CONTROL BOX
CRA	RELAY-DOOR SEALED	W6F3WSS+FF	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	CONTROL BOX
CRA	RELAY-DOOR SEALED	W6F3WSS+G	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	CONTROL BOX
CRC01	RELAY-INTERPRET RELAY #1	W6F3WSCP	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	INT RELAY BX
CRC02	RELAY-INTERPRET RELAY #2	W6F3WSCP	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	INT RELAY BX
CRC03	RELAY-INTERPRET RELAY #3	W6F3WSCP	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	INT RELAY BX
CRC04	RELAY-INTERPRET RELAY #4	W6F3WSCP	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	INT RELAY BX
CRC05	RELAY-INTERPRET RELAY #5	W6F3WSCP	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	INT RELAY BX
CRC06	RELAY-INTERPRET RELAY #6	W6F3WSCP	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	INT RELAY BX
CRC07	RELAY-INTERPRET RELAY #7	W6F3WSCP	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	INT RELAY BX
CRC08	RELAY-INTERPRET RELAY #8	W6F3WSCP	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	INT RELAY BX
CRC09	RELAY-INTERPRET RELAY #9	W6F3WSCP	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	INT RELAY BX
CRC10	RELAY-INTERPRET RELAY #10	W6F3WSCP	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	INT RELAY BX
CRC11	RELAY-INTERPRET RELAY #11	W6F3WSCP	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	INT RELAY BX
CRC12	RELAY-INTERPRET RELAY #12	W6F3WSCP	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	INT RELAY BX
CRC13	RELAY-INTERPRET RELAY #13	W6F3WSCP	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	INT RELAY BX
CRC14	RELAY-INTERPRET RELAY #14	W6F3WSCP	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	INT RELAY BX
CRC15	RELAY-INTERPRET RELAY #15	W6F3WSCP	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	INT RELAY BX
CRD	RELAY-DOOR UNLATCH	W6F3WSS+F	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	CONTROL BOX
CRD	RELAY-DOOR UNLATCH	W6F3WSS+FF	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	CONTROL BOX
CRD	RELAY-DOOR UNLATCH	W6F3WSS+G	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	CONTROL BOX
CRDB	RELAY-RESISTOR TEMP HIGH	W6F3WSS+F	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	CONTROL BOX
CRDB	RELAY-DOOR UNLATCH HIGH	W6F3WSS+FF	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	CONTROL BOX
CRDB	RELAY-DOOR UNLATCH HIGH	W6F3WSS+G	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	CONTROL BOX
CRDOA	RELAY-DOOR FULL OPEN	W6F3WSRH	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	CONTROL BOX
CRDOA	RELAY-DOOR FULL OPEN	W6F3WSRHA	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	CONTROL BOX
CRDOA	RELAY-DOOR FULL OPEN	W6F3WSRHF	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	CONTROL BOX

COMPONENT PARTS LIST

<u>COMPONENT NUMBER</u>	<u>FUNCTION OF THIS COMPONENT NUMBER</u>	<u>WHERE TO FIND THIS COMPONENT</u>	<u>MIL/NOR PIN</u>	<u>DESCRIPTION</u>	<u>LOCATION</u>
CREI	RELAY-DOOR OPEN AND UNLATCHED	W6F3WSS+F	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	CONTROL BOX
CREI	RELAY-DOOR OPEN AND UNLATCHED	W6F3WSS+FF	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	CONTROL BOX
CREI	RELAY-OK TO JOG	W6F3WSS+G	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	CONTROL BOX
CRFDL	RELAY-FRONT DOWN LEFT	W6F3WSRH	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	CONTROL BOX
CRFDL	RELAY-FRONT DOWN LEFT	W6F3WSRHA	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	CONTROL BOX
CRFDL	RELAY-FRONT DOWN LEFT	W6F3WSRHF	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	CONTROL BOX
CRFDLF	RELAY-FRENCH SPECS ONLY	W6F3WSRHF	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	CONTROL BOX
CRFDR	RELAY-FRONT DOWN RIGHT	W6F3WSRH	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	CONTROL BOX
CRFDR	RELAY-FRONT DOWN RIGHT	W6F3WSRHA	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	CONTROL BOX
CRFDR	RELAY-FRONT DOWN RIGHT	W6F3WSRHF	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	CONTROL BOX
CRFDRF	RELAY-FRENCH SPECS ONLY	W6F3WSRHF	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	CONTROL BOX
CRFL	RELAY-FRONT LEFT LOCKED	W6F3WSRHA	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	CONTROL BOX
CRFL	RELAY-FRONT LEFT LOCKED	W6F3WSRHA	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	CONTROL BOX
CRFL	RELAY-FRONT LEFT LOCKED	W6F3WSRHA	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	CONTROL BOX
CRFL	RELAY-FRONT RIGHT LOCKED	W6F3WSRHA	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	CONTROL BOX
CRFL	RELAY-FRONT RIGHT LOCKED	W6F3WSRHA	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	CONTROL BOX
CRFU	RELAY-FRONT FULL UP	W6F3WSRHF	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	CONTROL BOX
CRLL	RELAY-DOOR CLOSED	W6F3WSS+FF	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	CONTROL BOX
CRRDL	RELAY-REAR DOWN LEFT	W6F3WSRH	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	CONTROL BOX
CRRDL	RELAY-REAR DOWN LEFT	W6F3WSRHA	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	CONTROL BOX
CRRDL	RELAY-REAR DOWN LEFT	W6F3WSRHF	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	CONTROL BOX
CRRDR	RELAY-REAR DOWN RIGHT	W6F3WSRH	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	CONTROL BOX
CRRDR	RELAY-REAR DOWN RIGHT	W6F3WSRHA	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	CONTROL BOX
CRRDR	RELAY-REAR DOWN RIGHT	W6F3WSRHF	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	CONTROL BOX
CRRLL	RELAY-REAR LEFT LOCKED	W6F3WSRHA	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	CONTROL BOX
CRRLL	RELAY-REAR LEFT LOCKED	W6F3WSRHA	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	CONTROL BOX
CRRRL	RELAY-REAR RIGHT LOCKED	W6F3WSRHA	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	CONTROL BOX
CRRRL	RELAY-REAR RIGHT LOCKED	W6F3WSRHA	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	CONTROL BOX
CRS+	RELAY-START 3-WIRE	W6F3WSRH	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	CONTROL BOX
CRS+	RELAY-START 3-WIRE	W6F3WSS+FF	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	CONTROL BOX
CRS+	RELAY-START 3-WIRE	W6F3WSS+FF	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	CONTROL BOX
CRS+A	RELAY-START 3-WIRE (SLAVE)	W6F3WSS+G	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	CONTROL BOX
CRS+A	RELAY-START 3-WIRE (SLAVE)	W6F3WSS+F	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	CONTROL BOX
CRWJ	RELAY-JOG (68H5N ONLY)	W6F3WSS+FF	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	CONTROL BOX
		W6F3WSHDA	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	CONTROL BOX

COMPONENT PARTS LIST

W6F3WSPL/2022145N

<u>COMPONENT NUMBER</u>	<u>FUNCTION OF THIS COMPONENT NUMBER</u>	<u>WHERE TO FIND THIS COMPONENT</u>	<u>MIL NOR P/N</u>	<u>DESCRIPTION</u>	<u>LOCATION</u>
CS	>>>CONTACTOR-MOTOR STARTER				
CSDO	CONTACTOR-HYDRAULIC DOOR OPEN	W6F3WSHD	09MC08C371	16A 3P MCS CONT NR 240V5/6	CONTROL BOX
CSHYP	CONTACTOR-HYDRAULIC PUMP	W6F3WSRHC	09MC08C371	16A 3P MCS CONT NR 240V5/6	INVERTER BOX
CSR	CONTACTOR-RECIRCULATE	W6F3WSEV	09MC04E371	32A 3P CONT.NR 240V5/6 IEC	CONTROL BOX
CSR	CONTACTOR-RECIRCULATE	W6F3WSEVA	09MC04E371	32A 3P CONT.NR 240V5/6 IEC	CONTROL BOX
CSVP	CONTACTOR-INVERTER 6836H5	W6F3WSS+F	09MC08N371	72A 3P MCS CONT NR 240V5/6	CONTROL BOX
CSVP	CONTACTOR-INVERTER 6836H5	W6F3WSS+FF	09MC08N371	72A 3P MCS CONT NR 240V5/6	CONTROL BOX
CSVP	CONTACTOR-INVERTER 6836F5	W6F3WSS+G	09MC08N371	72A 3P MCS CONT NR 240V5/6	CONTROL BOX
CSV	CONTACTOR-INVERTER 4840H7	W6F3WSS+F	09MC08G371	37A 3P MCS CONT NR 240V5/6	CONTROL BOX
CSV	CONTACTOR-INVERTER 4840H7	W6F3WSS+FF	09MC08G371	37A 3P MCS CONT NR 240V5/6	CONTROL BOX
CSV	CONTACTOR-INVERTER 4840F7	W6F3WSS+G	09MC08G371	37A 3P MCS CONT NR 240V5/6	CONTROL BOX
EB	>>>BUZZER OR AUDIBLE SIGNAL				
EBSG	BUZZER-SIGNAL AUDIBLE	W6F3WSS+F	09H016	BUZZ. 230V W/6-32 CTR+6" LEADS	SWITCH PANEL
EBSG	BUZZER-SIGNAL AUDIBLE	W6F3WSS+FF	09H016	BUZZ. 230V W/6-32 CTR+6" LEADS	SWITCH PANEL
EBSG	BUZZER-SIGNAL AUDIBLE	W6F3WSS+G	09H016	BUZZ. 230V W/6-32 CTR+6" LEADS	SWITCH PANEL
EF	>>>FUSE OR FUSE HOLDER				
EF01	FUSE-CONTROL CIRCUIT	W6F3WSLV	09FF006AMA	FUSE BK/ABC 6 AMP 250V BUSS	CONTROL BOX
EF02	FUSE-CONTROL CIRCUIT	W6F3WSLV	09FF006AMA	FUSE BK/ABC 6 AMP 250V BUSS	CONTROL BOX
EF1	FUSE-PRIMARY INCOMING VOLTAGE	W6F3WSLV	09FF005AWN	BUSE BUSS KTK 5AMP 600V=HPS HOLDER	CONTROL BOX
EF2	FUSE-PRIMARY INCOMING VOLTAGE	W6F3WSLV	09FF005AWN	BUSE BUSS KTK 5AMP 600V=HPS HOLDER	CONTROL BOX
EL	>>>LIGHT-PILOT OR INDICATOR				
ELSG	LIGHT-SIGNAL VISUAL	W6F3WSS+F	09J060A71	LAMP 1/2" AMB 250V IDI 1051QC3	SWITCH PANEL
ELSG	LIGHT-SIGNAL VISUAL	W6F3WSS+FF	09J060A71	LAMP 1/2" AMB 250V IDI 1051QC3	SWITCH PANEL
ELSG	LIGHT-SIGNAL VISUAL	W6F3WSS+G	09J060A71	LAMP 1/2" AMB 250V IDI 1051QC3	SWITCH PANEL
ES	>>>POWER SUPPLY-ELECTRONIC				
ESPS	POWER SUPPLY-MICROPROCESSOR	W6F3WSBWA	08PSS3401T	40 WATT POWER SUPPLY TESTED	CONTROL BOX
ET	>>>THERMAL OVERLOAD DEVICES				
ETDB	OVERLOAD-DYNAMIC BRAKE	W6F3WSVP	09F024A	OL RELAY 1P SZ1 SQD #9065-C01	CONTROL BOX
ETDO	OVERLOAD-DOOR OPEN MOTOR	W6F3WSHD	09FTD0037T	MCS OL RELAY ADJ. RANGE 3.7-12	CONTROL BOX
ETHYD	OVERLOAD-HYDRAULIC PUMP MOTOR	W6F3WSRHC	09FTD0037T	E1 PLUS OL RELAY 3.2-16A	CONTROL BOX
ETVS	OVERLOAD-VARIABLE SPEED INVERTER	W6F3WSVP	09FTD0230T	MCS OL RELAY ADJ. RANGE 23-75	CONTROL BOX
EX	>>>TRANSFORMERS				
EX37	TRANSFORMER-INCOMING VOLT.120VAC	W6F3WSLV	MESSAGE EW	SEE EX37-1, -2, OR -3 FOR VOLTAGE	CONTROL BOX

COMPONENT PARTS LIST

<u>COMPONENT NUMBER</u>	<u>FUNCTION OF THIS COMPONENT NUMBER</u>	<u>WHERE TO FIND THIS COMPONENT</u>	<u>MIL NOR PIN</u>	<u>DESCRIPTION</u>	<u>LOCATION</u>
EX37-1	TRANSFORMER-208 TO 240V	W6F3WSLV	09U250AT71	AUTOXFMR 208V-230V 250VA	CONTROL BOX
EX37-2	TRANSFORMER-380/480 TO 240VAC	W6F3WSLV	09U200AAB	XFMR 380-480V/240-120V-250VA	CONTROL BOX
EX37-3	TRANSFORMER-600 TO 240VAC	W6F3WSLV	09UB100098	BUK/BOST 1KVA 240X480 120/240	CONTROL BOX
INVD1-H	BRAKING UNIT-6836H5N/F5W 380-480VOLTS	W6F3WSVP	09MVB725HC	BRAKE MODULE-OPEN CHASSIS	CONTROL BOX
INVD1-L	BRAKING UNIT-6836H5N/F5W 200-240VOLTS	W6F3WSVP	09MVB725LC	BRAKEMODULE OPEN CHASIS INVERT	CONTROL BOX
KB	>>>KEYBOARD-ELECTRONIC				
KBM	KEYPAD-MICROPROCESSOR	W6F3WSKP	08ND5X6WE	KEYPAD:5X6MATRIX WASHER-EXT	SWITCH PANEL
MT	>>>MOTORS				
MTD	MOTOR-DRIVE	W6F3WSVP	MESSAGE SO	SEE SPECIFIC COMPONENT+NAMEPLATE	MACHINE
MTDO	MOTOR-HYDRAULIC PUMP DOOR OPEN	W6F3WSHD	MESSAGE SO	SEE SPECIFIC COMPONENT+NAMEPLATE	MACHINE
MTHYD	MOTOR-HYDRAULIC PUMP	W6F3WSRHC	39T050CAN	5HP 4P TEFC 208-230/460 60C	MACHINE REAR
MTLF	FILTER-INVERTER/MOTOR POWER	W6F3WSS+F	09MVFILTR1	INCOME POWER FILTER CAP	CONTROL BOX
MTLF	FILTER-INVERTER/MOTOR POWER	W6F3WSS+FF	09MVFILTR1	INCOME POWER FILTER CAP	CONTROL BOX
MTLF	FILTER-INVERTER/MOTOR POWER	W6F3WSS+G	09MVFILTR1	INCOME POWER FILTER CAP	CONTROL BOX
MTVS	FAN-INVERTOR COOLING	W6F3WSS+F	13AF235A71	FAN 235CFM 230V 50/60	BACK C-BOX
MTVS	FAN-INVERTOR COOLING	W6F3WSS+FF	13AF235A71	FAN 235CFM 230V 50/60	BACK C-BOX
MTVS	FAN-INVERTOR COOLING	W6F3WSS+G	13AF235A71	FAN 235CFM 230V 50/60	BACK C-BOX
MVB	>>>INVERTER BRAKING UNIT				
MVDBR	RESISTOR-DYNAMIC BRAKE HIGH 48	W6F3WSVP	09MV100RET	RESIST 100 OHM 280WATT FIXED	BELOW C-BX
MVDBR	RESISTOR-DYNAMIC BRAKE LOW 48	W6F3WSVP	09MV050REV	RESISTOR 50 OHM 225W #FVT200-50	BELOW C-BX
MVDBR	RESISTOR-DYNAMIC BRAKE HIGH 68	W6F3WSVP	09MVR272S9	RESISTOR 27.2 OHMS SINGLE 600V 10 AMP	BELOW C-BX
MVDBR	RESISTOR-DYNAMIC BRAKE LOW 68	W6F3WSVP	09MVR068S9	RESISTOR 6.8OHM SINGLE 600V	BELOW C-BX
MVI	>>>MOTOR POWER INVERTERS				
MVFLT	INV FILTER-DRIVE	W6F3WSVP	09MVFILTR1	INCOME POWER FILTER CAP	CONTROL BOX
MVINV-H	INVERTER-4840H7N/F7W 380-460 VOLTS	W6F3WSVP	09MMW A03996	INVERTER 39AMPS 480V F7	CONTROL BOX
MVINV-H	INVERTER-6836H5N/F5W 380-460 VOLTS	W6F3WSVP	09MMWC07596	A1000 INVERTER 75 AMP	CONTROL BOX
MVINV-L	INVERTER-4840H7N/F7W 200-240VOLTS	W6F3WSVP	09MMW A07174	F7 INVERTER 71AMP	CONTROL BOX
MVINV-L	INVERTER-6836H5N/F5W 200-240VOLTS	W6F3WSVP	09MMWC14574	A1000 INVERTER 145AMPS	CONTROL BOX
PXDO	PROX SW-DOOR FULL OPEN	W6F3WSRHA	09RPS18CAS	PRXSW QKCO 18M NO-AC SHLD	SHELL FRONT
PXDO	PROX SWITCH-DOOR FULL OPEN	W6F3WSRHC	09RPS30CAS	PROXSW QK CONN 30M NO-AC SHLD	DOOR
PXEX	PROX SW-LOAD LEVEL	W6F3WS1A	09RPS12ADS	PROXSW QD CONN 12M NO-DC SHLD	BASE OF MACH
PXFD	PROX SWITCH-FULL DOWN	W6F3WSRHC	09RPS30DAS	PRXSW QK CONN 30M NC-AC SHLD	MACHINE BASE
PXFDL	PROX SW-FRONT DOWN LEFT	W6F3WSRH	09RPS12AAS	PROXSW QD CONN 12M NO-AC SHLD	SIDE OF MACH

COMPONENT PARTS LIST

W6F3WSPL/2022145N

COMPONENT NUMBER	FUNCTION OF THIS COMPONENT NUMBER	WHERE TO FIND THIS COMPONENT	MILNOR P/N	DESCRIPTION	LOCATION
PXFDL	PROX SW-FRONT DOWN LEFT	W6F3WSRHA	09RPS12AAS	PROXSW QD CONN 12M NO-AC SHLD	SIDE OF MACH
PXFDL	PROX SW-FRONT DOWN LEFT	W6F3WSRHF	09RPS12AAS	PROXSW QD CONN 12M NO-AC SHLD	SIDE OF MACH
PXFDR	PROX SW-FRONT DOWN RIGHT	W6F3WSRH	09RPS12AAS	PROXSW QD CONN 12M NO-AC SHLD	SIDE OF MACH
PXFDR	PROX SW-FRONT DOWN RIGHT	W6F3WSRHA	09RPS12AAS	PROXSW QD CONN 12M NO-AC SHLD	SIDE OF MACH
PXFDR	PROX SW-FRONT DOWN RIGHT	W6F3WSRHF	09RPS12AAS	PROXSW QD CONN 12M NO-AC SHLD	SIDE OF MACH
PXFL	PROX SW-FRONT LEFT LOCKED	W6F3WSRHA	09RPS12AAS	PROXSW QD CONN 12M NO-AC SHLD	BASE OF MACH
PXFL	PROX SW-FRONT LEFT LOCKED	W6F3WSRHA	09RPS12AAS	PROXSW QD CONN 12M NO-AC SHLD	SIDE OF MACH
PXFRL	PROX SW-FRONT RIGHT LOCKED	W6F3WSRHA	09RPS12AAS	PROXSW QD CONN 12M NO-AC SHLD	BASE OF MACH
PXFRL	PROX SW-FRONT RIGHT LOCKED	W6F3WSRHA	09RPS12AAS	PROXSW QD CONN 12M NO-AC SHLD	SIDE OF MACH
PXFU	PROX SWITCH-FULL UP	W6F3WSRHC	09RPS30DAS	PRXSW QK CONN 30M NC-AC SHLD	SIDE OF MACH
PXFU	PROX SW-FRONT FULL UP	W6F3WSRHF	09RPS12AAS	PROXSW QD CONN 12M NO-AC SHLD	MACHINE BASE
PXRDL	PROX SW-REAR DOWN LEFT	W6F3WSRH	09RPS12AAS	PROXSW QD CONN 12M NO-AC SHLD	SIDE OF MACH
PXRDL	PROX SW-REAR DOWN LEFT	W6F3WSRHA	09RPS12AAS	PROXSW QD CONN 12M NO-AC SHLD	SIDE OF MACH
PXRDL	PROX SW-REAR DOWN LEFT	W6F3WSRHF	09RPS12AAS	PROXSW QD CONN 12M NO-AC SHLD	SIDE OF MACH
PXRDR	PROX SW-REAR DOWN RIGHT	W6F3WSRH	09RPS12AAS	PROXSW QD CONN 12M NO-AC SHLD	SIDE OF MACH
PXRDR	PROX SW-REAR DOWN RIGHT	W6F3WSRHA	09RPS12AAS	PROXSW QD CONN 12M NO-AC SHLD	SIDE OF MACH
PXRDR	PROX SW-REAR DOWN RIGHT	W6F3WSRHF	09RPS12AAS	PROXSW QD CONN 12M NO-AC SHLD	SIDE OF MACH
PXRLL	PROX SW-REAR LEFT LOCKED	W6F3WSRHA	09RPS12AAS	PROXSW QD CONN 12M NO-AC SHLD	BASE OF MACH
PXRLL	PROX SW-REAR LEFT LOCKED	W6F3WSRHA	09RPS12AAS	PROXSW QD CONN 12M NO-AC SHLD	SIDE OF MACH
PXRRL	PROX SW-REAR RIGHT LOCKED	W6F3WSRHA	09RPS12AAS	PROXSW QD CONN 12M NO-AC SHLD	BASE OF MACH
PXRRL	PROX SW-REAR RIGHT LOCKED	W6F3WSRHA	09RPS12AAS	PROXSW QD CONN 12M NO-AC SHLD	SIDE OF MACH
PXWP	PROX SW-WASH LEVEL	W6F3WSI1A	09RPS12ADS	PROXSW QD CONN 12M NO-DC SHLD	BASE OF MACH
SH	>>>SWITCH-HAND OPERATED				
SH01	SWITCH-208-240V SELECT	W6F3WSLV	09N050	TOGSW SPDT NO OFF 10A250V	CONTROL BOX
SHD	SWITCH-ALTERNATE DRAIN	W6F3WSDR	09N400CBNO	CONTACT BLK ONLY 1-NO SQD#ZB2BE101	ALT DRAIN BX
SHDO	SWITCH-DOOR FULL OPEN	W6F3WSRH	09N405PB11	SWASS PBBK 1NO/1NC	SWITCH PANEL
SHDO	SWITCH-DOOR FULL OPEN	W6F3WSRHA	09N405PB11	SWASS PBBK 1NO/1NC	SWITCH PANEL
SHDO	SWITCH-OPEN DOOR	W6F3WSRHC	09N405PB12	SWASS PB BLUE 1NO/2NC	SWITCH PANEL
SHDO	SWITCH-DOOR FULL OPEN	W6F3WSRHF	09N405PB11	SWASS PBBK 1NO/1NC	SWITCH PANEL
SHDOH	SWITCH-DOOR OPEN	W6F3WSS+F	09N405S320	SWASS S3W 2NO	SWITCH PANEL
SHDOH	SWITCH-DOOR OPEN	W6F3WSS+FF	09N405S320	SWASS S3W 2NO	SWITCH PANEL
SHDOH	SWITCH-DOOR OPEN	W6F3WSS+G	09N405S320	SWASS S3W 2NO	SWITCH PANEL
SHDOJ	SWITCH-DOOR OPEN JOG (68H5N ONLY)	W6F3WSHDA	09N405PB10	SWASS PBBK 1NO	SWITCH PANEL

COMPONENT PARTS LIST

W6F3WSPL/2022145N

<u>COMPONENT</u>	<u>FUNCTION OF THIS</u>	<u>WHERE TO FIND</u>	<u>MIL NOR PIN</u>	<u>DESCRIPTION</u>	<u>LOCATION</u>
<u>NUMBER</u>	<u>COMPONENT NUMBER</u>	<u>THIS COMPONENT</u>			
SHDOJ	SWITCH-DOOR OPEN JOG (68H5N ONLY)	W6F3WSRHC	09N405PB10	SWASS PBBK 1NO	SWITCH PANEL
SHFR	SWITCH-FRONT/REAR SELECTOR	W6F3WSRH	09N405M211	SWASS M2W 1NO+1NC	SWITCH PANEL
SHFR	SWITCH-FRONT/REAR SELECTOR	W6F3WSRHA	09N405M211	SWASS M2W 1NO+1NC	SWITCH PANEL
SHFR	SWITCH-FRONT/REAR SELECTOR	W6F3WSRHF	09N405M211	SWASS M2W 1NO+1NC	SWITCH PANEL
SHMD	SWITCH-MILDATA LOCAL/REMOTE	W6F3WSEVA	09N405M210	SWASS M2W 1NO	PROCESSOR BX
SHRM	SWITCH-MOVE (TILT)	W6F3WSRHC	09N405S320	SWASS S3W 2NO	SWITCH PANEL
SHS+	SWITCH-START	W6F3WSS+F	09N405PG10	SWASS PBGN 1NO	SWITCH PANEL
SHS+	SWITCH-START	W6F3WSS+FF	09N405PG10	SWASS PBGN 1NO	SWITCH PANEL
SHS+	SWITCH-START	W6F3WSS+G	09N405PG10	SWASS PBGN 1NO	SWITCH PANEL
SHSAD	SWITCH-SAMPLE DESIRED	W6F3WSDS	09N400CBNO	CONTACT BLK ONLY 1-NO SQD#ZB2BE101	SAMPLE SWPL
SHSAR	SWITCH--SAMPLE DOOR RESET	W6F3WSDS	09N400CBNC	CONTACT BLKONLY 1-NC SQD#ZB2BE102	SAMPLE SWPL
SHSG	SWITCH-SIGNAL CANCEL	W6F3WSI1A	09N405PY10	SWASS PB YELLOW INO	SWITCH PANEL
SHSMA	SWITCH-MASTER	W6F3WSS+F	09N405M210	SWASS M2W 1NO	SWITCH PANEL
SHSMA	SWITCH-MASTER	W6F3WSS+FF	09N405M210	SWASS M2W 1NO	SWITCH PANEL
SHSMA	SWITCH-MASTER	W6F3WSS+G	09N405M210	SWASS M2W 1NO	SWITCH PANEL
SHSO	SWITCH-STOP	W6F3WSS+F	09N405PR01	SWASS PBRD 1NC	SWITCH PANEL
SHSO	SWITCH-STOP	W6F3WSS+FF	09N405PR01	SWASS PBRD 1NC	SWITCH PANEL
SHSO	SWITCH-STOP	W6F3WSS+G	09N405PR01	SWASS PBRD 1NC	SWITCH PANEL
SHSOE	SWITCH-EMERGENCY STOP	W6F3WSS+F	09N505	SW ASSY EMER STOP	SWITCH PANEL
SHSOE	SWITCH-EMERGENCY STOP	W6F3WSS+FF	09N505	SW ASSY EMER STOP	SWITCH PANEL
SHSOE	SWITCH-EMERGENCY STOP	W6F3WSS+G	09N505	SW ASSY EMER STOP	SWITCH PANEL
SHU	SWITCH-UP/DOWN	W6F3WSRH	09N405S360	SWASS S3W 6NO	SWITCH PANEL
SHU	SWITCH-UP/DOWN	W6F3WSRHA	09N405S360	SWASS S3W 6NO	SWITCH PANEL
SHU	SWITCH-UP/DOWN	W6F3WSRHF	09N405S360	SWASS S3W 6NO	SWITCH PANEL
SHWDO	SWITCH-DOOR OPEN/CLOSE	W6F3WSHDA	09N405S320	SWASS S3W 2NO	SWITCH PANEL
SHWDO	SWITCH-DOOR OPEN/CLOSE	W6F3WSRHC	09N405S320	SWASS S3W 2NO	SWITCH PANEL
SHWJ	SWITCH-JOG	W6F3WSHDA	09N405PB11	SWASS PBBK 1NO/1NC	SWITCH PANEL
SHWJ	SWITCH-JOG	W6F3WSVP	09N405S310	SWASS S3W 1NO	SWITCH PANEL
SK	>>>SWITCH-KEYLOCK				
SKPR	SWITCH-RUN/PROGRAM (KEY OP)	W6F3WSI1A	09N127C	KEYSW SPST 7A120VAC SCREW TERM	SWITCH PANEL
SM	>>>SWITCH-MECHANICAL OPERATED				
SMDO	SWITCH-DOOR FULL OPEN	W6F3WSRH	08R008A	MICSW SPDT BZE6-2RN183	SHELL FRONT
SMEB	SWITCH-EXCURSION	W6F3WSI1A	09R008A	MICSW SPDT BZE6-2RN183	UNDER SHELL

COMPONENT PARTS LIST

<u>COMPONENT NUMBER</u>	<u>FUNCTION OF THIS COMPONENT NUMBER</u>	<u>WHERE TO FIND THIS COMPONENT</u>	<u>MIL NOR P/N</u>	<u>DESCRIPTION</u>	<u>LOCATION</u>
SMPL1	SWITCH-DOOR CLOSED	W6F3WSS+F	09R014A	MINI-SW SPDT STAKON #V15G1C26	DOOR LATCH
SMPL1	SWITCH-DOOR CLOSED	W6F3WSS+FF	09R014A	MINI-SW SPDT STAKON #V15G1C26	DOOR LATCH
SMPL1	SWITCH-DOOR CLOSED	W6F3WSS+G	09R014A	MINI-SW SPDT STAKON #V15G1C26	DOOR LATCH
SMSDC	SWITCH-SAMPLE DOOR	W6F3WSDS	09RM01212S	CAPSW 12' 180DEG ROLLER SILVER	SAMPLE DOOR
SMWVB	SWITCH-VIBRATION	W6F3WSS+F	09R020	SWITCH NC VIBR#WZ-2RW84429-P52	CONTROL BOX
SMWVB	SWITCH-VIBRATION	W6F3WSS+FF	09R020	SWITCH NC VIBR#WZ-2RW84429-P52	CONTROL BOX
SMWVB	SWITCH-VIBRATION	W6F3WSS+G	09R020	SWITCH NC VIBR#WZ-2RW84429-P52	CONTROL BOX
SP	>>>SWITCH-PRESSURE OPERATED				
SPBP	PRESSURE SW-BEARING SEAL	W6F3WSI1A	09N082B05	PRESSW NASON CLOSE @ 5 LB	AIR VALVE BX
SPD	PRESSURE SW-LEVEL OK TO OPEN DOOR	W6F3WSS+F	09N086A	PRESS SWITCH EATON #738-761	CONTROL BOX
SPD	PRESSURE SW-LEVEL OK TO OPEN DOOR	W6F3WSS+FF	09N086A	PRESS SWITCH EATON #738-761	CONTROL BOX
SPD	PRESSURE SW-LEVEL OK TO OPEN DOOR	W6F3WSS+G	09N086A	PRESS SWITCH EATON #738-761	CONTROL BOX
ST	>>>SWITCH-TEMPERATURE OPERATED				
STDB	SWITCH-THERMOSTAT	W6F3WSS+F	30RA175T	THERMOSTAT OPEN AT 175F	CONTROL BOX
STDB	SWITCH-THERMOSTAT	W6F3WSS+FF	30RA175T	THERMOSTAT OPEN AT 175F	CONTROL BOX
VE	>>>VALVE-ELECTRIC OPERATED				
VEAD	VALVE-ALTERNATE DRAIN	W6F3WSDR	96R301A71	1/8" AIRPILOT 3W NC 240V50/60	ALT DRAIN BX
VEBP	VALVE-BEARING PRESSURE	W6F3WSEV	96TBC2BA71	1/4" N/C 2WAY 220V50/60C VALVE	AIR VALVE BX
VEBP	VALVE-BEARING PRESSURE	W6F3WSEVA	96TBC2BA71	1/4" N/C 2WAY 220V50/60C VALVE	AIR VALVE BX
VEC01	VALVE-CHEMICAL #1 FLUSH	W6F3WSCF	96P013G71	3/4" 2WAYPLASTCVL 240V/60C	SUPPLY INJEC
VEC02	VALVE-CHEMICAL #2 FLUSH	W6F3WSCF	96P013G71	3/4" 2WAYPLASTCVL 240V/60C	SUPPLY INJEC
VEC03	VALVE-CHEMICAL #3 FLUSH	W6F3WSCF	96P013G71	3/4" 2WAYPLASTCVL 240V/60C	SUPPLY INJEC
VEC04	VALVE-CHEMICAL #4 FLUSH	W6F3WSCF	96P013G71	3/4" 2WAYPLASTCVL 240V/60C	SUPPLY INJEC
VEC05	VALVE-CHEMICAL #5 FLUSH	W6F3WSCF	96P013G71	3/4" 2WAYPLASTCVL 240V/60C	SUPPLY INJEC
VEC06	VALVE-CHEMICAL #6	W6F3WSCX	96R301A71	1/8" AIRPILOT 3W NC 240V50/60	SUPPLY VLVST
VEC07	VALVE-CHEMICAL #7	W6F3WSCX	96R301A71	1/8" AIRPILOT 3W NC 240V50/60	SUPPLY VLVST
VEC08	VALVE-CHEMICAL #8	W6F3WSCX	96R301A71	1/8" AIRPILOT 3W NC 240V50/60	SUPPLY VLVST
VEC09	VALVE-CHEMICAL #9	W6F3WSCX	96R301A71	1/8" AIRPILOT 3W NC 240V50/60	SUPPLY VLVST
VEC10	VALVE-CHEMICAL #10	W6F3WSCX	96R301A71	1/8" AIRPILOT 3W NC 240V50/60	SUPPLY VLVST
VEC11	VALVE-CHEMICAL #11	W6F3WSCX	96R301A71	1/8" AIRPILOT 3W NC 240V50/60	SUPPLY VLVST
VEC12	VALVE-CHEMICAL #12	W6F3WSCX	96R301A71	1/8" AIRPILOT 3W NC 240V50/60	SUPPLY VLVST
VEC13	VALVE-CHEMICAL #13	W6F3WSCX	96R301A71	1/8" AIRPILOT 3W NC 240V50/60	SUPPLY VLVST
VEC14	VALVE-CHEMICAL #14	W6F3WSCX	96R301A71	1/8" AIRPILOT 3W NC 240V50/60	SUPPLY VLVST

COMPONENT PARTS LIST

<u>COMPONENT NUMBER</u>	<u>FUNCTION OF THIS COMPONENT NUMBER</u>	<u>WHERE TO FIND THIS COMPONENT</u>	<u>MIL NOR P/N</u>	<u>DESCRIPTION</u>	<u>LOCATION</u>
VEC15	VALVE-CHEMICAL #15	W6F3WSCX	96R301A71	1/8" AIRPILOT 3W NC 240V50/60	SUPPLY VLVST
VED	VALVE-DOWN	W6F3WSRH	96R301A71	1/8" AIRPILOT 3W NC 240V50/60	AIR VALVE BX
VED	VALVE-DOWN	W6F3WSRHA	96R301A71	1/8" AIRPILOT 3W NC 240V50/60	AIR VALVE BX
VED	VALVE-DOWN	W6F3WSRHF	96R301A71	1/8" AIRPILOT 3W NC 240V50/60	AIR VALVE BX
VEDL	VALVE-DOOR UNLATCH	W6F3WSS+F	96R301A71	1/8" AIRPILOT 3W NC 240V50/60	AIR VALVE BOX
VEDL	VALVE-DOOR UNLATCH	W6F3WSS+FF	96R301A71	1/8" AIRPILOT 3W NC 240V50/60	AIR VALVE BOX
VEDL	VALVE-DOOR UNLATCH	W6F3WSS+G	96R301A71	1/8" AIRPILOT 3W NC 240V50/60	AIR VALVE BOX
VEDRR	VALVE-REUSE DRAIN	W6F3WSEV	96R301A71	1/8" AIRPILOT 3W NC 240V50/60	AIR VALVE BX
VEDRR	VALVE-REUSE DRAIN	W6F3WSEVA	96R301A71	1/8" AIRPILOT 3W NC 240V50/60	AIR VALVE BX
VEDRS	VALVE-DRAIN	W6F3WSEV	96D350A71	DRINVAL 3" MTRDR 240V 50/60C	REAR OF MACH
VEDRS	VALVE-DRAIN	W6F3WSEVA	96D350A71	DRINVAL 3" MTRDR 240V 50/60C	REAR OF MACH
VEF	VALVE-FRONT	W6F3WSRH	96R301A71	1/8" AIRPILOT 3W NC 240V50/60	AIR VALVE BX
VEF	VALVE-FRONT	W6F3WSRHA	96R301A71	1/8" AIRPILOT 3W NC 240V50/60	AIR VALVE BX
VEF	VALVE-FRONT	W6F3WSRHF	96R301A71	1/8" AIRPILOT 3W NC 240V50/60	AIR VALVE BX
VEFL	VALVE-FLUSH	W6F3WSCF	96P013G71	3/4" 2WAYPLASTCVAL 240V/60C	SUPPLY INJEC
VEHDC	VALVE-HYDRAULIC DOOR CLOSED	W6F3WSHD	96RH706E71	VLVPARKER 220V50/240V/60 7GPM	MACHINE REAR
VEHDC	VALVE-HYDRAULIC DOOR CLOSED	W6F3WSHDA	96RH706E71	VLVPARKER 220V50/240V/60 7GPM	MACHINE REAR
VEHDO	VALVE-HYDRAULIC DOOR OPEN	W6F3WSHD	96RH706E71	VLVPARKER 220V50/240V/60 7GPM	MACHINE REAR
VEHDO	VALVE-HYDRAULIC DOOR OPEN	W6F3WSHDA	96RH706E71	VLVPARKER 220V50/240V/60 7GPM	MACHINE REAR
VEHTD	VALVE-HYDRAULIC TILT DOWN	W6F3WSRHC	96RH711E71	DIRECTIONAL CNT VLV D05NG10 230V	MACHINE REAR
VEHTU	VALVE-HYDRAULIC TILT UP	W6F3WSRHC	96RH711E71	DIRECTIONAL CNT VLV D05NG10 230V	MACHINE REAR
VEMTM	VALVE-MACHINE TO MACHINE	W6F3WSEV	96R301A71	1/8" AIRPILOT 3W NC 240V50/60	AIR VALVE BX
VEMTM	VALVE-MACHINE TO MACHINE	W6F3WSEVA	96R301A71	1/8" AIRPILOT 3W NC 240V50/60	AIR VALVE BX
VEMTT	VALVE-MACHINE TO TANK	W6F3WSEV	96R301A71	1/8" AIRPILOT 3W NC 240V50/60	AIR VALVE BX
VEMTT	VALVE-MACHINE TO TANK	W6F3WSEVA	96R301A71	1/8" AIRPILOT 3W NC 240V50/60	AIR VALVE BX
VEPPO	VALVE-DOOR SEAL	W6F3WSS+F	96R302A71	1/8" AIRPILOT 3W NO 240V50/60	AIR VALVE BOX
VEPPO	VALVE-DOOR SEAL	W6F3WSS+FF	96R302A71	1/8" AIRPILOT 3W NO 240V50/60	AIR VALVE BOX
VEPPO	VALVE-DOOR SEAL	W6F3WSS+G	96R302A71	1/8" AIRPILOT 3W NO 240V50/60	AIR VALVE BOX
VER	VALVE-REAR	W6F3WSRH	96R301A71	1/8" AIRPILOT 3W NC 240V50/60	AIR VALVE BX
VER	VALVE-REAR	W6F3WSRHA	96R301A71	1/8" AIRPILOT 3W NC 240V50/60	AIR VALVE BX
VER	VALVE-REAR	W6F3WSRHF	96R301A71	1/8" AIRPILOT 3W NC 240V50/60	AIR VALVE BX
VESTM	VALVE-STEAM 48" & 68"	W6F3WSEV	96R301A71	1/8" AIRPILOT 3W NC 240V50/60	AIR VALVE BX
VESTM	VALVE-STEAM 48" & 68"	W6F3WSEVA	96R301A71	1/8" AIRPILOT 3W NC 240V50/60	AIR VALVE BX

COMPONENT PARTS LIST

<u>COMPONENT NUMBER</u>	<u>FUNCTION OF THIS COMPONENT NUMBER</u>	<u>WHERE TO FIND THIS COMPONENT</u>	<u>MIL NOR P/N</u>	<u>DESCRIPTION</u>	<u>LOCATION</u>
VEU	VALVE-UP	W6F3WSRH	96R301A71	1/8" AIRPILOT 3W NC 240V50/60	AIR VALVE BX
VEU	VALVE-UP	W6F3WSRHA	96R301A71	1/8" AIRPILOT 3W NC 240V50/60	AIR VALVE BX
VEU	VALVE-UP	W6F3WSRHF	96R301A71	1/8" AIRPILOT 3W NC 240V50/60	AIR VALVE BX
VEWC	VALVE-COLD WATER	W6F3WSEV	96R301A71	1/8" AIRPILOT 3W NC 240V50/60	AIR VALVE BX
VEWC	VALVE-COLD WATER	W6F3WSEVA	96R301A71	1/8" AIRPILOT 3W NC 240V50/60	AIR VALVE BX
VEWH	VALVE-HOT WATER	W6F3WSEV	96R301A71	1/8" AIRPILOT 3W NC 240V50/60	AIR VALVE BX
VEWH	VALVE-HOT WATER	W6F3WSEVA	96R301A71	1/8" AIRPILOT 3W NC 240V50/60	AIR VALVE BX
VEWVX	VALVE-EXTRA WATER	W6F3WSEV	96R301A71	1/8" AIRPILOT 3W NC 240V50/60	AIR VALVE BX
VEWVX	VALVE-EXTRA WATER	W6F3WSEVA	96R301A71	1/8" AIRPILOT 3W NC 240V50/60	AIR VALVE BX

PELLERIN MILNOR CORPORATION

LIMITED STANDARD WARRANTY

We warrant to the original purchaser that MILNOR machines including electronic hardware/software (hereafter referred to as "equipment"), will be free from defects in material and workmanship for a period of one year from the date of shipment (unless the time period is specifically extended for certain parts pursuant to a specific MILNOR published extended warranty) from our factory with no operating hour limitation. This warranty is contingent upon the equipment being installed, operated and serviced as specified in the operating manual supplied with the equipment, and operated under normal conditions by competent operators.

Providing we receive written notification of a warranted defect within 30 days of its discovery, we will—at our option—repair or replace the defective part or parts, EX Factory (labor and freight specifically NOT included). We retain the right to require inspection of the parts claimed defective in our factory prior to repairing or replacing same. We will not be responsible, or in any way liable, for unauthorized repairs or service to our equipment, and this warranty shall be void if the equipment is tampered with, modified, or abused, used for purposes not intended in the design and construction of the machine, or is repaired or altered in any way without MILNOR's written consent.

Parts damaged by exposure to weather, to aggressive water, or to chemical attack are not covered by this warranty. For parts which require routine replacement due to normal wear—such as gaskets, contact points, brake and clutch linings, belts, hoses, and similar parts—the warranty time period is 90 days.

We reserve the right to make changes in the design and/or construction of our equipment (including purchased components) without obligation to change any equipment previously supplied.

ANY SALE OR FURNISHING OF ANY EQUIPMENT BY MILNOR IS MADE ONLY UPON THE EXPRESS UNDERSTANDING THAT MILNOR MAKES NO EXPRESSED OR IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR USE OR PURPOSE OR ANY OTHER WARRANTY IMPLIED BY LAW INCLUDING BUT NOT LIMITED TO REDHIBITION. MILNOR WILL NOT BE RESPONSIBLE FOR ANY COSTS OR DAMAGES ACTUALLY INCURRED OR REQUIRED AS A RESULT OF: THE FAILURE OF ANY OTHER PERSON OR ENTITY TO PERFORM ITS RESPONSIBILITIES, FIRE OR OTHER HAZARD, ACCIDENT, IMPROPER STORAGE, MIS-USE, NEGLIGENCE, POWER OR ENVIRONMENTAL CONTROL MALFUNCTIONS, DAMAGE FROM LIQUIDS, OR ANY OTHER CAUSE BEYOND THE NORMAL RANGE OF USE. REGARDLESS OF HOW CAUSED, IN NO EVENT SHALL MILNOR BE LIABLE FOR SPECIAL, INDIRECT, PUNITIVE, LIQUIDATED, OR CONSEQUENTIAL COSTS OR DAMAGES, OR ANY COSTS OR DAMAGES WHATSOEVER WHICH EXCEED THE PRICE PAID TO MILNOR FOR THE EQUIPMENT IT SELLS OR FURNISHES.

THE PROVISIONS ON THIS PAGE REPRESENT THE ONLY WARRANTY FROM MILNOR AND NO OTHER WARRANTY OR CONDITIONS, STATUTORY OR OTHERWISE, SHALL BE IMPLIED.

WE NEITHER ASSUME, NOR AUTHORIZE ANY EMPLOYEE OR OTHER PERSON TO ASSUME FOR US, ANY OTHER RESPONSIBILITY AND/OR LIABILITY IN CONNECTION WITH THE SALE OR FURNISHING OF OUR EQUIPMENT TO ANY BUYER.

BMP720097/19036

How to Get the Necessary Repair Components



This document uses Simplified Technical English.
Learn more at <http://www.asd-ste100.org>.

You can get components to repair your machine from the approved supplier where you got this machine. Your supplier will usually have the necessary components in stock. You can also get components from the Milnor® factory.

Tell the supplier the machine model and serial number and this data for each necessary component:

- The component number from this manual
- The component name if known
- The necessary quantity
- The necessary transportation requirements
- If the component is an electrical component, give the schematic number if known.
- If the component is a motor or an electrical control, give the nameplate data from the used component.

To write to the Milnor factory:

Pellerin Milnor Corporation
Post Office Box 400
Kenner, LA 70063-0400
UNITED STATES

Telephone: 504-467-2787
Fax: 504-469-9777
Email: parts@milnor.com

— End of BIUUUD19 —

BIUUUK01 (Published) Book specs- Dates: 20130308 / 20130308 / 20130308 Lang: ENG01 Applic: PCR UUU

How to Use Milnor® Electrical Schematic Diagrams

Milnor® electrical schematic manuals contain a table of contents/component list and a set of schematic drawings. These documents are cross referenced and must be used together.

The table of contents/components list shows, for every component on every schematic in the manual, the component item number (explained in detail below), statement of function, parent schematic number, part number, description and electric box location. In older manuals, two component lists are provided: List 1 sorts the components by function, and List 2 by type of component. Newer schematic manuals include only the list sorted by component number.

The schematic drawings use symbols for each electromechanical component, and indicate the function of each. Integrated circuits are not shown, but the function of each microprocessor input and output is stated. Certain electrical components not pertinent to circuit logic, such as wire connectors, are not represented on the schematic.

Most machines require several schematics to describe the complete control system and all the options available on the included models. In most manuals there are some schematic pages that don't apply to your specific machine because certain options and configurations are mutually exclusive or are not necessary in all markets. You may find it helpful to mark or remove such pages. A schematic page that only applies to a subset of machines will normally state, in the title, which models and/or options it covers. Compare this with the nameplate on your machine and with your purchase records.

Each schematic is devoted to circuits with common functions (e.g., microprocessor inputs, motor contactors). Schematics appear in the manual in alphanumeric order.

1. Component Prefix Classifications and Descriptions

Component item numbers consist of up to six characters and appear as part of a component's symbol on the schematic. The first two characters indicate the general class of component, and the remaining characters are a mnemonic for the function. For example, "CD" is the code for all time delay relays, and "SR" stands for safety reset. Thus, CDSR is a time delay relay that serves as a safety reset.

The following are descriptions of electrical components used in Milnor® machines. Descriptions are in alphabetical order by the component class code (two character prefix).

Note 1: Some component class codes do not have a corresponding symbol, but are represented by a box and an accompanying note describing the component. Examples of such codes are BA (printed circuit board), ED (electronic display), and ES (electronic power supply).

BA=Printed Circuit Board—Insulating substrate on which a thin pattern of copper conductors has been formed to connect discrete electronic components also mounted on the board.

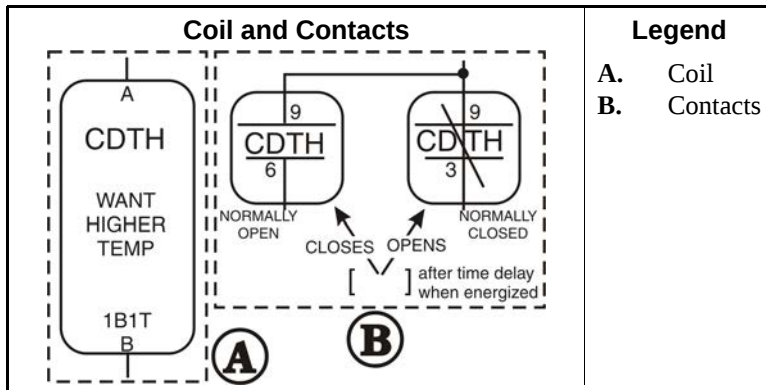
CB=Circuit Breaker (Figure 1)—Automatic switch that opens an electric circuit in abnormal current conditions (e.g., an overload).

Figure 1: Circuit Breaker (CB)



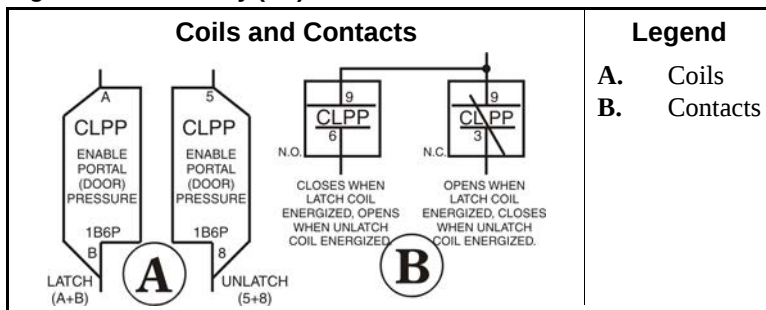
CD=Control, Time Delay Relay (Figure 2)—A relay whose contacts switch only after a fixed or adjustable delay, once voltage has been applied to its coil. The contacts switch back to normal (de-energized state) immediately when the voltage is removed.

Figure 2: Time Delay Relay (CD)



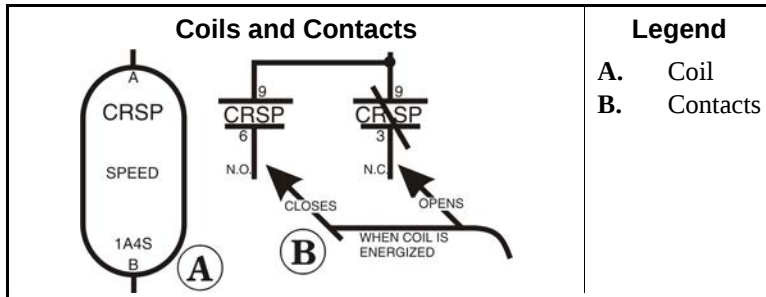
CL=Control, Latch Relay (Figure 3)—A relay which latches in an energized or set position when operated by one coil (the latch/set coil). The relay stays latched even though coil voltage is removed. The relay releases or unlatches when voltage is applied to a second coil (the unlatch/reset coil).

Figure 3: Latch Relay (CL)



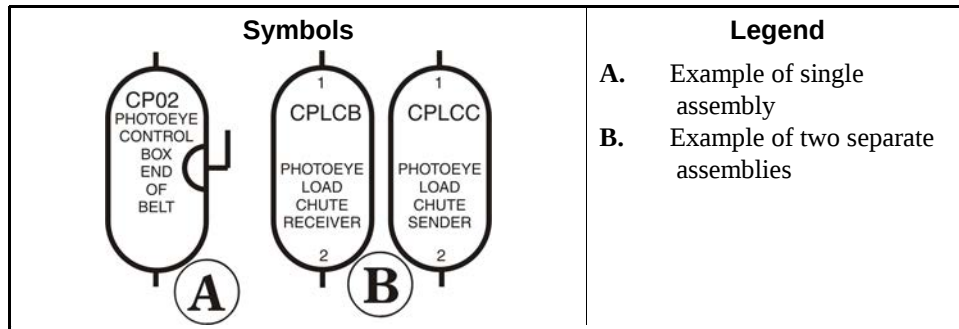
CR=Control, Relay (Figure 4)—A relay whose contacts switch immediately when voltage is applied to its coil and revert to normal when the voltage is removed.

Figure 4: Standard Relay (CR)



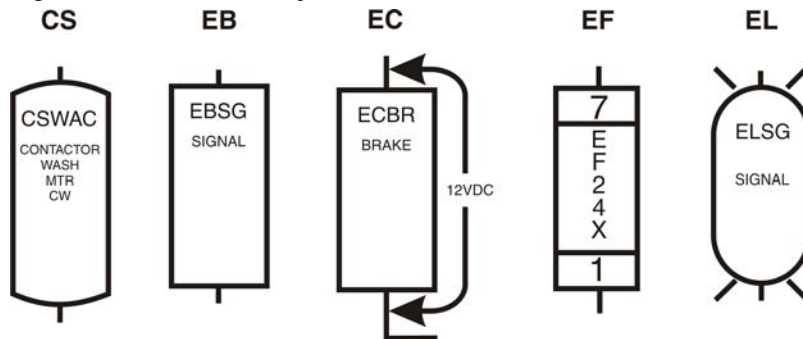
CP=Control, Photo-Eye (Figure 5)—Photo-eyes sense the presence of an object without direct physical contact. Photo-eyes consist of a transmitter, receiver, and output module. These components may be housed in one assembly with the transmitter bouncing light off of a reflector to the receiver, or these components can be housed in two separate assemblies with the transmitter pointed directly at the receiver. The photo-eye can be set to turn on its output either when the light beam becomes blocked (dark operate) or when it becomes un-blocked (light operate).

Figure 5: Photo-eye (CP)



CS=Control, Contactor/Motor Starter (Figure 6)—A relay capable of handling heavier electrical loads, usually a motor.

Figure 6: Other Control Symbols



EB=Electric Buzzer (Figure 6)—An audible signaling device.

EC=Electric Clutch (Figure 6)—A clutch consists of a coil and a rotor. The rotor has two separate rotating plates. These plates are free to rotate independent of each other until the coil is energized. Once energized the two plates turn as one.

ED=Electronic Display—A visual presentation of data, such as an LCD (liquid crystal display), LED (light emitting diode) display, or VFD (vacuum florescent display).

EF=Electric Fuse (Figure 6)—A fuse is an over-current safety device with a circuit opening fusible member which is heated and severed by the passage of over-current through it.

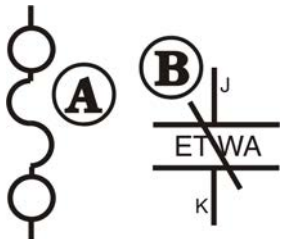
EL=Electric Light (Figure 6)—Indicator lights may be either incandescent or fluorescent.

EM=Electro Magnet Solenoid—A device consisting of a core surrounded by a wire coil through which an electric current is passed. While current is flowing, iron is attracted to the core (e.g., a pinch tube drain valve solenoid).

ES=Electronic Power Supply—A device that converts AC (alternating current) to filtered and regulated DC (direct current). The input voltage to the power supply is usually 120 or 240 VAC. The output is +5, +12, and -12 VDC.

ET=Thermal Overload (Figure 7)—A safety device designed to protect a motor. A thermal overload consists of an overload block, heaters, and an auxiliary contact. The auxiliary contact is normally installed in a safety (three-wire) circuit that stops power to the motor contactor coil when a motor overload occurs.

Figure 7: Thermal Overload (ET)

Schematic Symbol	Legend
	A. Heater (one per phase) B. Overload relay; contacts open if overload condition exists

EX=Electrical Transformer (Figure 8)—A device that transfers electrical energy from one isolated circuit to another, often raising or lowering the voltage in the process.

KB=Keyboard—Device similar to a typewriter for making entries to a computer.

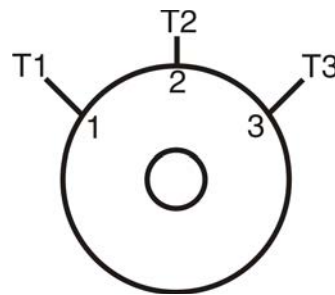
MN=Electronic Monitor (CRT)—A cathode ray tube used for visual presentation of data.

MR=Motors (Figure 9)—Electromechanical device that converts electrical energy into mechanical energy.

Figure 8: Transformer (EX)



Figure 9: Electric Motor (MR)

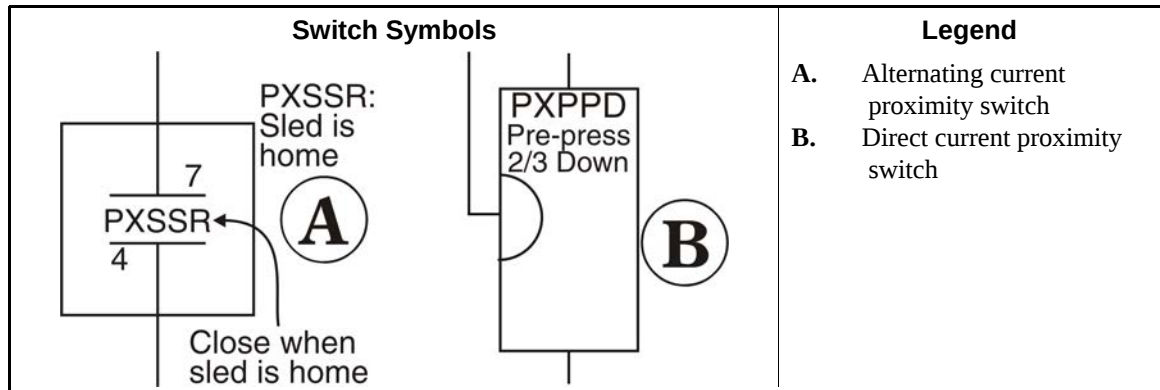


MV=Motor (Variable Speed) Inverter—To vary the speed of an AC motor, the volts to frequency ratio must be kept constant. The motor will overheat if this ratio is not maintained. The motor variable speed inverter converts three phase AC to DC. The inverter then uses this DC voltage to generate AC at the proper voltage and frequency for the commanded speed.

Note 2: Switch symbols used in the schematics and described below always depict the switch in its un-actuated state.

PX=Proximity Switch (Figure 10)—A device which reacts to the proximity of a target without physical contact or connection. The actuator or target causes a change in the inductance of the proximity switch which causes the switch to operate. Proximity switches can be two-wire (AC) or three-wire (DC) devices.

Figure 10: Proximity Switches (PX)



SC=Switch, Cam Operated (Figure 11)—A switch in which the electrical contacts are opened and/or closed by the mechanical action of a cam(s). Applications include 35-50 pound timer operated machines, Autospot, timer reversing motor assembly, and some balancing systems.

SH=Switch, Hand Operated (Figure 12)—A switch that is manually operated (e.g., *Start button*, *Master switch*, etc.).

Figure 11: Cam Switch (SC)

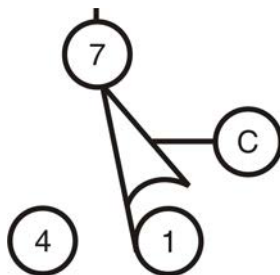
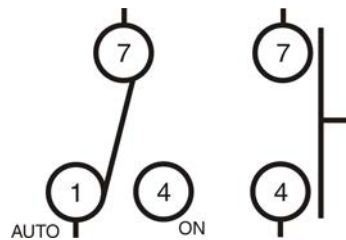


Figure 12: Hand Operated Switch (SH)



SK=Switch, Key Lock (Figure 13)—A switch that requires a key to operate. This prevents unauthorized personnel from gaining access to certain functions (e.g., the *Program menu*).

SL=Switch, Level Operated (Figure 14)—A switch connected to a float that causes the switch to open and close as the level changes.

Figure 13: Key Switch (SK)

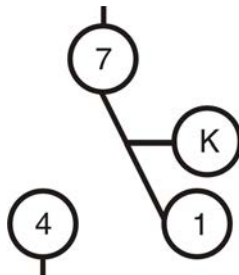
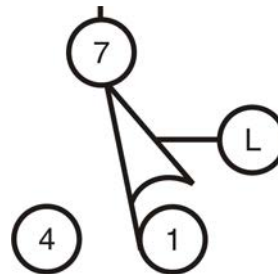


Figure 14: Level Switch (SL)



SM=Switch, Mechanically Operated (Figure 15)—A switch that is mechanically operated by a part of or the motion of the machine (e.g., door closed switch, tilt limit switches, etc.)

SP=Switch, Pressure Operated (Figure 16)—A switch in which a diaphragm presses against a switch actuator.

Figure 15: Mechanical Switch (SM)

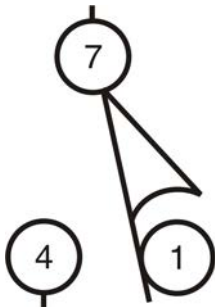
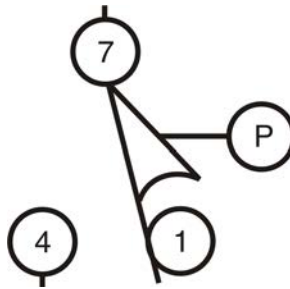


Figure 16: Pressure Switch (SP)



ST=Switch, Temperature Operated (Figure 17)—A switch that is actuated at a preset temperature (e.g., dryer safety probes) or has adjustable set points (e.g., Motometers or Combistats).

TB=Terminal Board (Figure 18)—A strip or block for attaching or terminating wires.

Figure 17: Temperature Switch (ST)

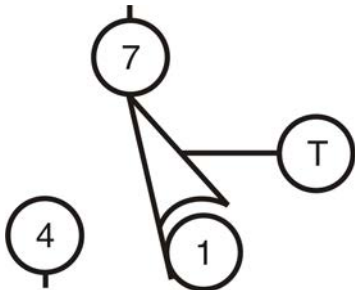


Figure 18: Terminal Board (TB)



VE=Valve, Electric Operated (Figure 19)—A valve operated by an electric coil to control the flow of fluid. The fluid can be air, water or hydraulic.

Figure 19: Electrically Operated Valve (VE)



ZF=Rectifier (Figure 20)—A solid state device that converts alternating current to direct current.

Figure 20: Bridge Rectifier (ZF)

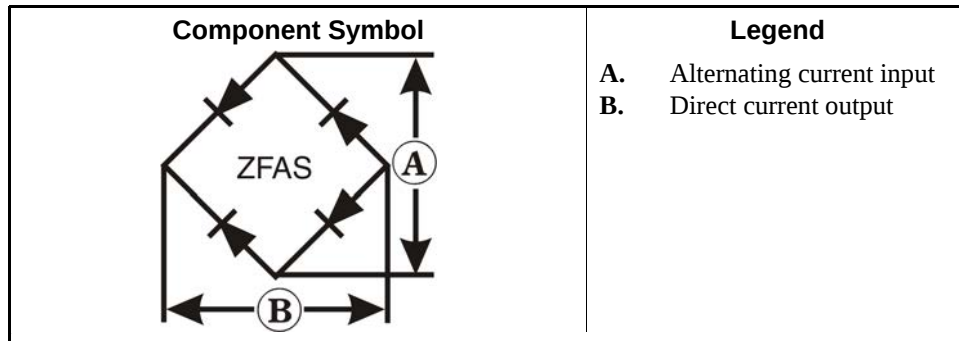
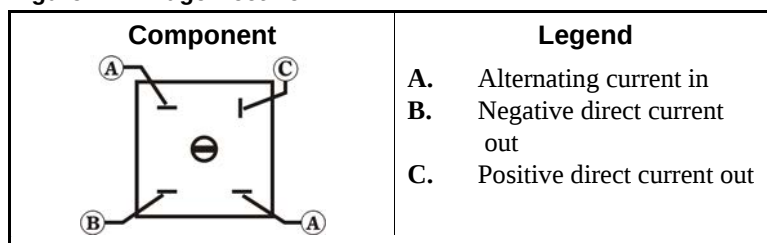


Figure 21: Bridge Rectifier



WC=Wiring Connector—A coupling device for joining two cables or connecting a cable to an electronic circuit or piece of equipment. Connectors are male or female, according to whether they plug into or receive the mating connector.

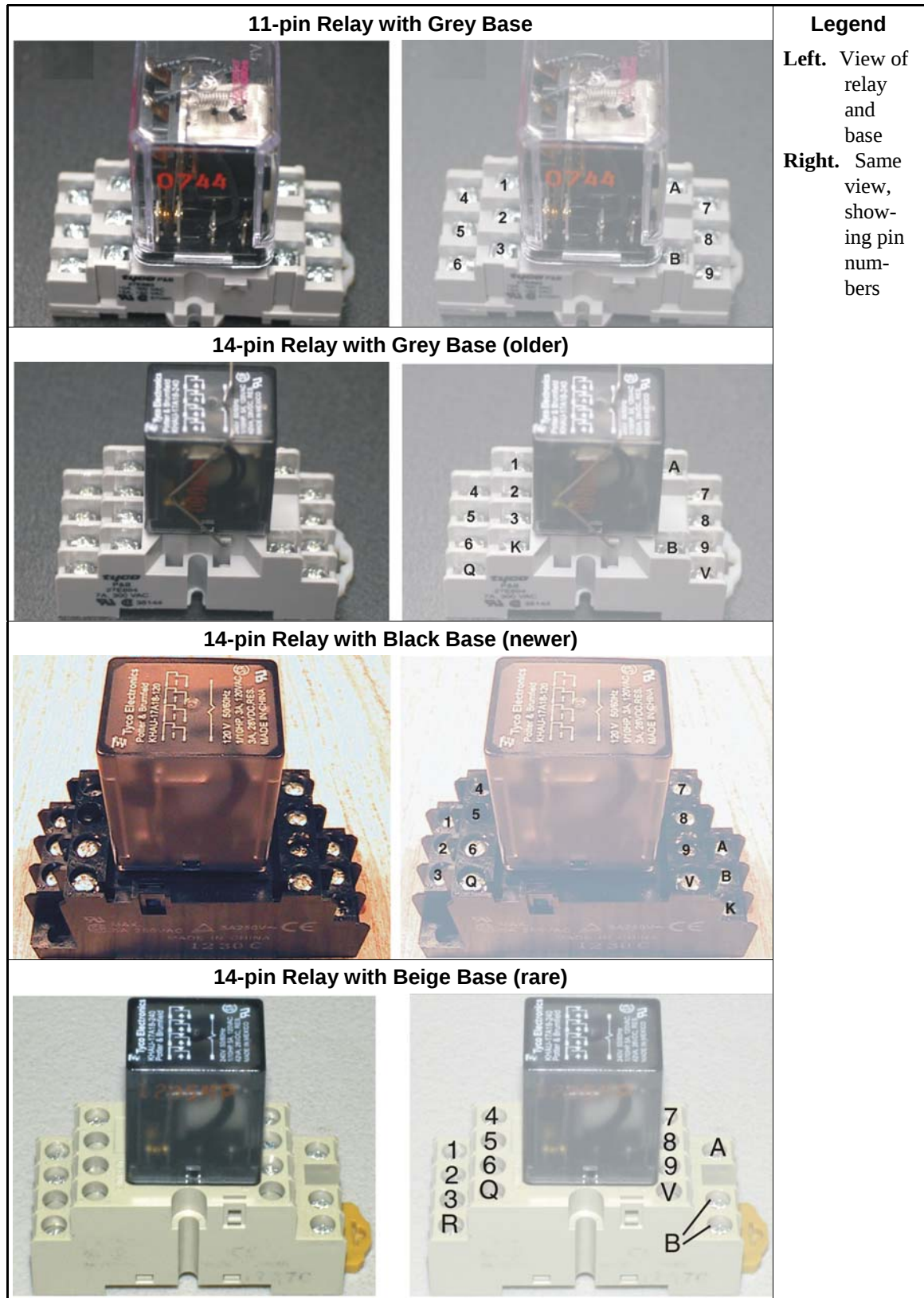
2. Component Terminal Numbering



CAUTION 1: Risk of Mis-wiring—Due to electrical component manufacturing inconsistencies, the pin numbers imprinted on components such as connectors and relay bases used on Milnor machines often do not correspond to the pin numbers shown in the schematics.

- Ignore pin numbers imprinted on in-line connectors (e.g., Molex connectors) and relay bases.
- Use the pin identification illustrations herein to identify pins on these components.

Figure 22: Plug-in Relays



Note 3: Relay functional names ending with the letter "M" (e.g., CRxxM) are not discrete components but are a component of a printed circuit board. They are usually not individually replaceable.

Figure 23: AMP Connector Pin Locations

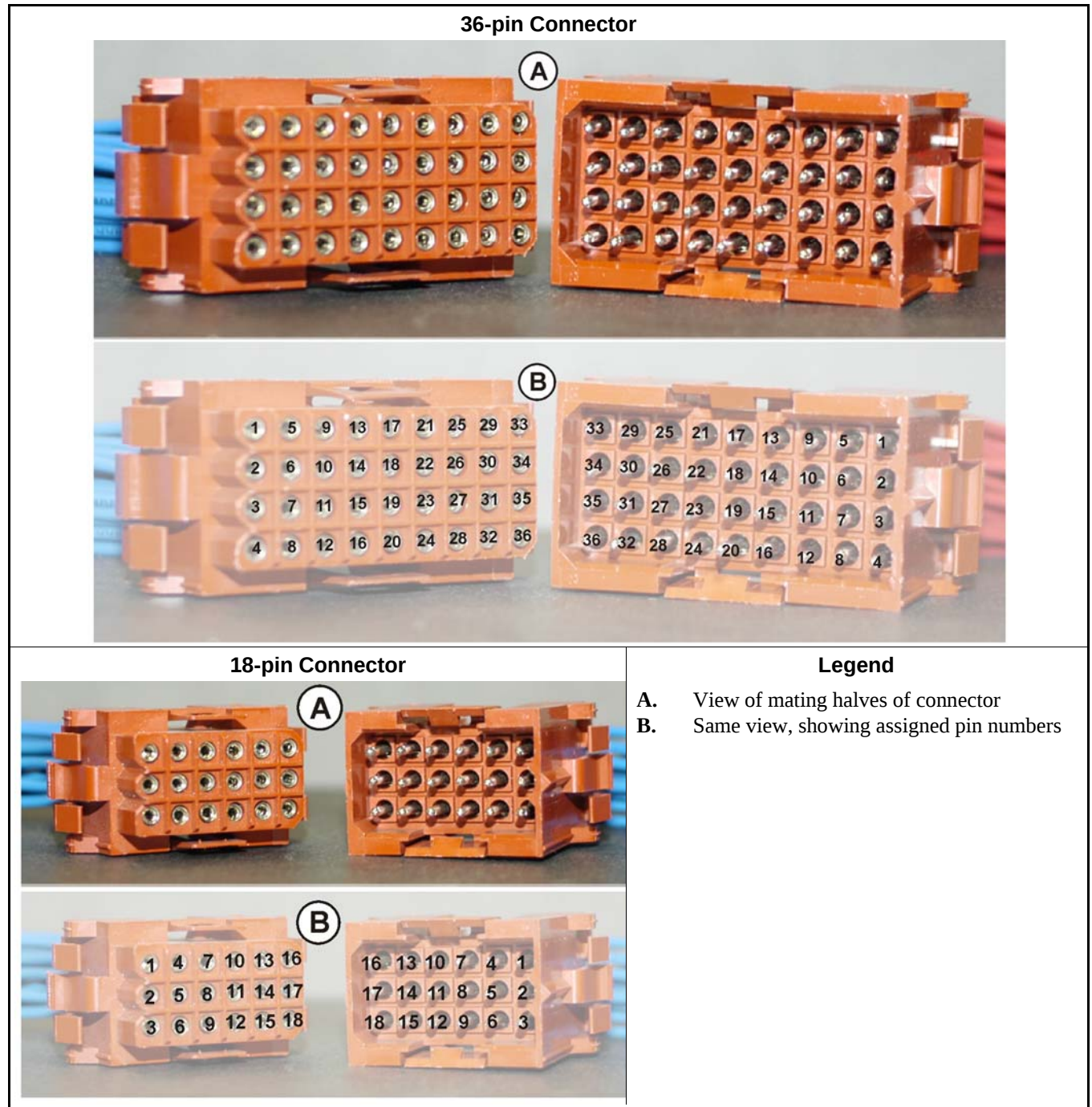


Figure 24: Molex Connector Pin Locations

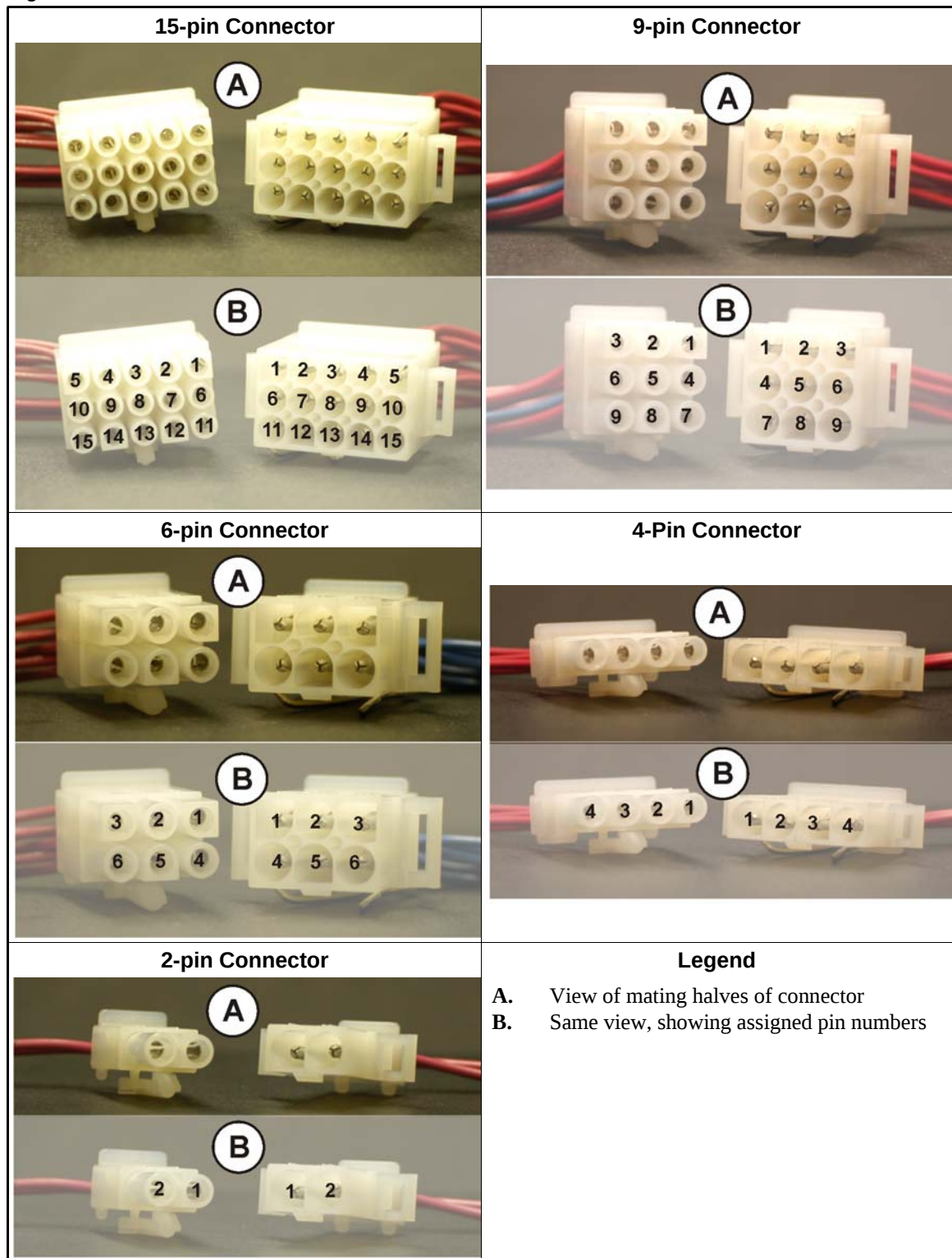


Figure 25: Pressure Switch

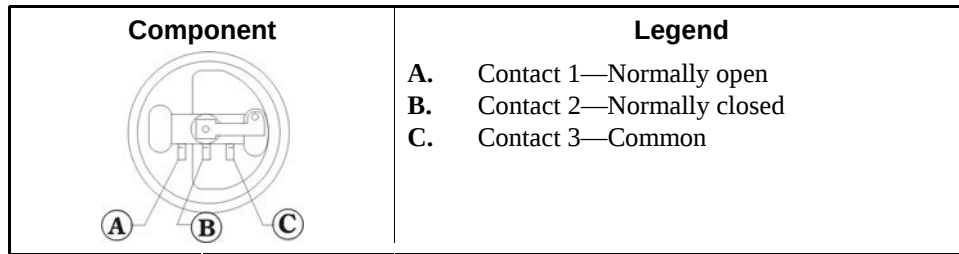


Figure 26: Toggle Switch

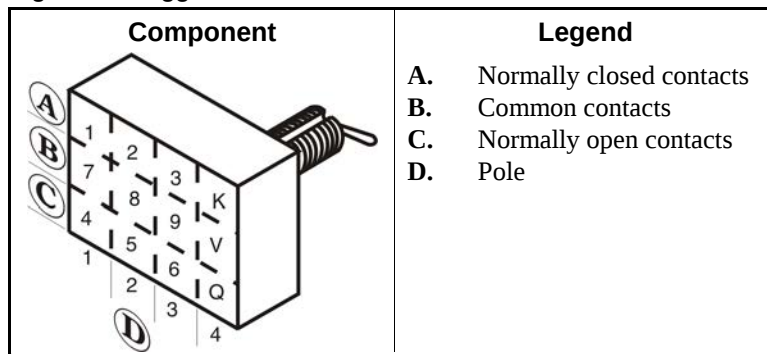
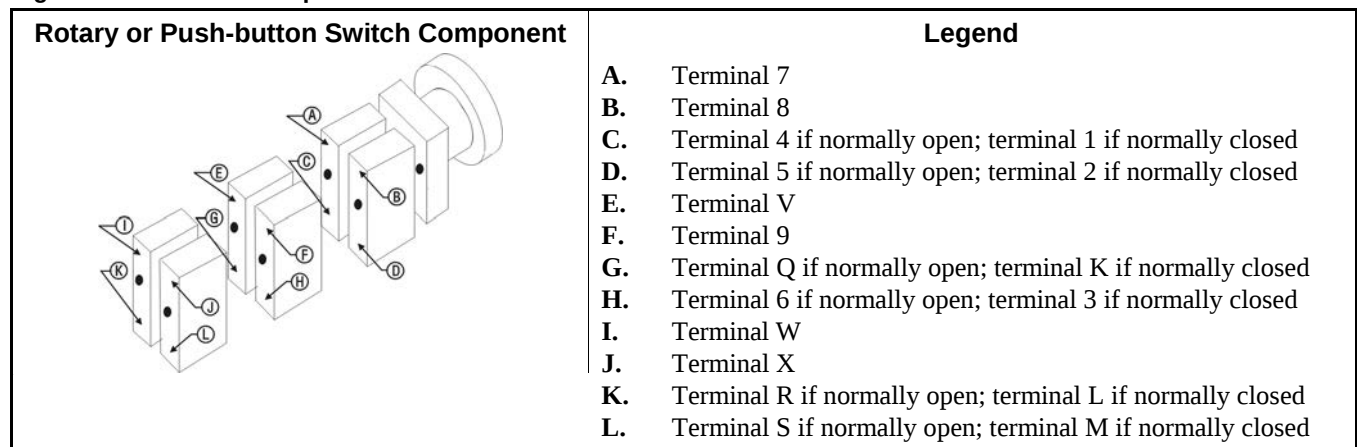


Figure 27: Switch with Replaceable Contact Blocks



3. Features of Milnor® Electrical Schematic Diagrams

Document BMP010012 (following this section) is a sample schematic, based on a schematic diagram for the Milnor® gas dryer. For the purposes of this exercise, the schematic is shown gray and explanations of the items on the schematic are shown black.

The item numbers below correspond to the circled item numbers shown on the drawing.

1. The first six characters of the drawing number (W6DRYG) indicate that this is a wiring diagram (W), identify the generation of controls (6), and identify the type of machine (DRYG=Gas Dryer). These characters appear in the drawing number of every schematic in the set.

The characters following the first six are unique to each drawing. The two characters identified as the page number are an abbreviation for the function performed by the depicted

circuitry (S+=three-wire circuit) and establish the order in which the schematic occurs in the manual (schematics are arranged in alpha-numeric order in the manual).

Whenever circuitry changes are significant enough to warrant publishing a new schematic drawing, the new drawing number will be the same as the old except for the major revision letter (A in the example).

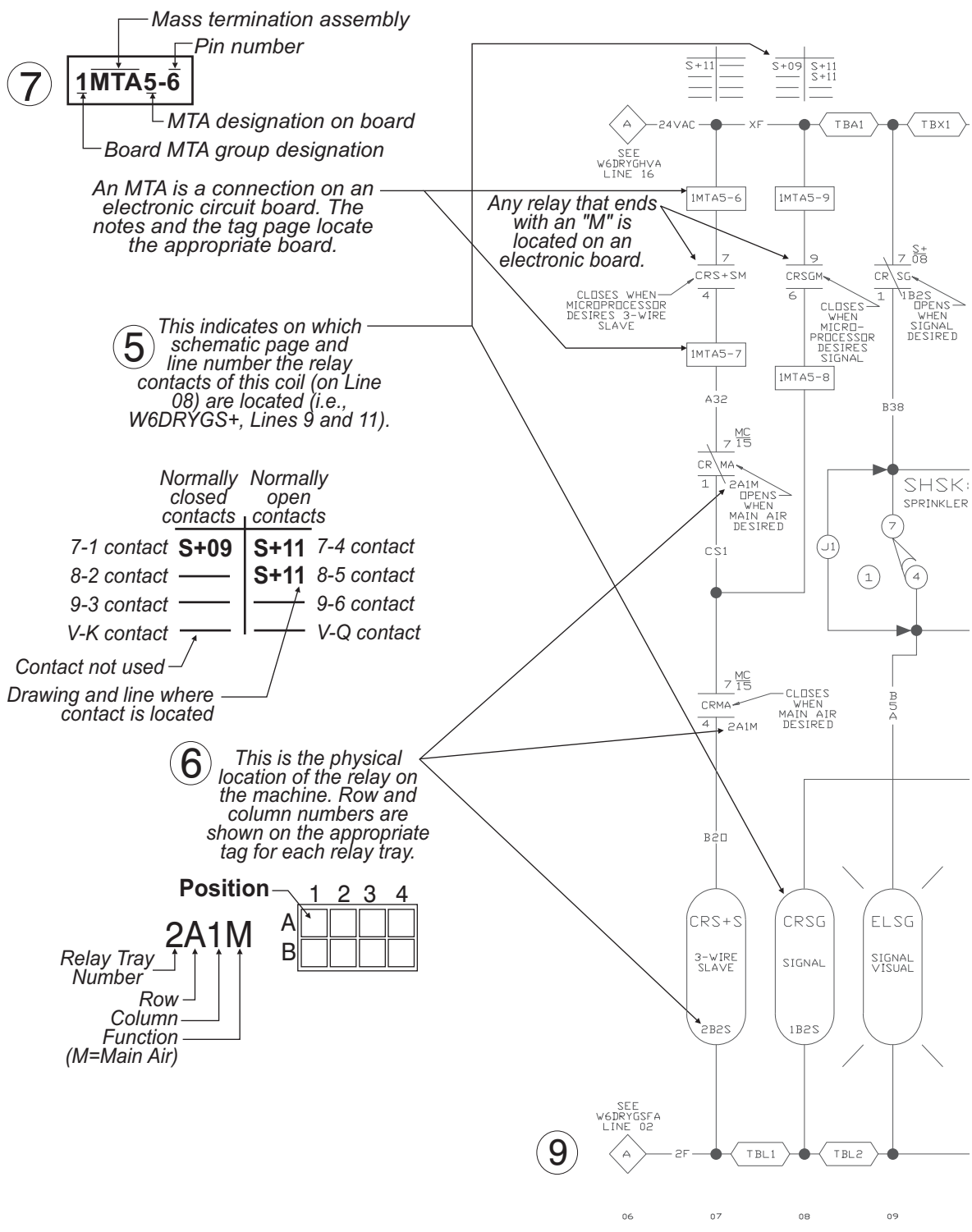
2. Included in the drawing title are the class of control system, the title of this circuit, and the circuit voltage.
3. Line numbers are provided along the bottom edge of the drawing. These permit service personnel in the field and at the Milnor® factory to quickly relate circuit locations when discussing troubleshooting over the phone. Page and line numbers are referenced on the drawing as explained in items five and six below.
4. Relay contacts show the page and line number on which the relay coil may be found. This is the type of cross referencing most frequently used in troubleshooting.
5. Relay coils show the page and line number on which its associated contacts are located.
6. Relay contacts and relay coils show the physical location of the relay.
7. The designation MTA applies to electronic circuit board connections. Typically, a control system will contain several different types of circuit boards and one or more boards of each type. A numerical suffix identifies the board type and a numerical prefix identifies which one of several boards of a given type is being depicted. For example, the designation 1MTA5 identifies this as the first I/O board (8 output, 16 input board) in the control system. As shown on the drawing, a pin number follows the board number, separated by a dash. Thus, 1MTA5-9 is pin 9 on this board. The numerical designations for board types vary from one control system to another. Some of the board types commonly encountered on the Mark V and Mark VI washer-extractor control and their designations are as follows:
 - MTM1-MTM8 = Mother board
 - MTA1-MTA5 = 8 output, 16 input (8/16) boards
 - MTA11-MTA14 = 24 output boards
 - MTA30-MTA40 = processor boards
 - MTA41-MTA43 = digital to analog (D/A) boards
 - MTA51-MTA55 = analog to digital (A/D) boards
 - MTA81-MTA85 = balance A-D board

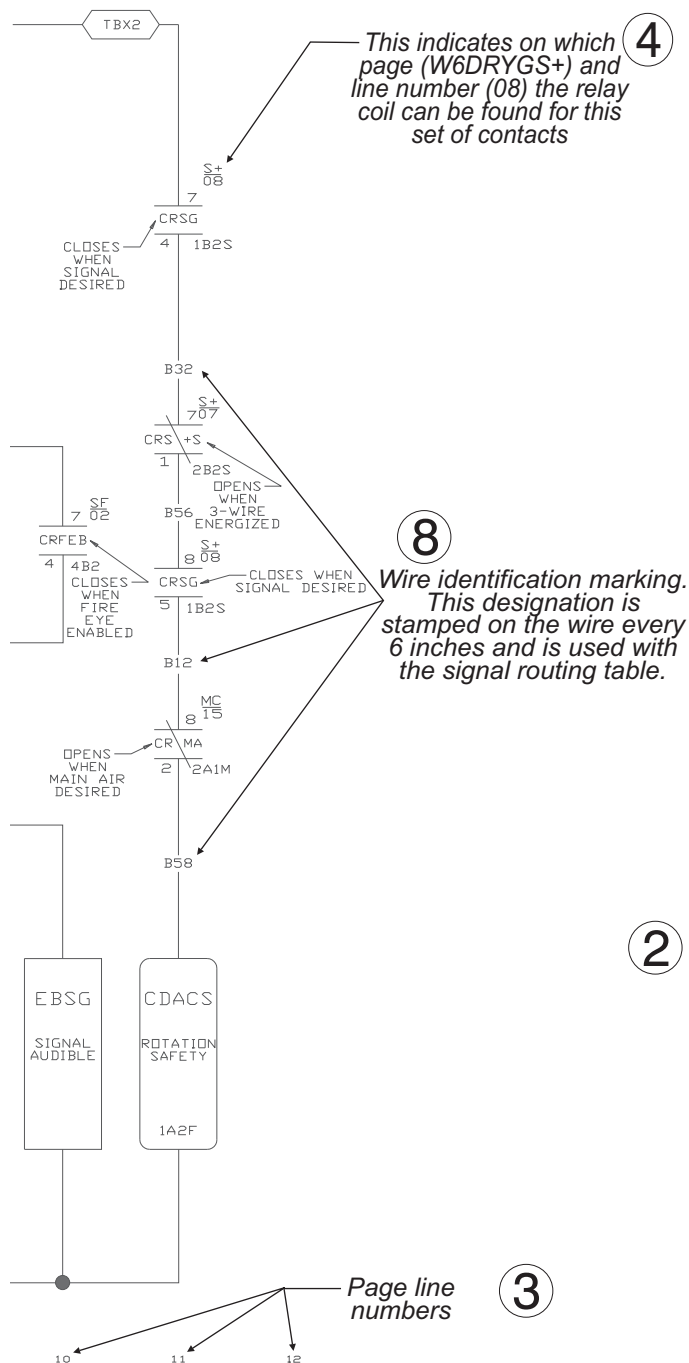
The complete listing of the boards utilized in a given control system can be found in the component list for that system.

8. Wire numbers, as described earlier in this section, are shown at appropriate locations on the schematic drawing.
9. Where diamond symbols appear at the end of a conductor, these are match points for continuing the schematic on another drawing. The page and line number that continues the circuit is printed adjacent to the diamond symbol. Where more than one match point appears on the referenced page, match diamonds containing corresponding letters.

— End of BIUUUK01 —

This page intentionally left blank.

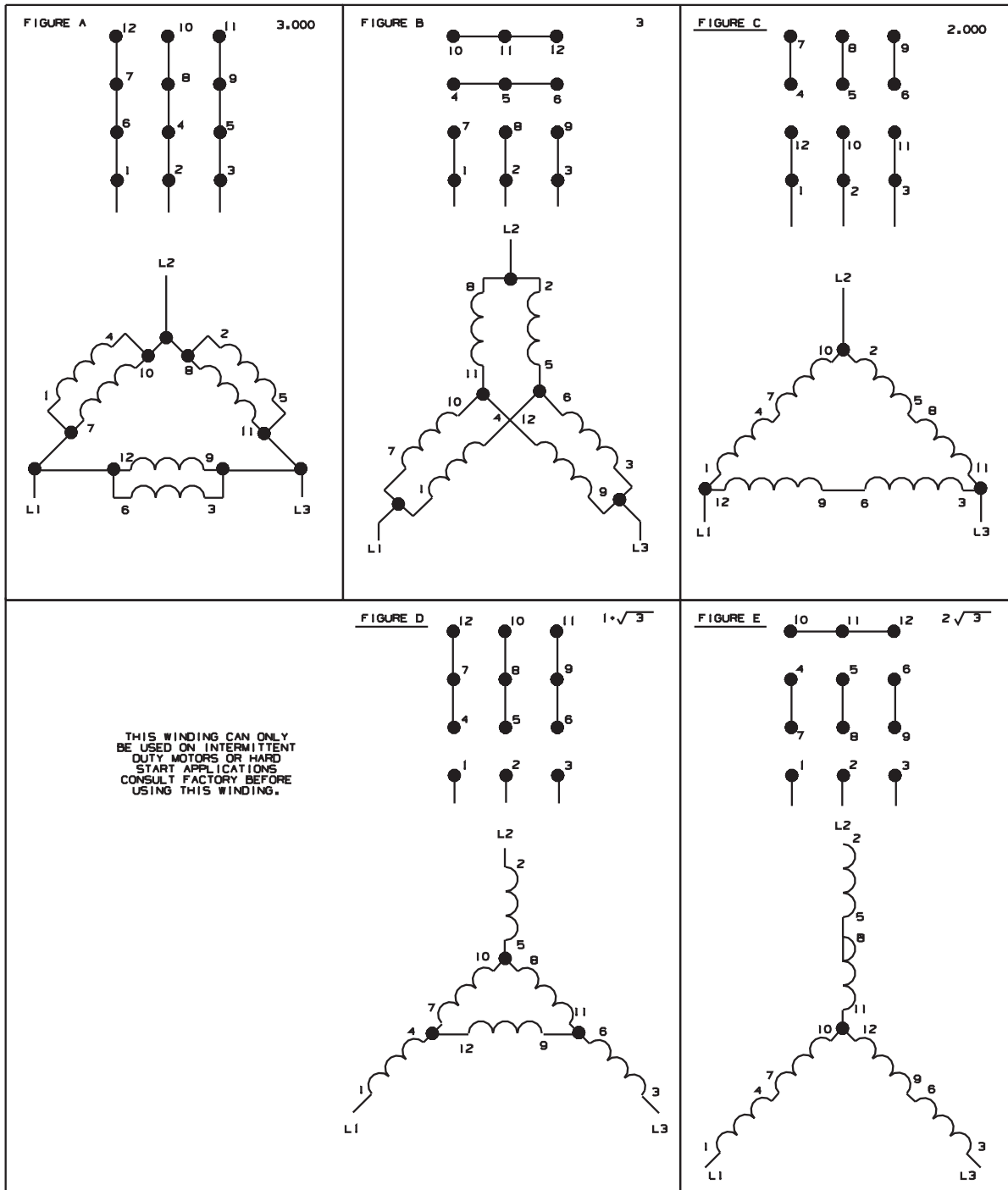




NOTES:

1. TBL IS LOCATED IN LEFT CONTROL BOX.
2. TBA IS LOCATED IN RIGHT CONTROL BOX.
3. TBX IS LOCATED IN LEFT CONTROL BOX.
4. 1MTA5 IS LOCATED ON BIDI (8 OUTPUT-16 INPUT BOARD).
5. REMOVE (J1) IF DRYER HAS VALVE SET SHUT OPTION.

FIGURE	ELECTRICAL VALUES	SUFFIXES							
		B		H		M		T	
		50HZ	60HZ	50HZ	60HZ	50HZ	60HZ	50HZ	60HZ
A	1,000	208	230			200	220	220	240
B	$\sqrt{3}$			208	240	346	380	380	
C	2,000	416	460	220	240	400	440	440	480
D	$1 + \sqrt{3}$						600		
E	$2\sqrt{3}$			380					



06

07

08

09

10

11

12

13

14

15

16

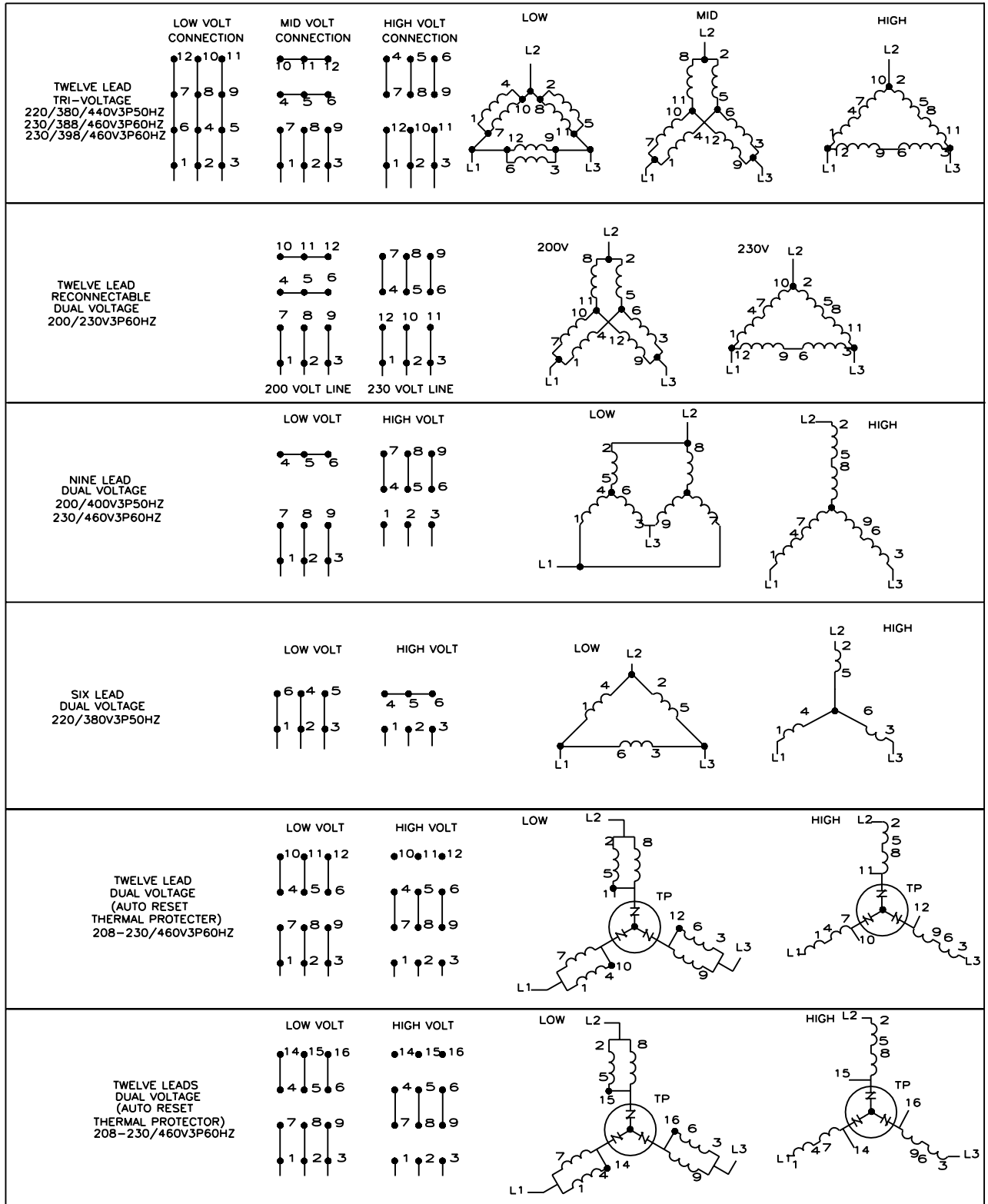
17

BMP850029

MOTOR CONNECTION DIAGRAMS

THREE PHASE SINGLE SPEED MOTORS WITH MULTIPLE VOLTAGE RATINGS
(ONLY FOR MOTOR SUFFIXES LISTED)

PELLERIN MILNOR CORPORATION



W80008

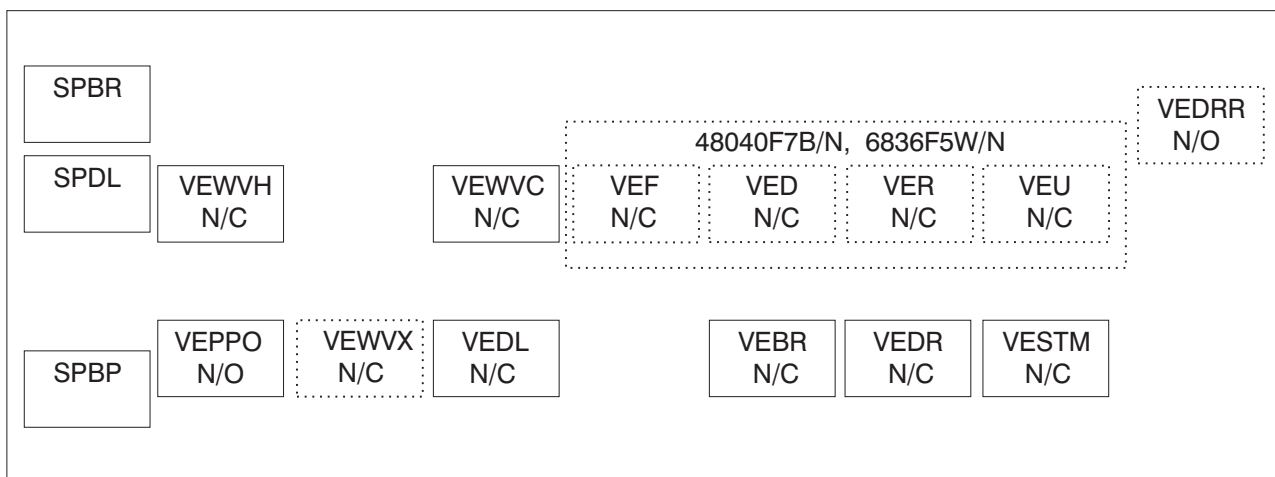
THREE PHASE
MOTOR CONNECTION DIAGRAMS
SINGLE SPEED MOTORS WITH MULTIPLE VOLTAGE RATINGS
PELLERIN MILNOR CORPORATION

W80008
2001253A

BIO-1	BO24-1	BO24-2(OPTIONAL) LIQUID SUPPLIES	BO24-3(OPTIONAL) 20 PROGRAMMABLE OUTPUTS
INPUTS 0 HI LEVEL REUSE TANK 1 DOOR CLOSED 2 INVERTER FAULT 3 NOT USED 4 NOT USED 5 NOT USED 6 DON'T ALLOW CHEM 7 NOT USED 8 AMPSAVER 9 AT WASH LEVEL 10 NOT USED 11 AT LOAD LEVEL 12 NOT USED 13 NOT USED 14 NOT USED 15 NOT USED OUTPUTS 0 RECIRCULATE PUMP 1 COOLDOWN 2 CHEMICAL FLUSH 3 CHEMICAL #4 4 CHEMICAL #1 5 CHEMICAL #3 6 CHEMICAL #2 7 CHEMICAL #5	OUTPUTS 0 TANK TO MACHINE 1 ACCELERATE/DECELERATE 2 DOOR UNLOCK 3 CLOCKWISE WASH 4 COUNTER CLOCKWISE WASH 5 STEAM 6 SIGNAL 7 3-WIRE ENABLED 8 NOT USED 9 HOT WATER 10 COLD WATER 11 EXTRA WATER 12 DRAIN TO SEWER 13 DRAIN TO REUSE 14 MACHINE TO MACHINE 15 MACHINE TO TANK 16 NOT USED 17 NOT USED 18 NOT USED 19 NOT USED 20 NOT USED 21 NOT USED 22 NOT USED 23 NOT USED	OUTPUTS 0 CHEM #14 1 CHEM #9 2 CHEM #13 3 FLUSH MANIFOLD 4 CHEM #15 5 CHEM #11 6 CHEM SAVE 7 DOOR UNLOCK PULSE(30022) 8 CHEM #10 9 DOORLOCK PULSE(30022) 10 CHEM #6 11 CHEM #7 12 CHEM #8 13 CHEM #12 14 AUTO RECIRCULATION 15 NOT USED 16 NOT USED 17 NOT USED 18 NOT USED 19 TILT TO LOAD 20 NOT USED 21 TILT TO WASH 22 NOT USED 23 TILTING	OUTPUTS 0 OUTPUT 0 1 OUTPUT 1 2 OUTPUT 2 3 OUTPUT 3 4 OUTPUT 4 5 OUTPUT 5 6 OUTPUT 6 7 OUTPUT 7 8 OUTPUT 8 9 OUTPUT 9 10 OUTPUT 10 11 OUTPUT 11 12 OUTPUT 12 13 OUTPUT 13 14 OUTPUT 14 15 OUTPUT 15 16 OUTPUT 16 17 OUTPUT 17 18 OUTPUT 18 19 OUTPUT 19 20 NOT USED 21 NOT USED 22 NOT USED 23 NOT USED

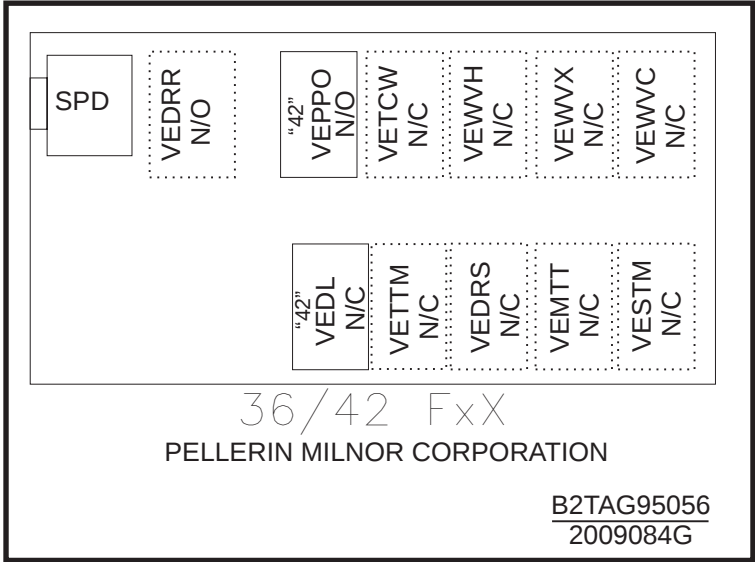
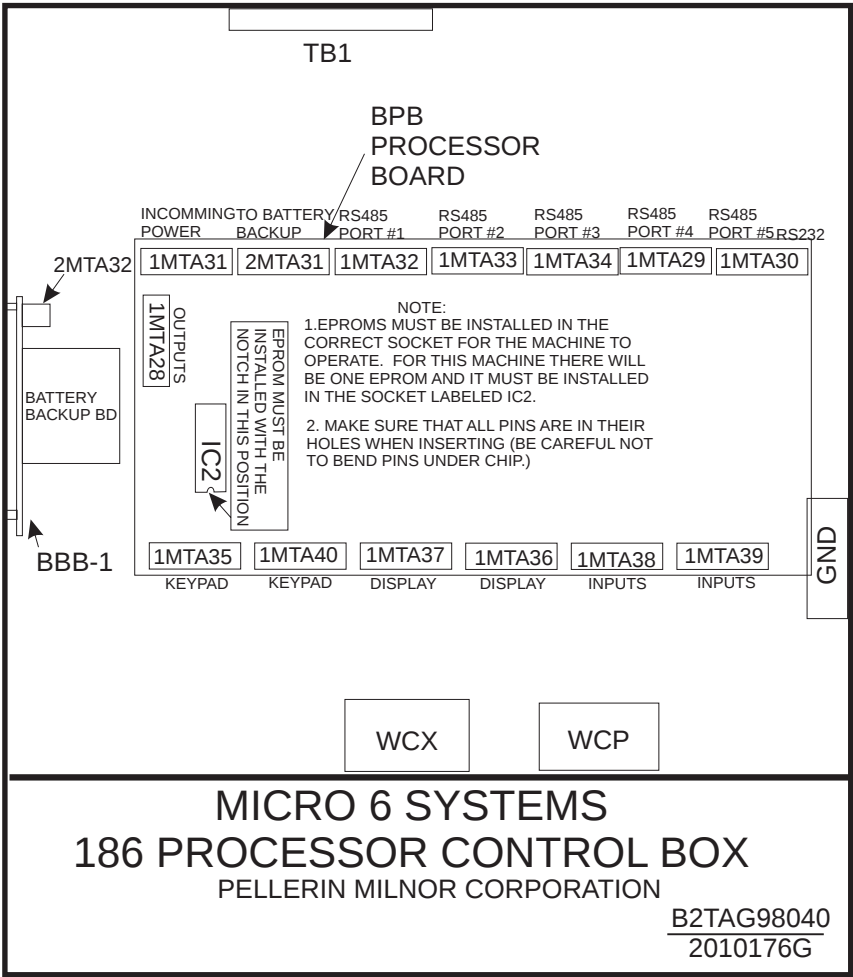
**MICRO 6 SYSTEMS
WASHER EXTRACTOR
CONTROL BOARDS INPUTS/OUTPUTS**
PELLERIN MILNOR CORPORATION

B2TAG96034
20121245G



4840F7J/B,W/N,6836F#W/N
PELLERIN MILNOR CORPORATION

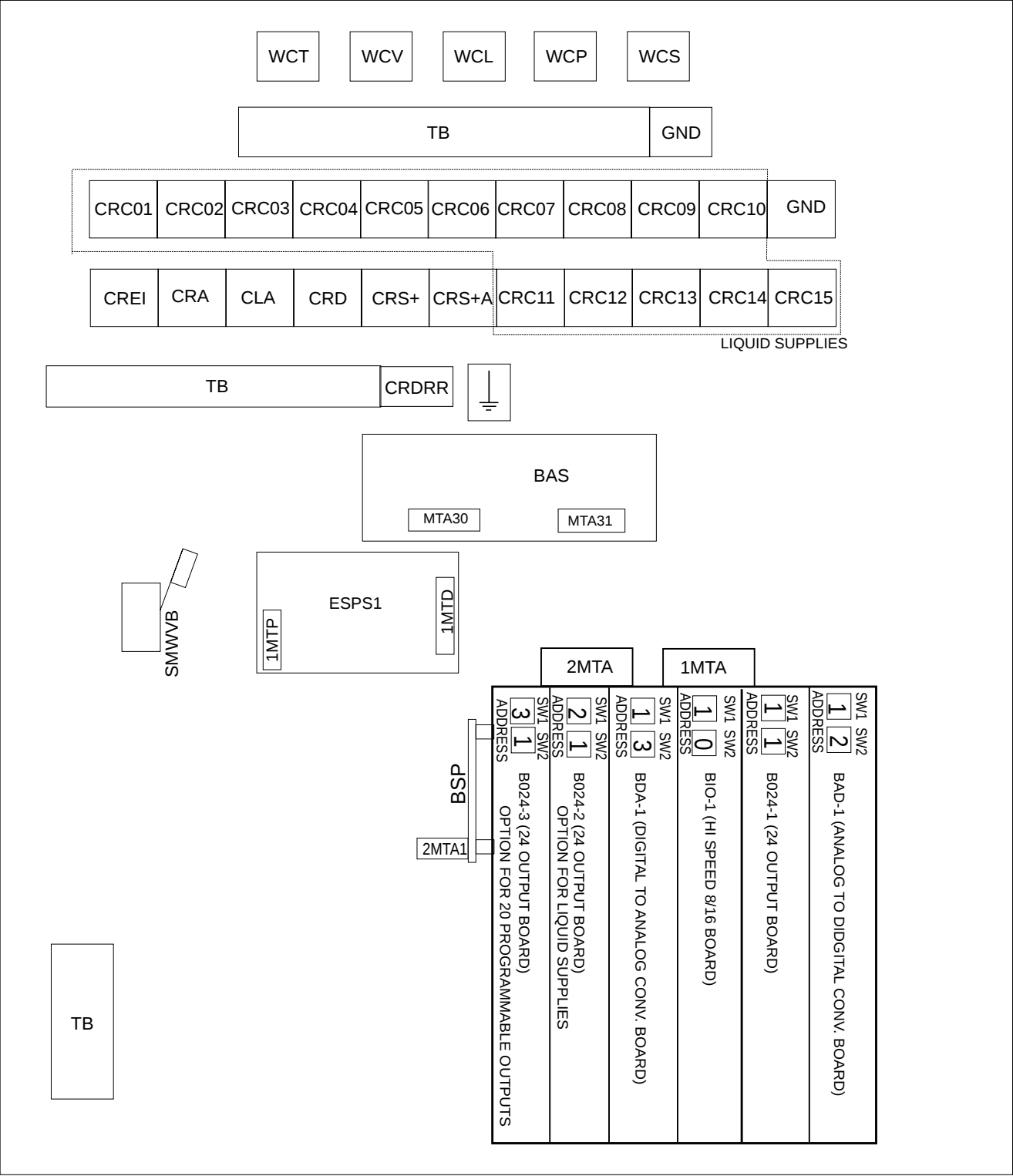
B2T2000019
2009084G



W6F3WSTG1
MICRO 6 SYSTEMS
CONTROL BOX LAYOUTS
PELLERIN MILNOR CORPORATION

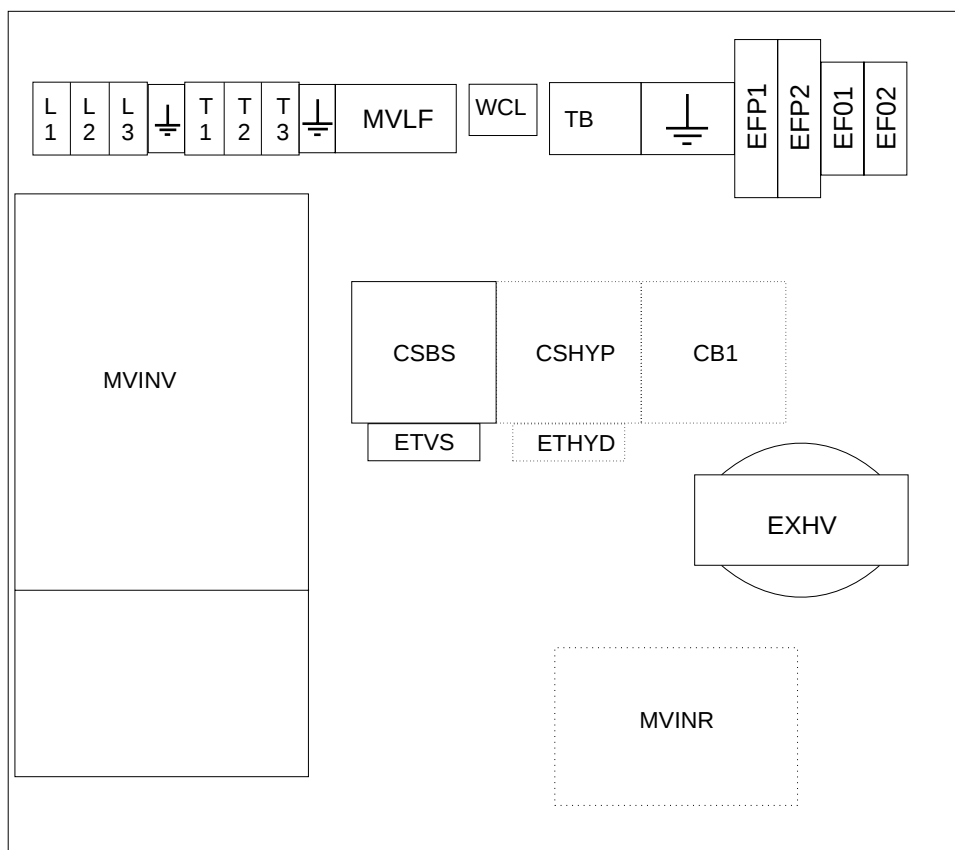
W6F3WSTG1A
2012316B

W6F3WSTG1A
2012316B



48040H7N
LOW VOLTAGE CONTROL BOX
PELLERIN MILNOR CORPORATION

B2T2009022
2012124G



48040H7N/W INVERTER BOX

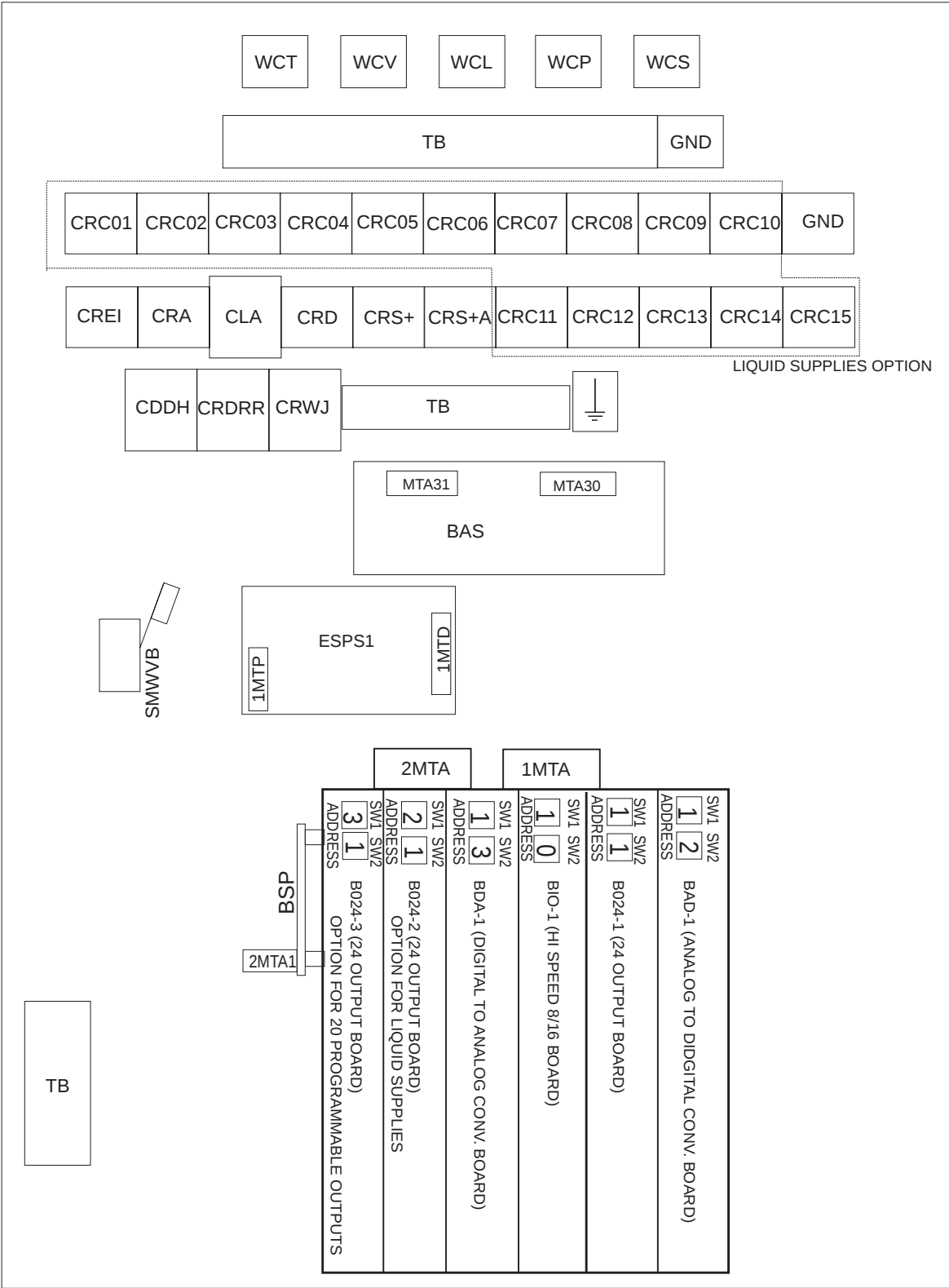
PELLERIN MILNOR CORPORATION

B2T2000021
2012124A

W6F3WSTG4
PELLERIN MILNOR CORPORATION

W6F3WSTG4
2012134B

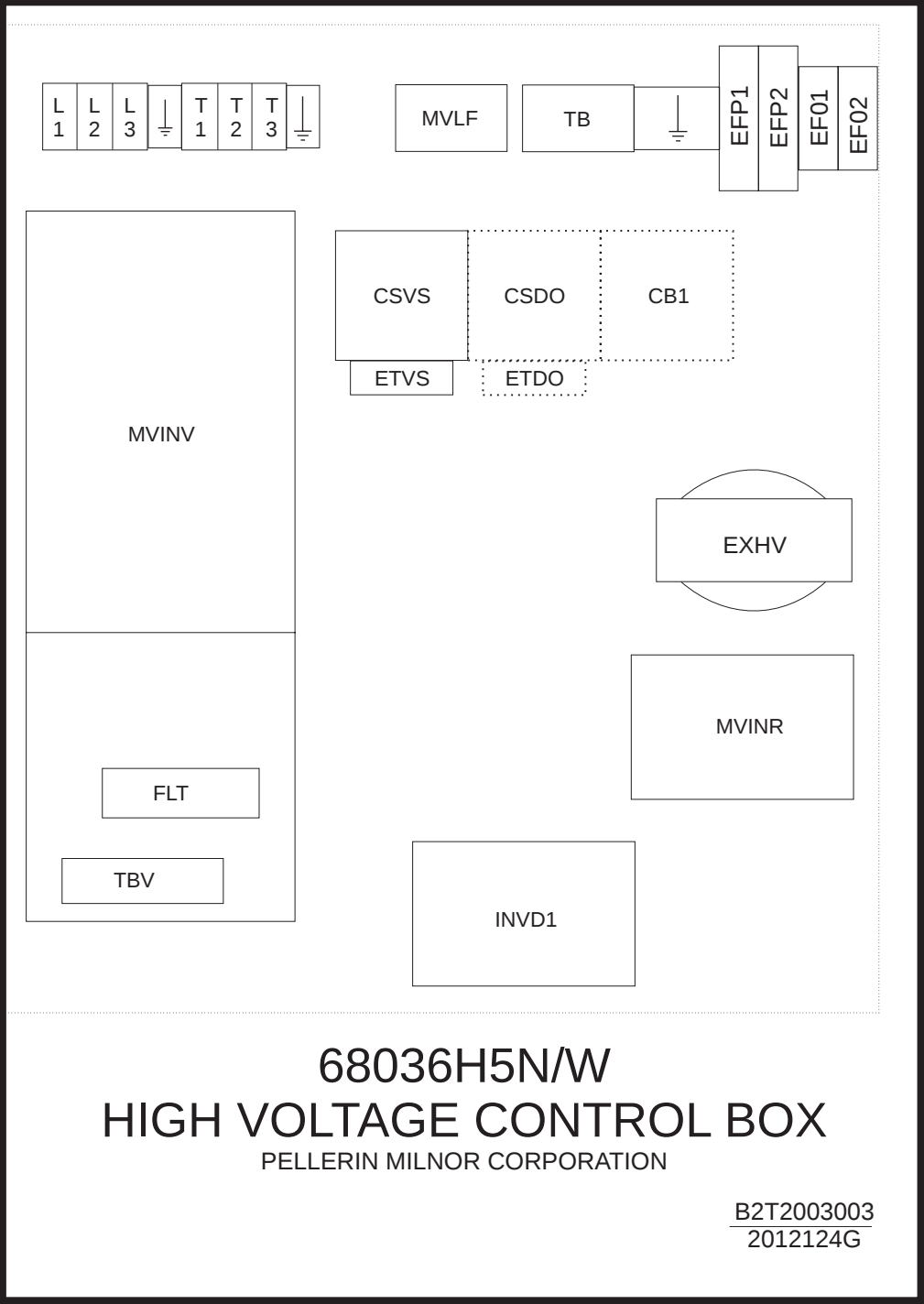
W6F3WSTG4
20012134B

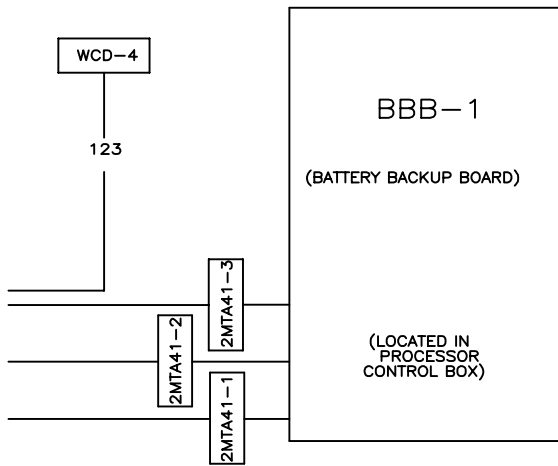


68036H5N
LOW VOLTAGE CONTROL BOX

PELLERIN MILNOR CORPORATION

B2T2011020
2012293G

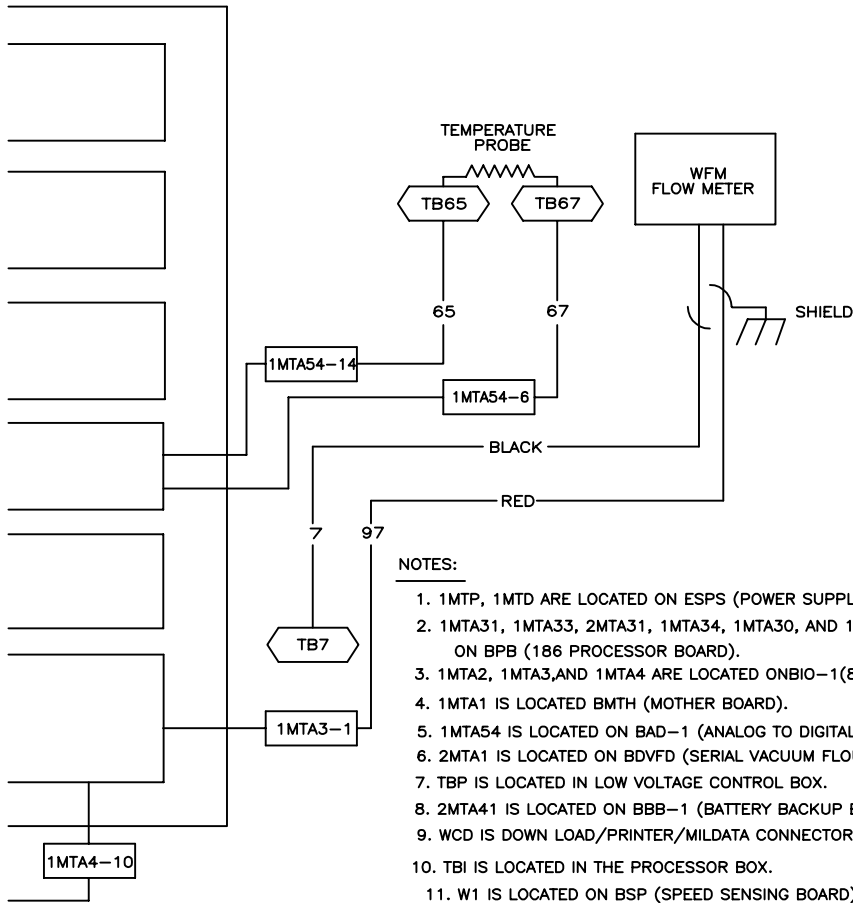
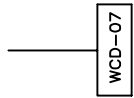




WIRE NO.
103
104
105
7
107
106
INPUTS
5
6

VOLTAGE
+5VDC
+12VDC
-12VDC
GROUND
SERIAL HIGH
SERIAL LOW
—
240VAC
240VAC

WIRE COLOR
BLUE/RED
BLUE/ORANGE
BLUE/BLACK
BLUE/WHITE
BLUE/RED
BLUE/BLACK
BLUE/BLACK
RED
RED/WHITE



NOTES:

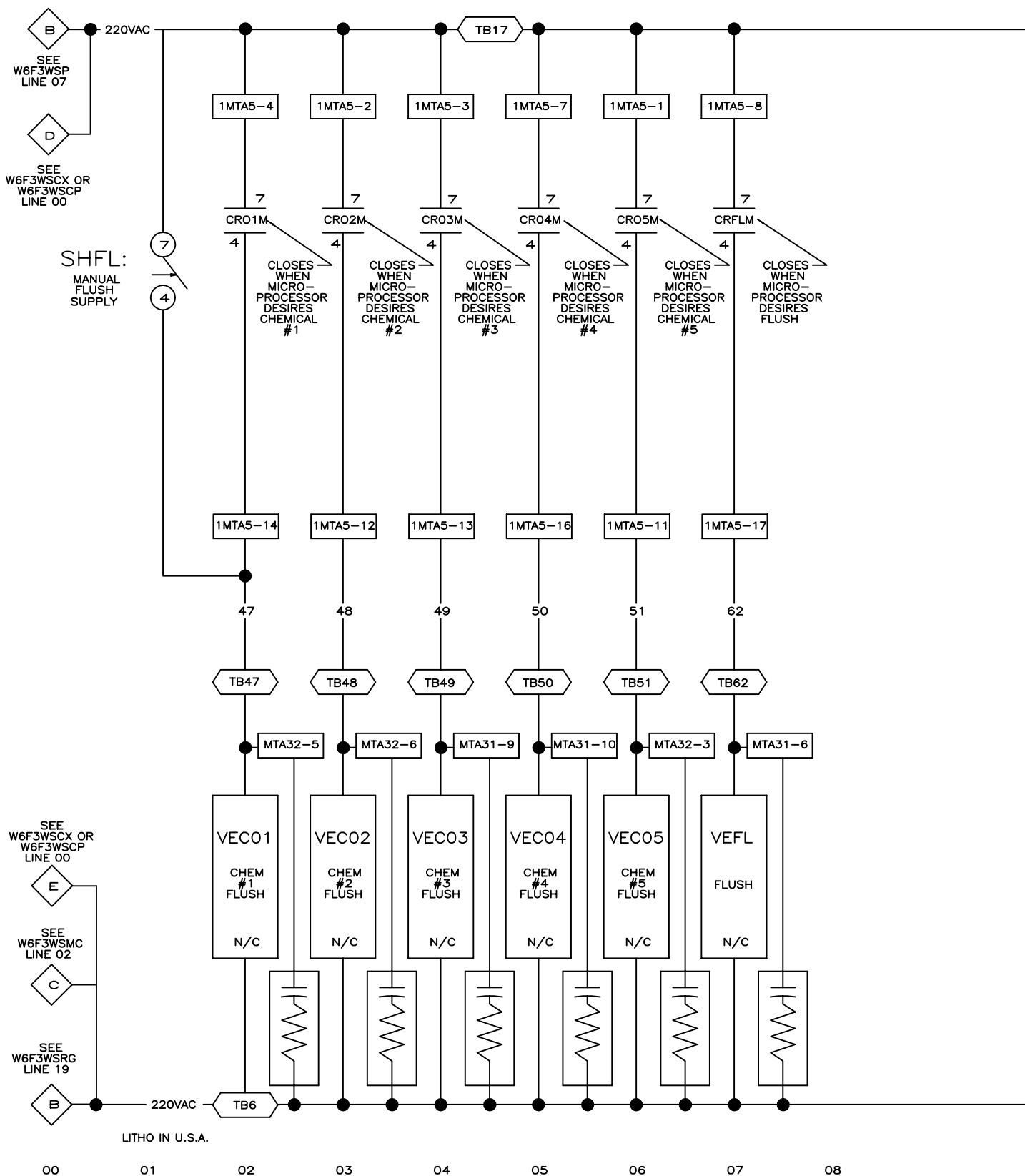
1. 1MTP, 1MTD ARE LOCATED ON ESPS (POWER SUPPLY).
2. 1MTA31, 1MTA33, 2MTA31, 1MTA34, 1MTA30, AND 1MTA39 ARE LOCATED ON BPB (186 PROCESSOR BOARD).
3. 1MTA2, 1MTA3, AND 1MTA4 ARE LOCATED ON BIO-1 (8 OUTPUT-16 INPUT BOARD).
4. 1MTA1 IS LOCATED BMTH (MOTHER BOARD).
5. 1MTA54 IS LOCATED ON BAD-1 (ANALOG TO DIGITAL BOARD).
6. 2MTA1 IS LOCATED ON BDVFD (SERIAL VACUUM FLOURESENT DISPLAY).
7. TBP IS LOCATED IN LOW VOLTAGE CONTROL BOX.
8. 2MTA41 IS LOCATED ON BBB-1 (BATTERY BACKUP BOARD).
9. WCD IS DOWN LOAD/PRINTER/MILDATA CONNECTOR.
10. TBI IS LOCATED IN THE PROCESSOR BOX.
11. W1 IS LOCATED ON BSP (SPEED SENSING BOARD).

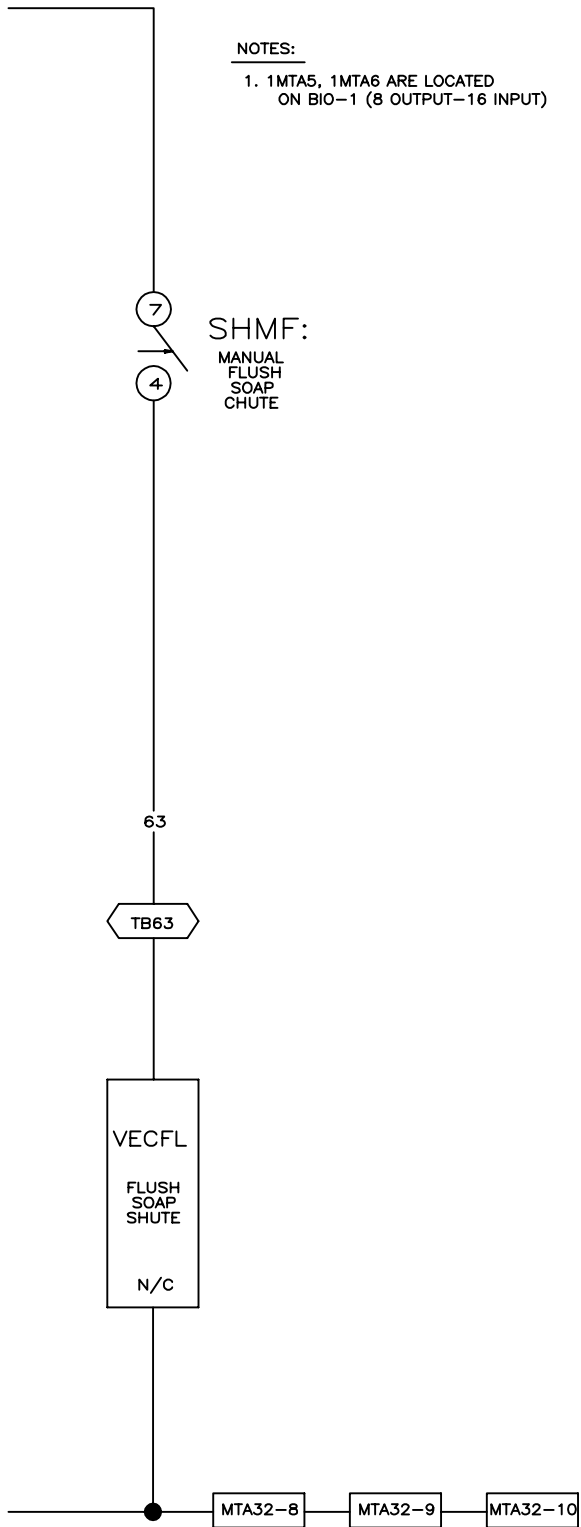
W6F3WSBWA

MICRO 6 SYSTEMS SERIAL CONTROLS MARK V SCHEMATIC: BOARD TO BOARD WIRING (SERIAL CONTROLS)

(MODIFIED FOR 186 PROCESSOR BOARD)

PELLERIN MILNOR CORPORATION





W6F3WSCF

MICRO 6 SYSTEMS SERIAL CONTROLS MARK V

SCHEMATIC: FLUSHING SUPPLIES

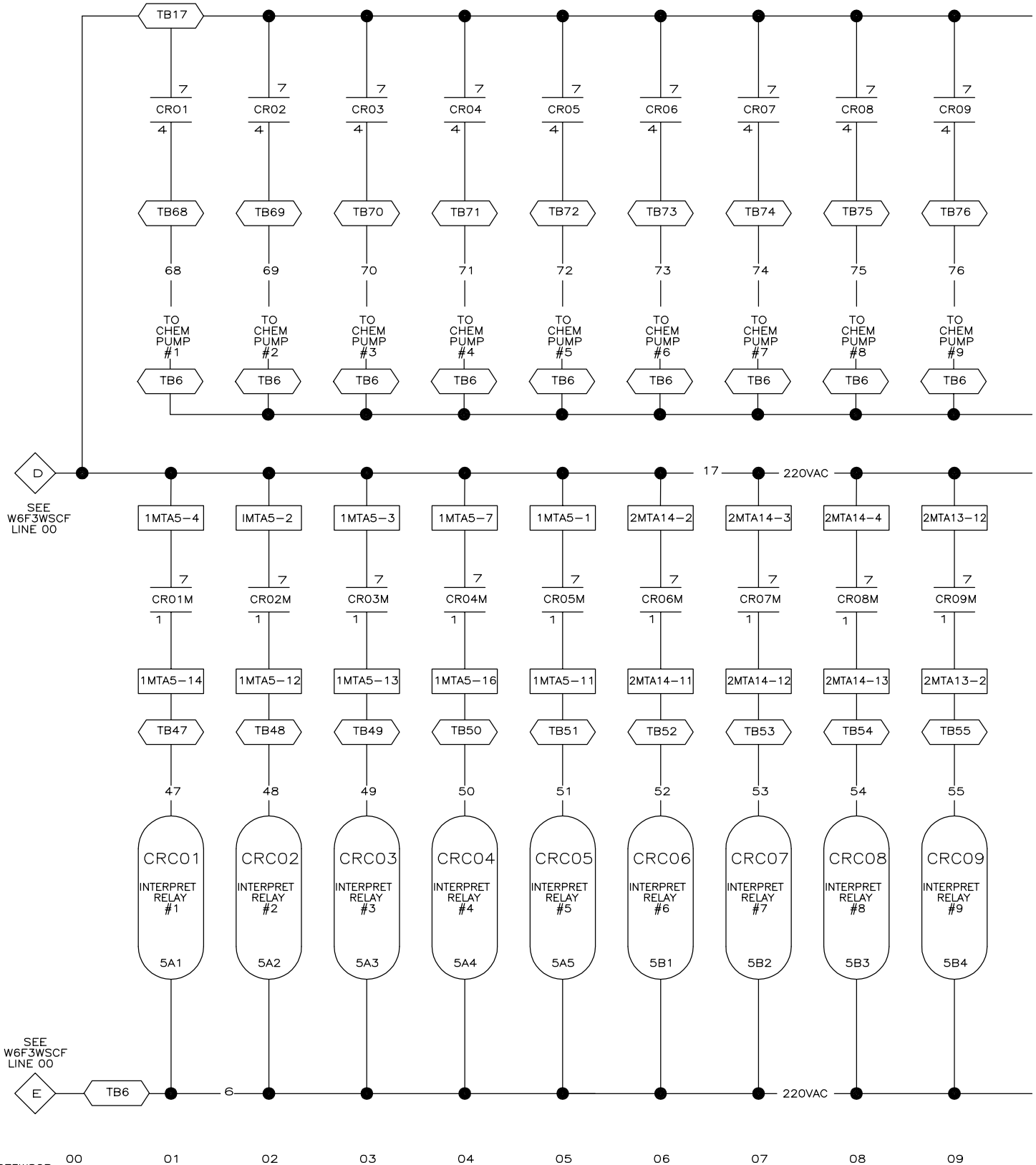
220V1P50HZ/240V1P60HZ

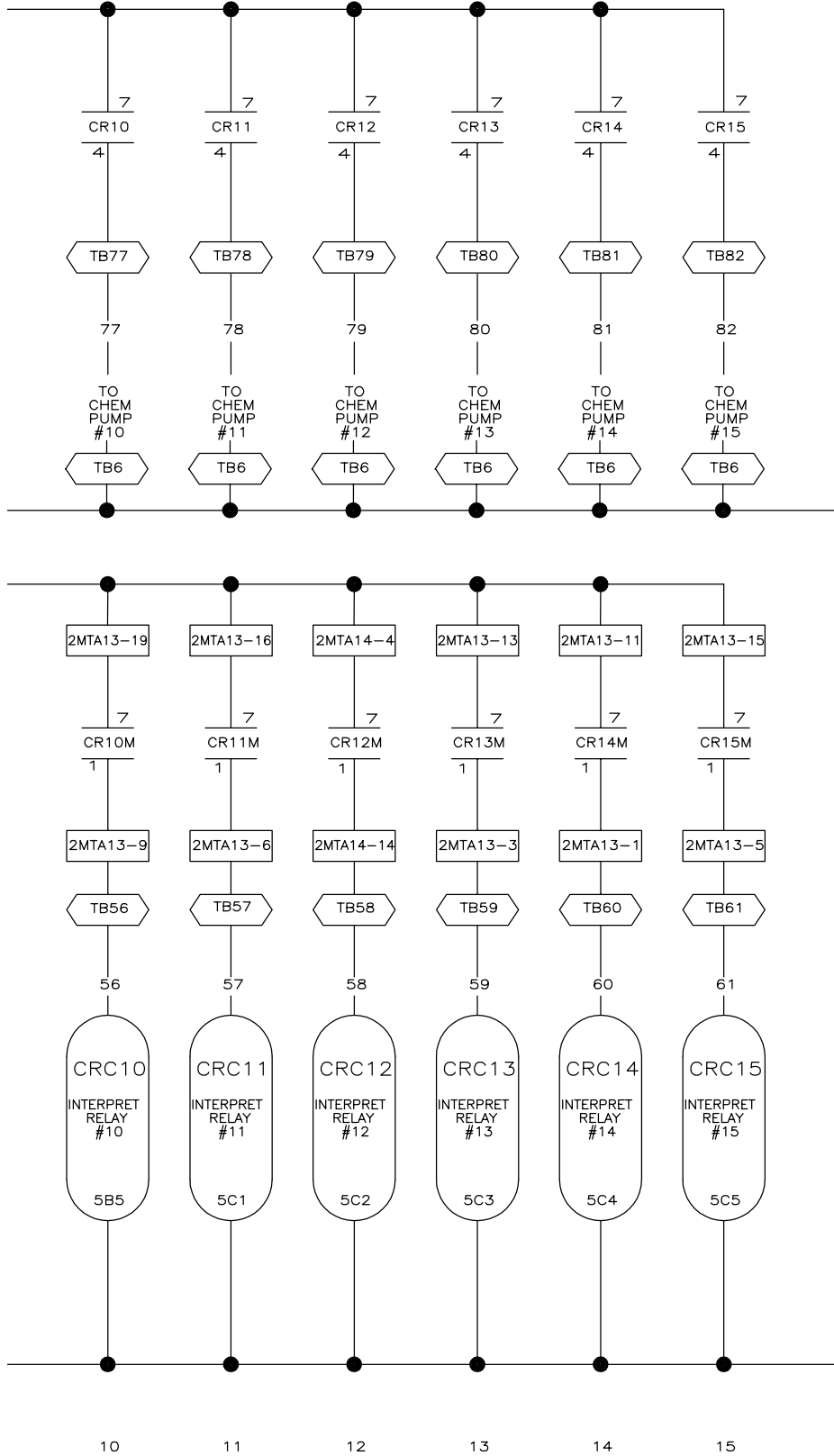
PELLERIN MILNOR CORPORATION

W6F3WSCF
2006084B

W6F3WSCF
2006084B

IF CUSTOMER IS SUPPLYING
VOLTAGE FOR CHEMICAL
PUMPS THEM TB17 & TB6 FEEDING
THE INTERPRET RELAY CONTACTS
MUST BE DISCONNECTED FROM
THE INTERNAL 220/240VAC SUPPLY.





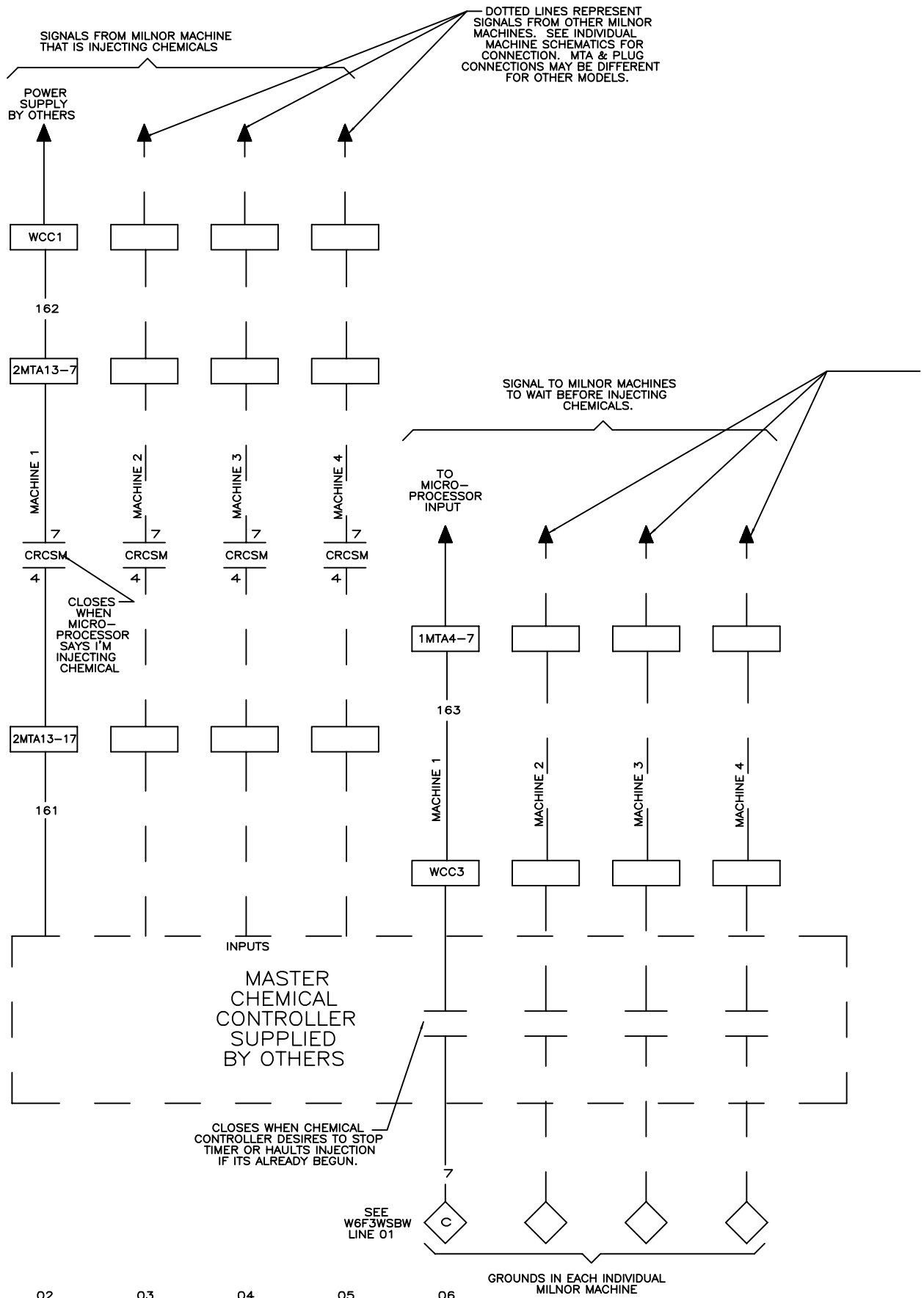
W6F3WSCP

MICRO 6 SYSTEMS SERIAL CONTROLS

SCHEMATIC: LIQUID SUPPLY-INTERPRET RELAYS

220V1P50HZ/240V1P60HZ

PELLERIN MILNOR CORPORATION



00

01

02

03

04

05

06

— DOTTED LINES REPRESENT
SIGNALS TO OTHER MILNOR
MACHINES SEE INDIVIDUAL
MACHINE SCHEMATICS FOR
CONNECTION. MTA & PLUG
CONNECTIONS MAY BE DIFFERENT
FOR OTHER MODELS.

NOTES:

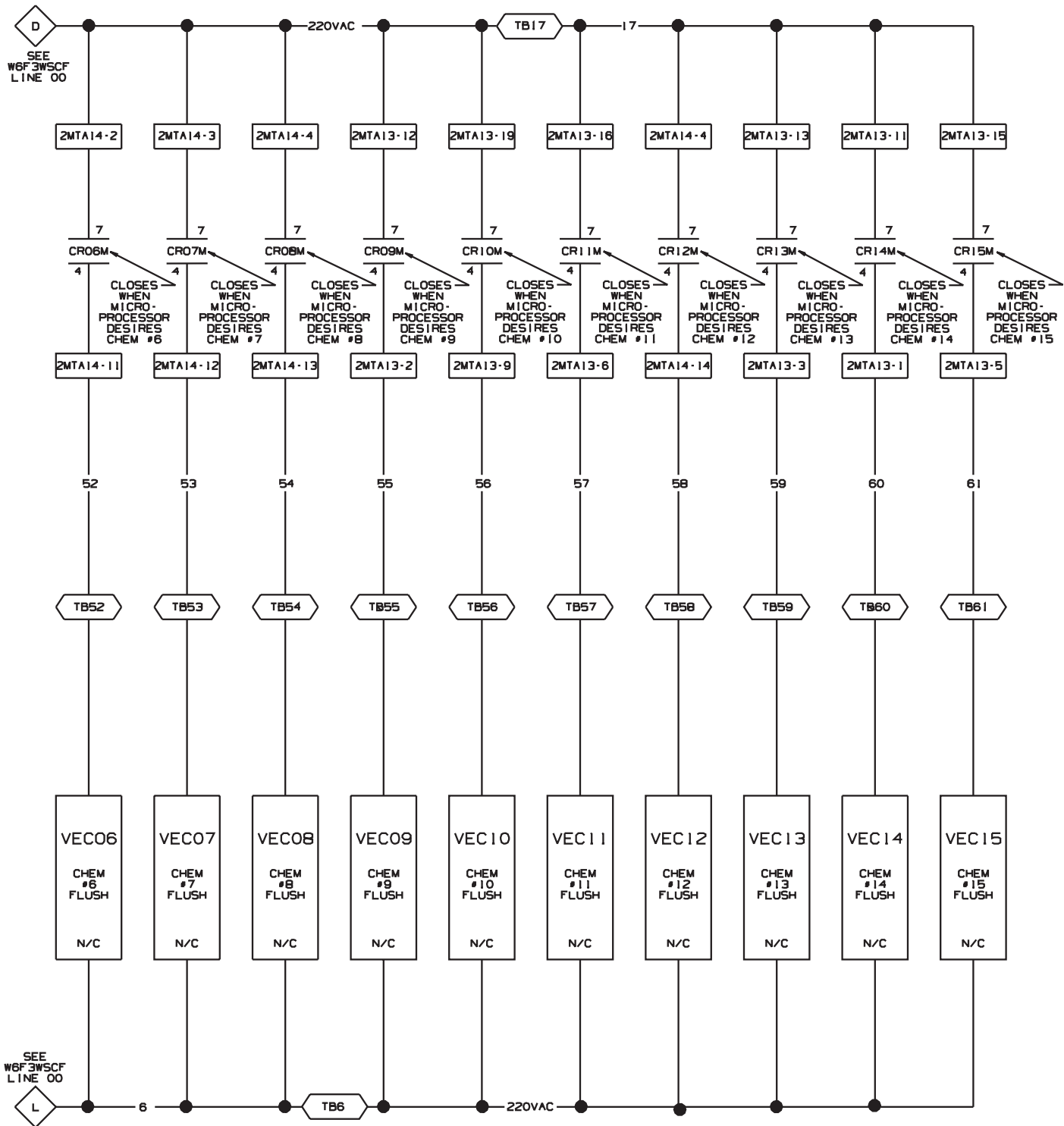
1. WCC IS LOCATED IN THE RIGHT CONTROL BOX ON THIS MODEL MACHINE.
2. CONTACT CRCSM MUST BE INTERPRETED BY THE CHEMICAL SEQUENCER (SUPPLIED BY OTHERS) AND IT MUST SIGNAL ALL OTHER MILNOR MACHINES TO WAIT BEFORE THEY INJECT CHEMICALS.

W6F3WSCS

MICRO 6 SYSTEMS MARK V

SCHEMATIC: CHEMICAL SAVE (OPTIONAL)

PELLERIN MILNOR CORPORATION



00 01 02 03 04 05 06 07 08 09 10 11

W6F3WSCX

MICRO 6 SYSTEMS

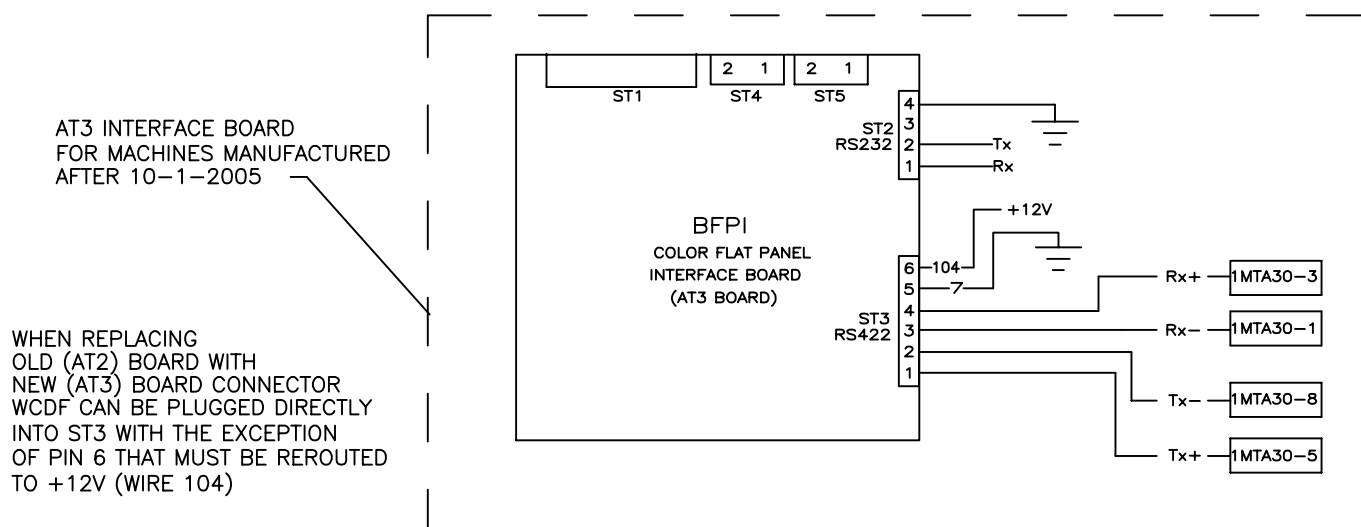
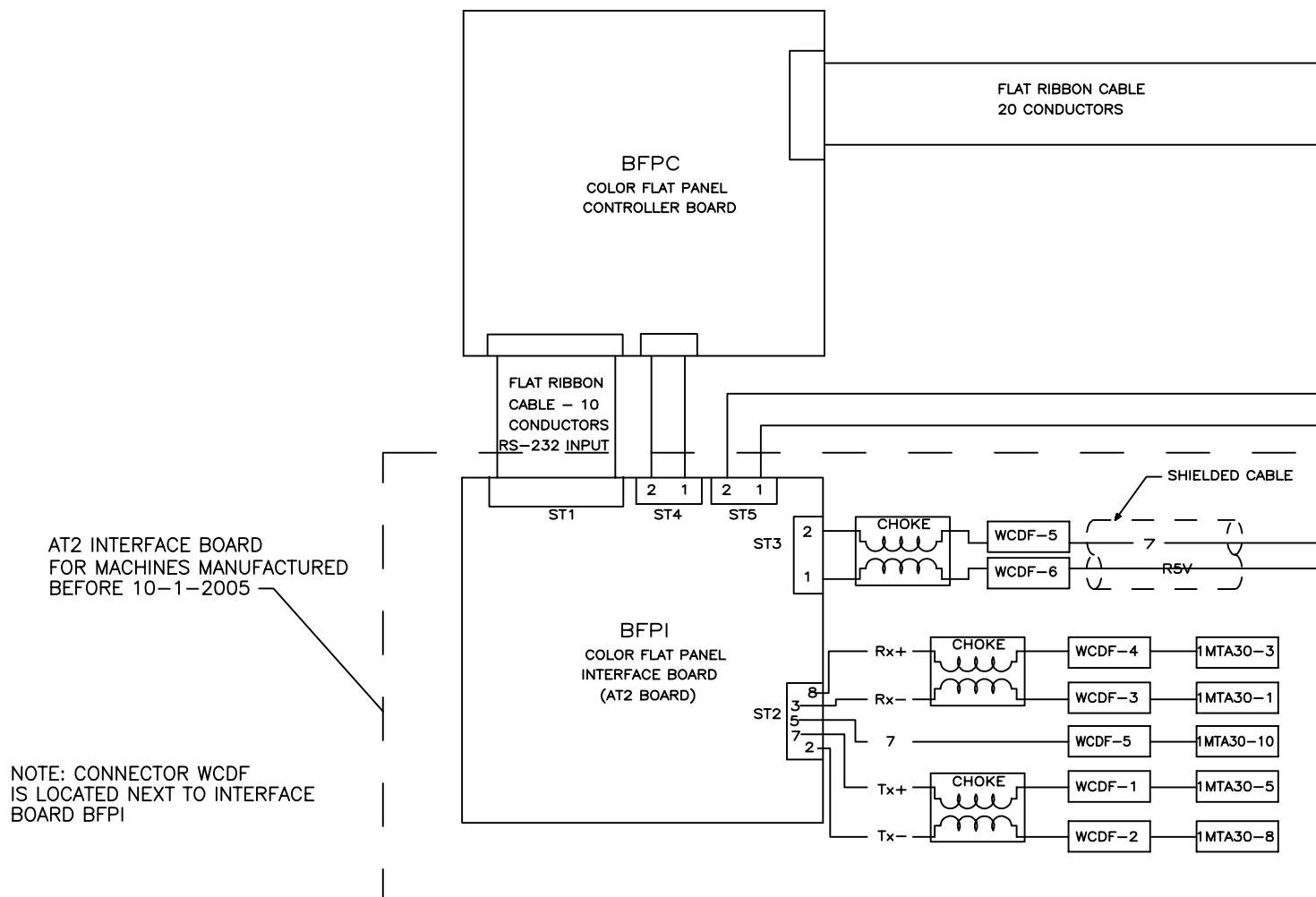
SERIAL CONTROLS

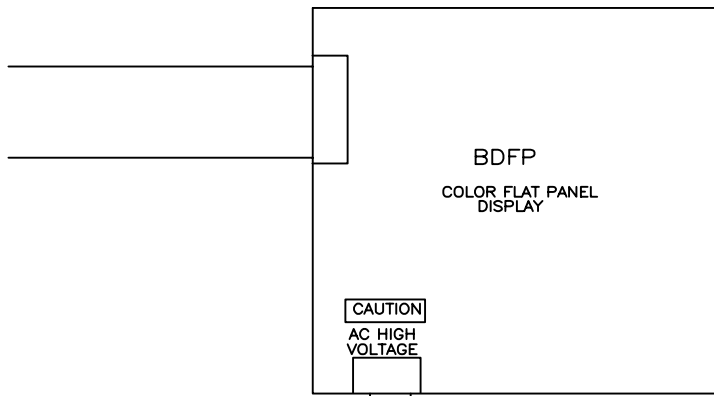
MARK V

SCHEMATIC: CENTRAL LIQUID SUPPLY

FLUSH 6 THRU 15

PELLERIN MILNOR CORPORATION





NOTES

1. 1MTA30 IS LOCATED ON BPB (PROCESSOR BOARD).
2. ST1 THROUGH ST5 IS LOCATED ON BFPI COLOR FLAT PANEL INTERFACE BOARD.

W6F3WSDF

MICRO 6 SYSTEMS

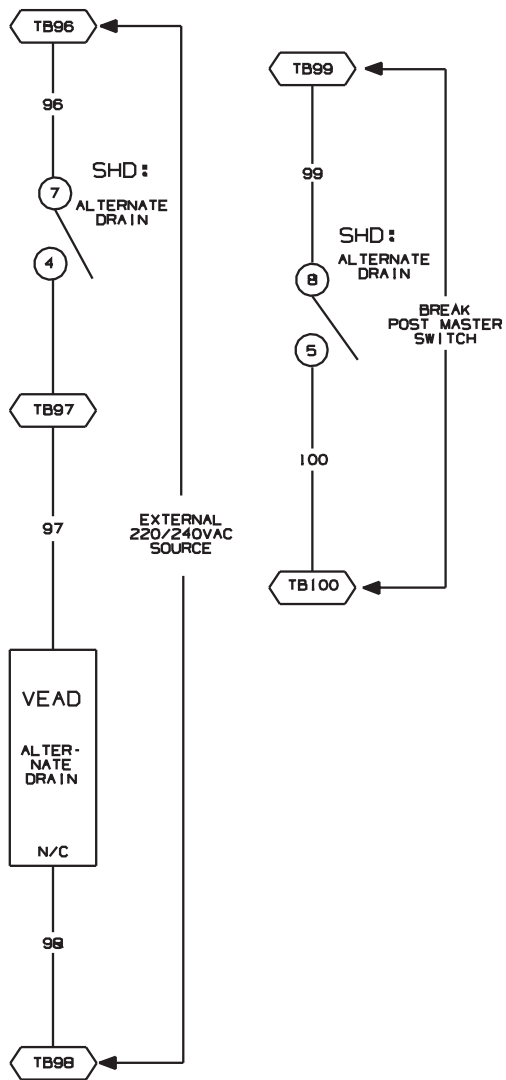
MARK V

SCHEMATIC: COLOR FLAT PANEL DISPLAY

PELLERIN MILNOR CORPORATION

W6F3WSDF
2008043B

EV05 EV05
EV05 EV05



00

01

02

03

04

05

06

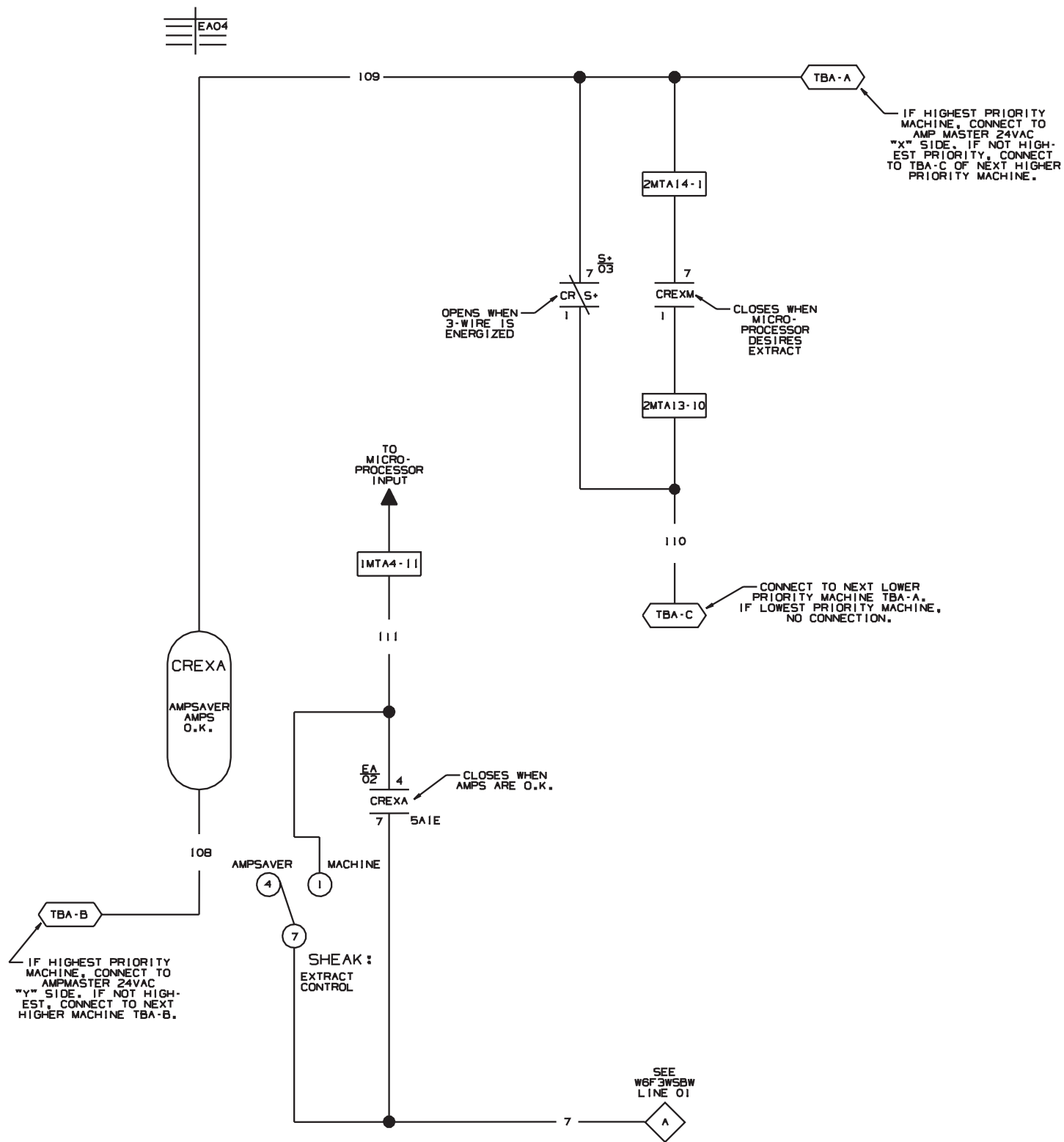
07

W6F3WSDR

SCHEMATIC: ALTERNATE DRAIN VALVE
FOR AIR OPERATED DRAINS ONLY

220V1P50HZ/240V1P60HZ

PELLERIN MILNOR CORPORATION

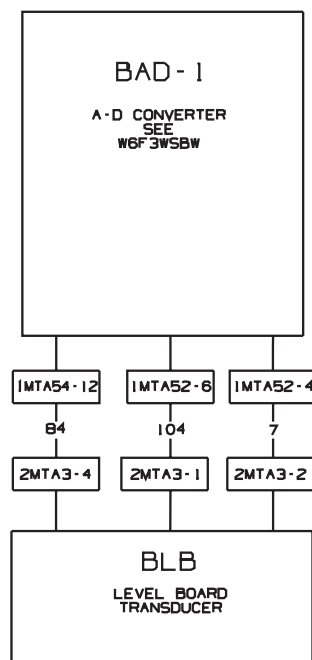


00 01 02 03 04 05 06 07 08 09 10 11

W6F3WSEA

MICRO 6 SYSTEMS SERIAL CONTROLS
MARK V

SCHEMATIC: EXTRACT COMMANDS SATISFIED
24V1P50HZ/24V1P60HZ
PELLERIN MILNOR CORPORATION



00 01 02 03 04 05 06 07 08 09 10

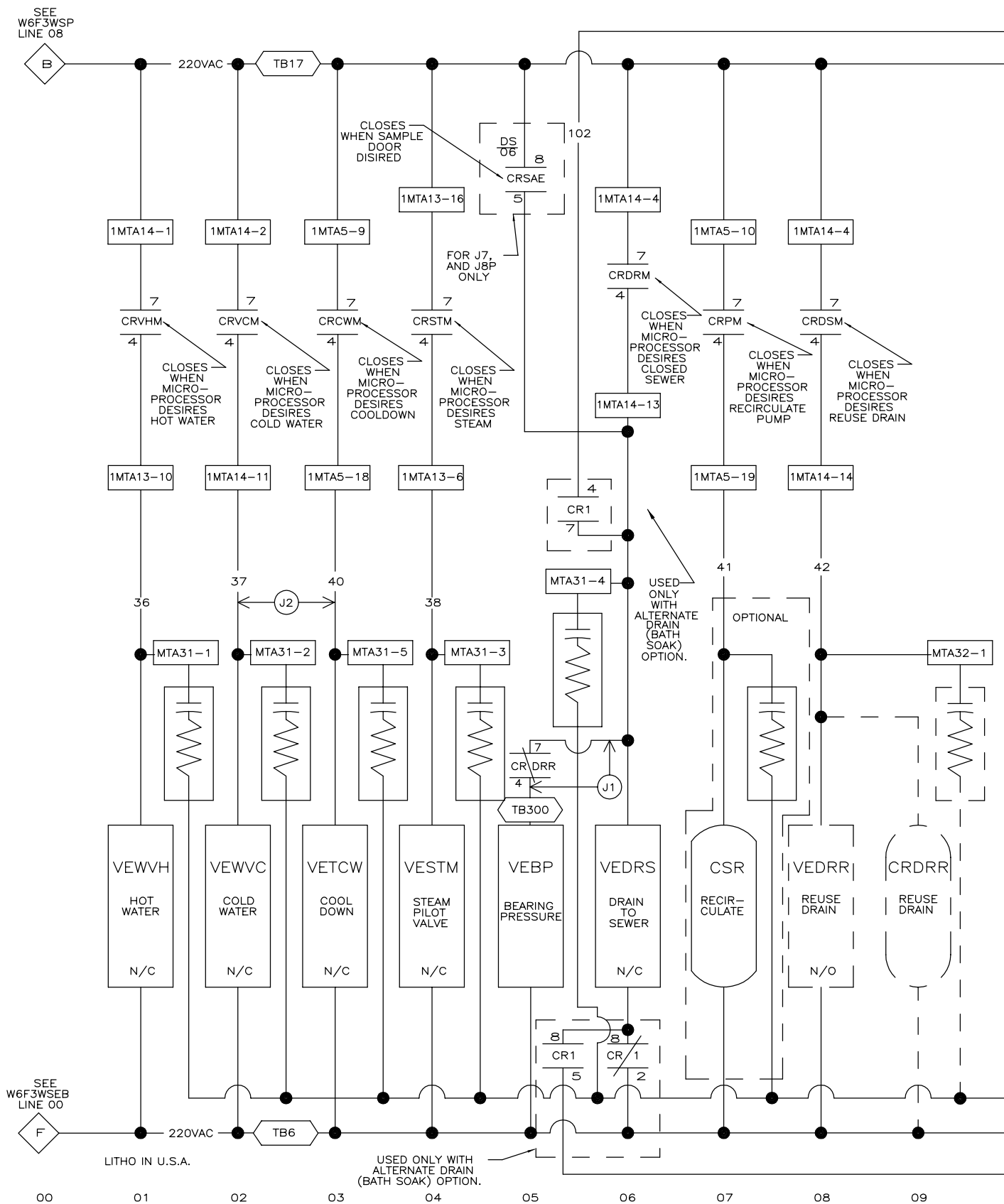
11

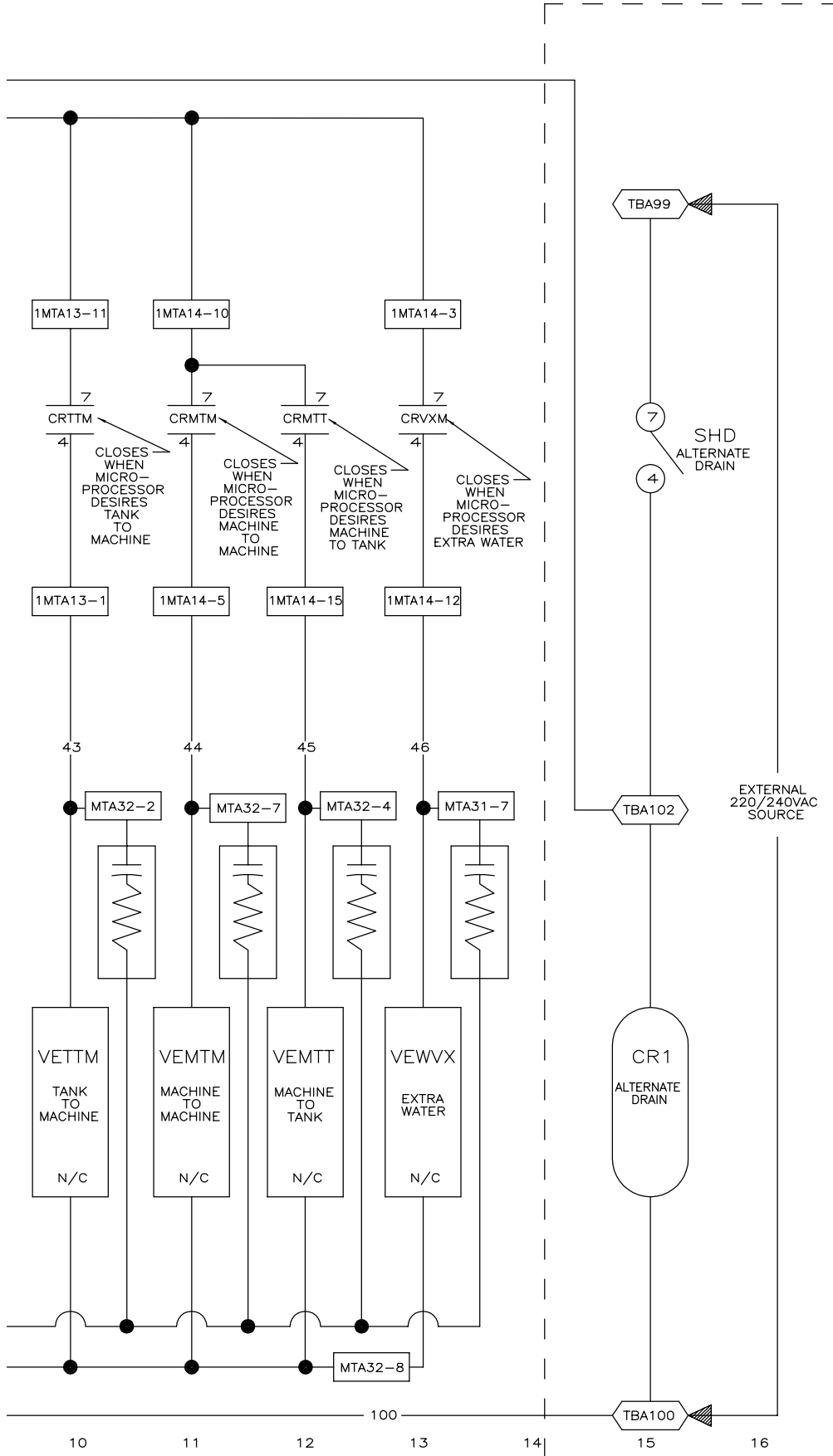
12

13

14

W6F3WSEC
MICRO 6 SYSTEMS
SERIAL CONTROLS
MARK V
SCHEMATIC: ELECTRONIC RPM/LEVEL
PELLERIN MILNOR CORPORATION





W6F3WSEV

MICRO 6 SYSTEMS

MARK V CONTROLS

SCHEMATIC: ELECTRICAL VALVES

220V1P50HZ/240V1P60HZ

PELLERIN MILNOR CORPORATION

USED ONLY ON MACHINES WITH ALTERNATE DRAIN (BATH SOAK) OPTION. IF MACHINE IS EQUIPPED WITH AIR OPERATED VALVES SEE W6F3WSDR.

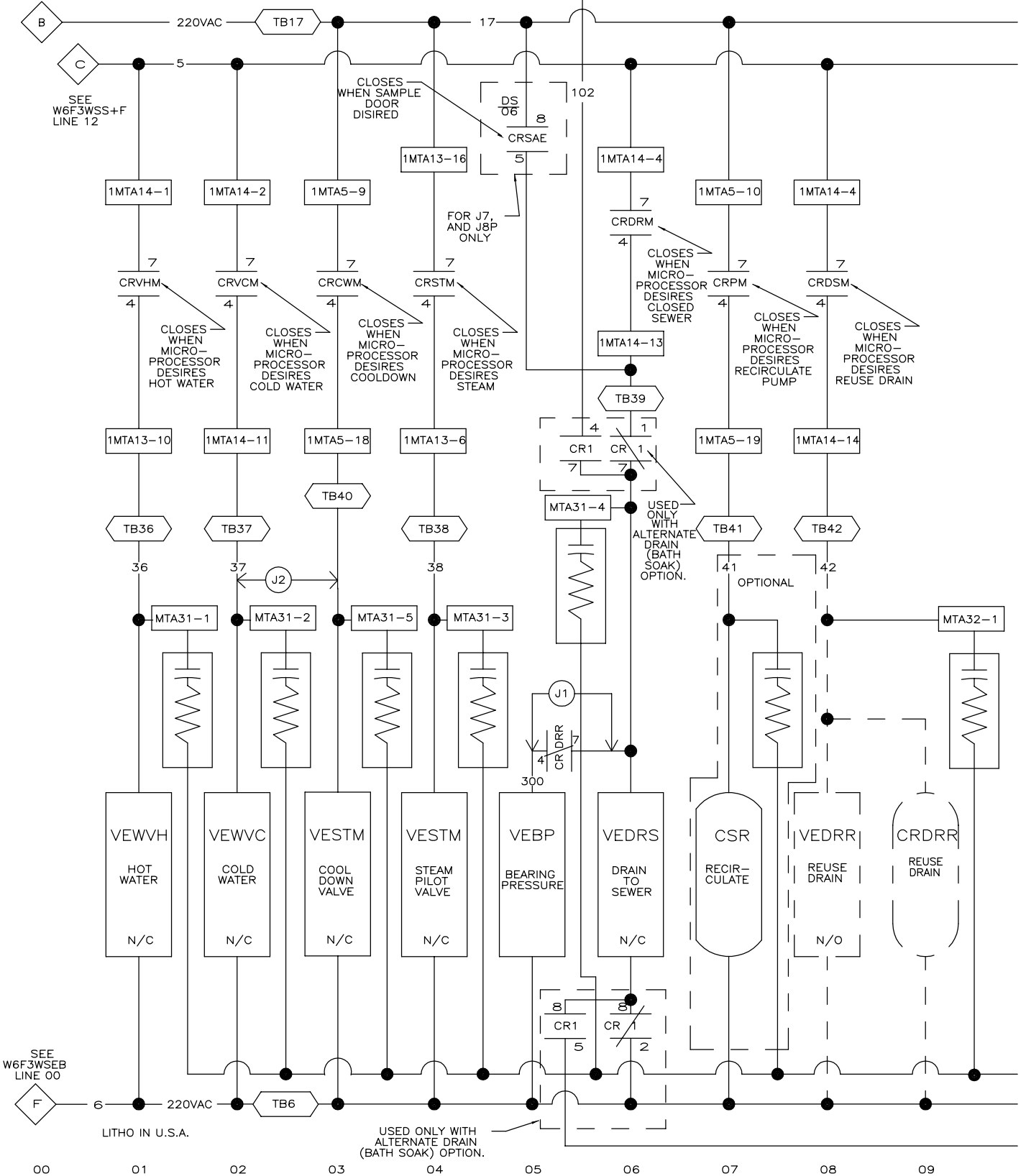
NOTE: SEE W6F3WSEVA FOR 48040F7N TILTING W/E.

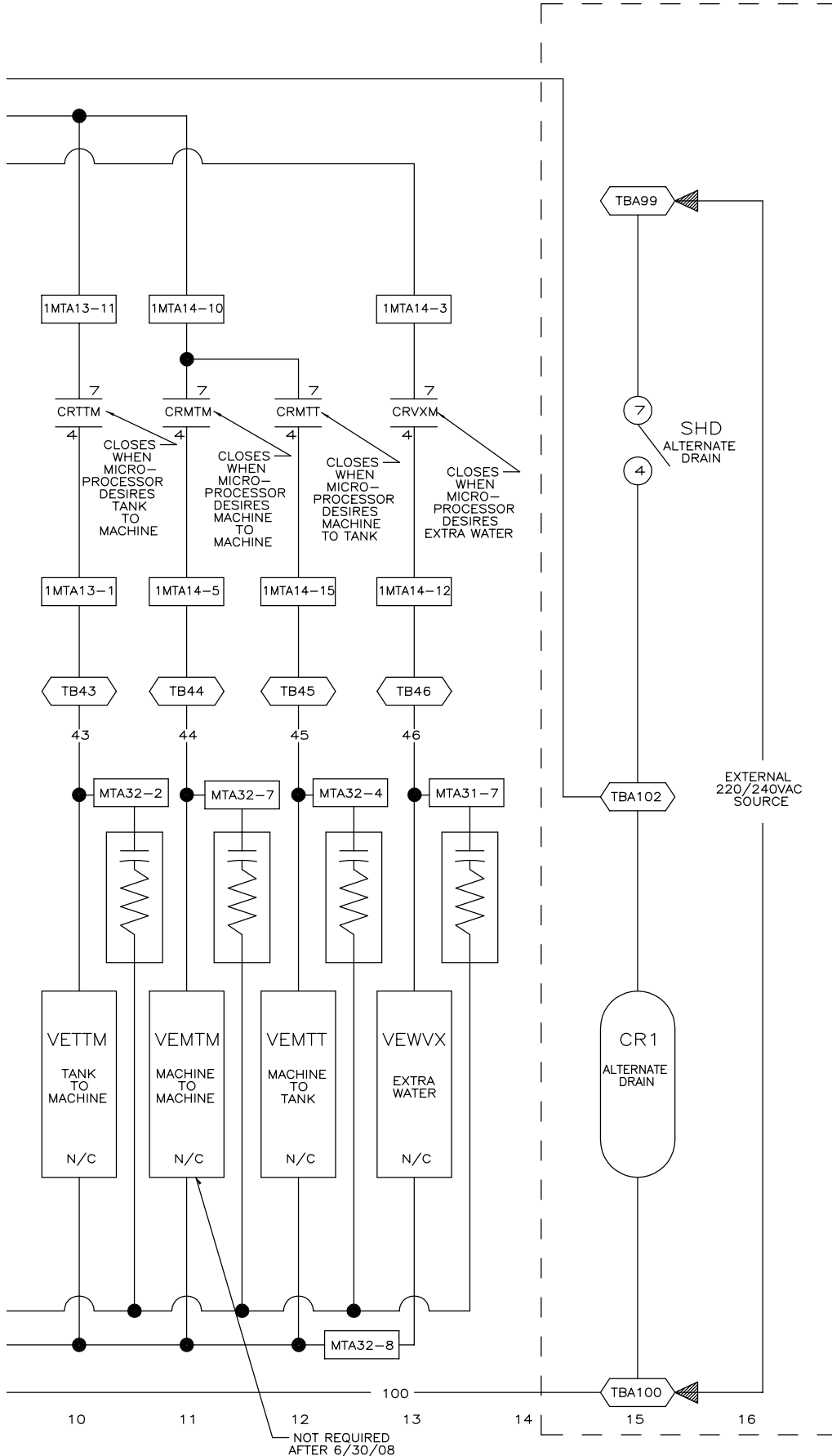
NOTE: REMOVE (J1) FOR DRAIN TO REUSE OPTION.

NOTE: REMOVE (J2) IF MACHINE IS EQUIPPED WITH SEPERATE COOLDOWN WATER VALUE.

EVA05

SEE
W6F3WSS+F
LINE 13





USED ONLY ON MACHINES WITH ALTERNATE DRAIN (BATH SOAK) OPTION. IF MACHINE IS EQUIPPED WITH AIR OPERATED VALVES SEE W6F3WSDR.

W6F3WSEVA

MICRO 6 SYSTEMS

MARK V CONTROLS

SCHEMATIC: ELECTRICAL VALVES

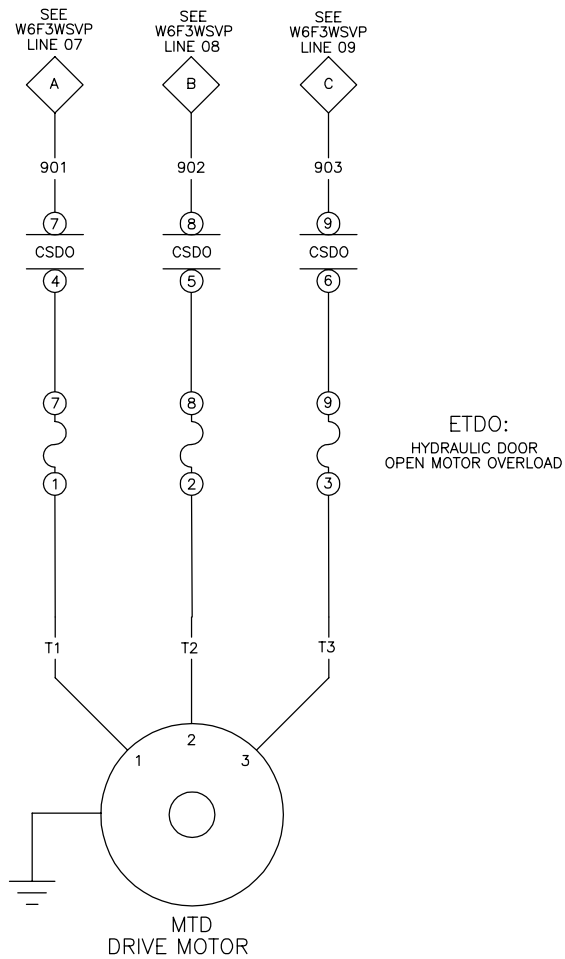
FOR 48040H7N/68036H5N TILTING W/E ONLY

220V1P50HZ/240V1P60HZ

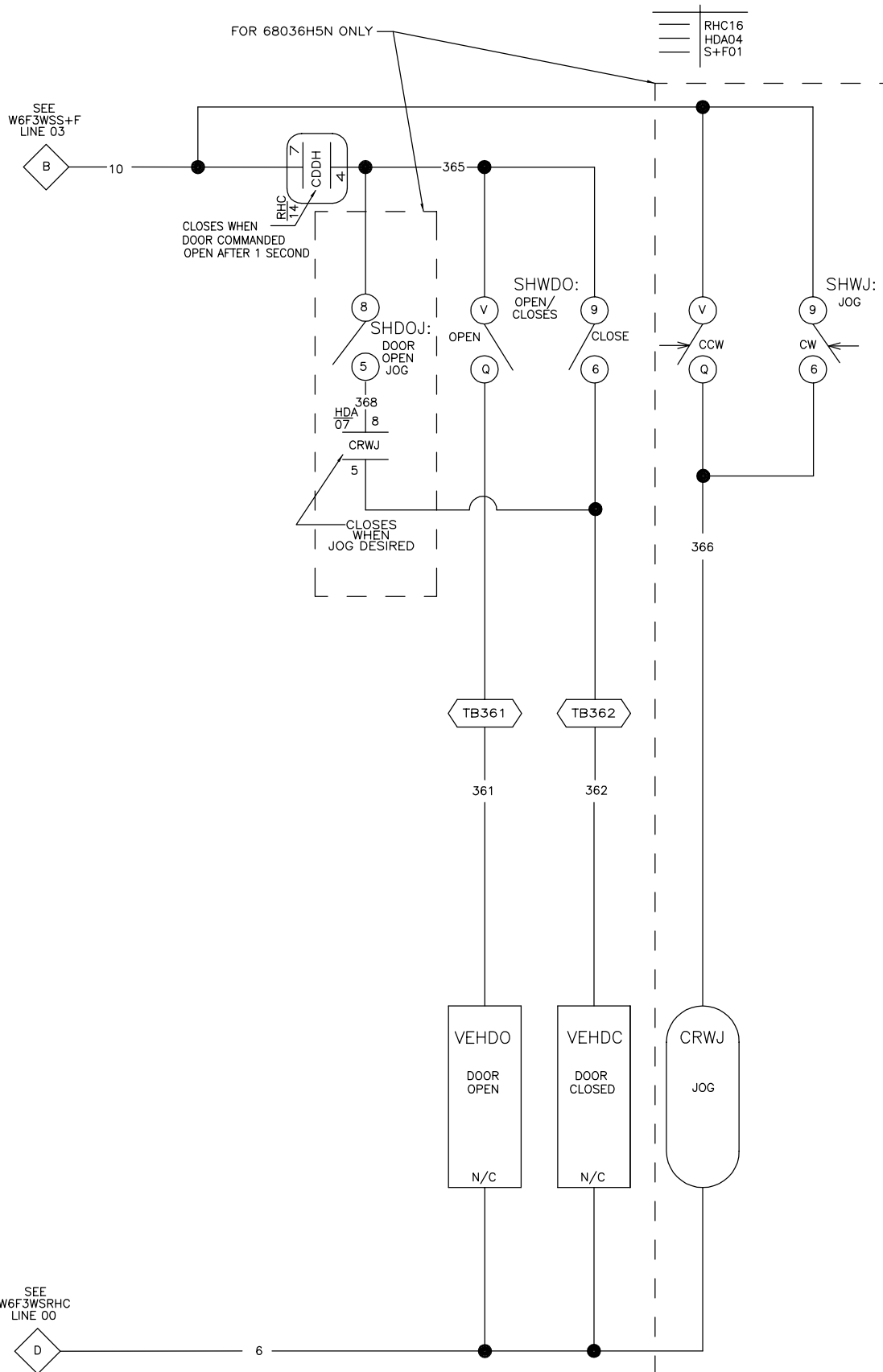
PELLERIN MILNOR CORPORATION

NOTES
REMOVE (J1) FOR DRAIN TO REUSE OPTION.
REMOVE (J2) IF MACHINE IS EQUIPPED WITH SEPARATE COOLDOWN VALVE.

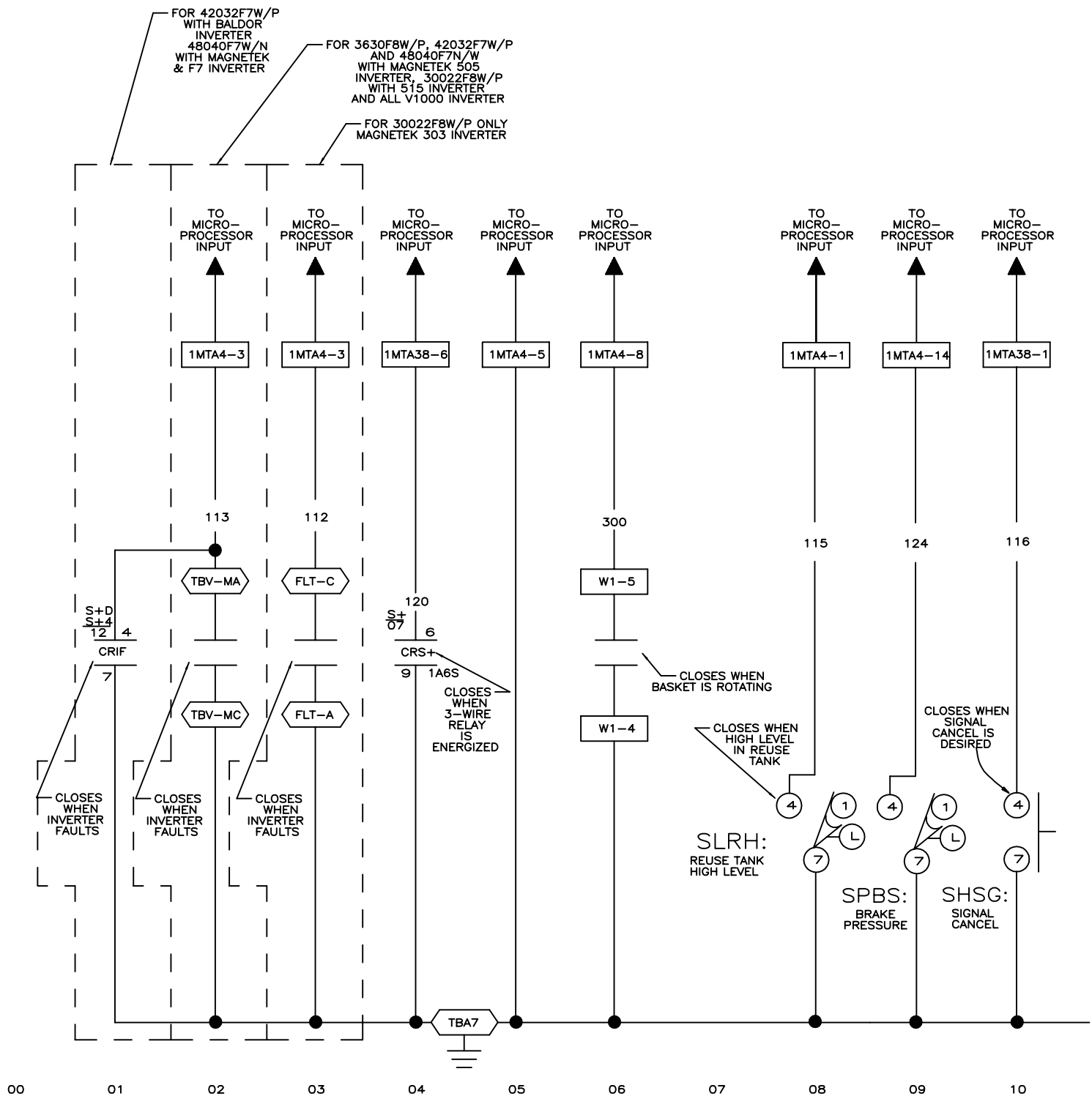




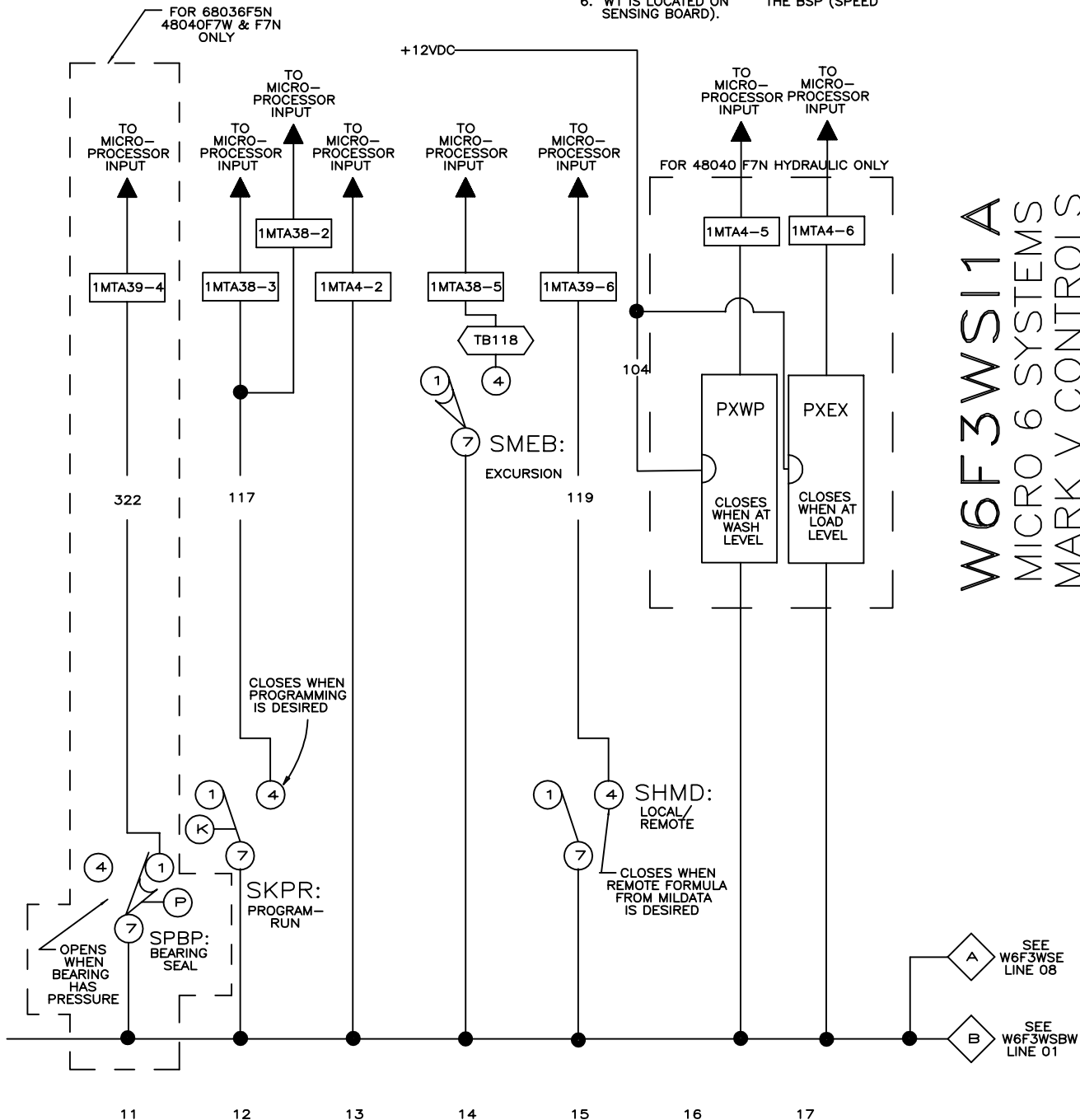
W6F3WSHD
MICRO 6 SYSTEMS
MARK V CONTROLS
SCHEMATIC; HYDRAULIC DOOR
FOR 48040F7N/W 68036F5N/W
220V1P50HZ/240V1P60HZ
PELLERIN MILNOR CORPORATION



W6F3WSHDA
MICRO 6 SYSTEMS
MARK VI CONTROLS
SCHEMATIC; HYDRAULIC TILT
FOR HYDRAULIC TILT ONLY
220V1P50HZ/240V1P60HZ
PELLERIN MILNOR CORPORATION



1. 1MTA38 AND 1MTA39 ARE LOCATED ON BPB (PROCESSOR BOARD).
2. 1MTA3 AND 1MTA4 ARE LOCATED ON BIO-1 (8 OUTPUT-16 INPUT BOARD).
3. TBR, TBP, AND TB3 (COPPER BUS BAR) ARE LOCATED IN LOW VOLTAGE CONTROL BOX.
4. INVERTER FAULT CONTACTS TBV-MA ARE FOR GPD505 INVERTER. FOR GPD503 CONTACTS ARE TBV18 AND 20.
5. REMOVE (J1) FOR J7, J8P.
6. W1 IS LOCATED ON THE BSP (SPEED SENSING BOARD).



W6F3WS11A

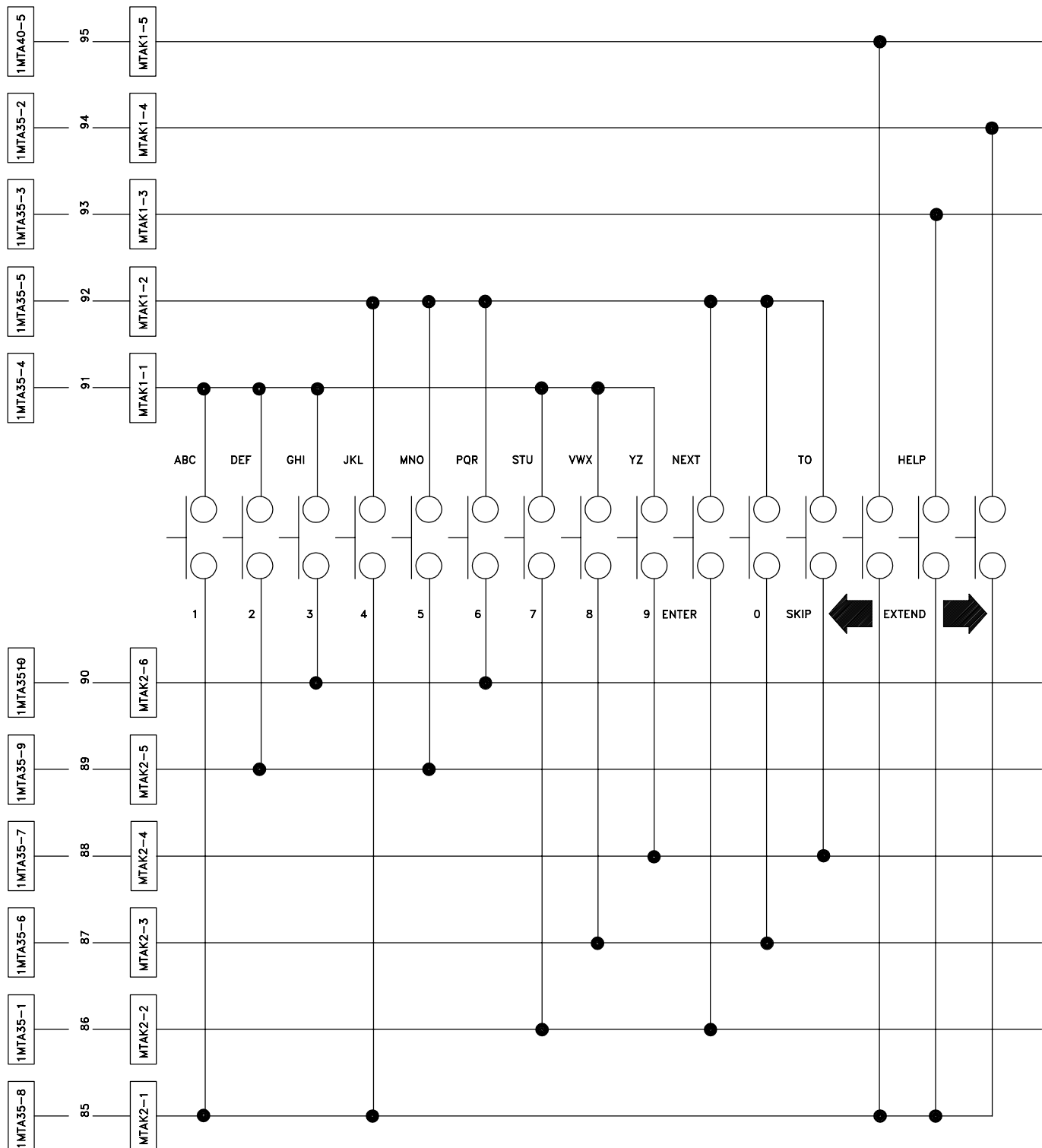
MICRO 6 SYSTEMS

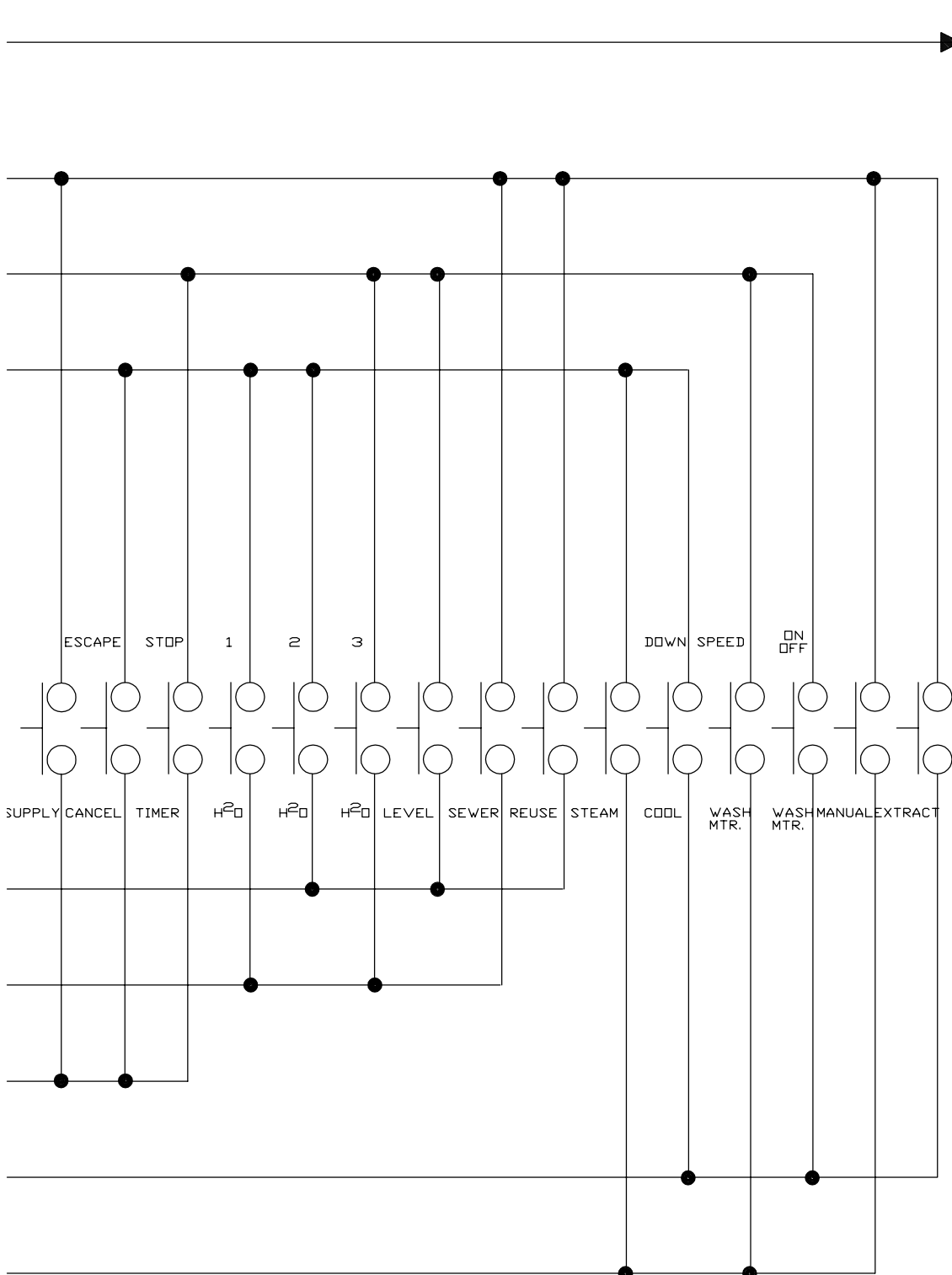
MARK V CONTROLS

186 PROCESSOR

SCHEMATIC: MICROPROCESSOR INPUTS

PELLERIN MILNOR CORPORATION





NOTES:

1. MTAK1 & MTAK2 ARE LOCATED ON KEYPAD.
2. IMTA35 & IMTA40 ARE LOCATED ON BPB (PROCESSOR BOARD).

W6F3WSKP

MICRO 6 SYSTEMS

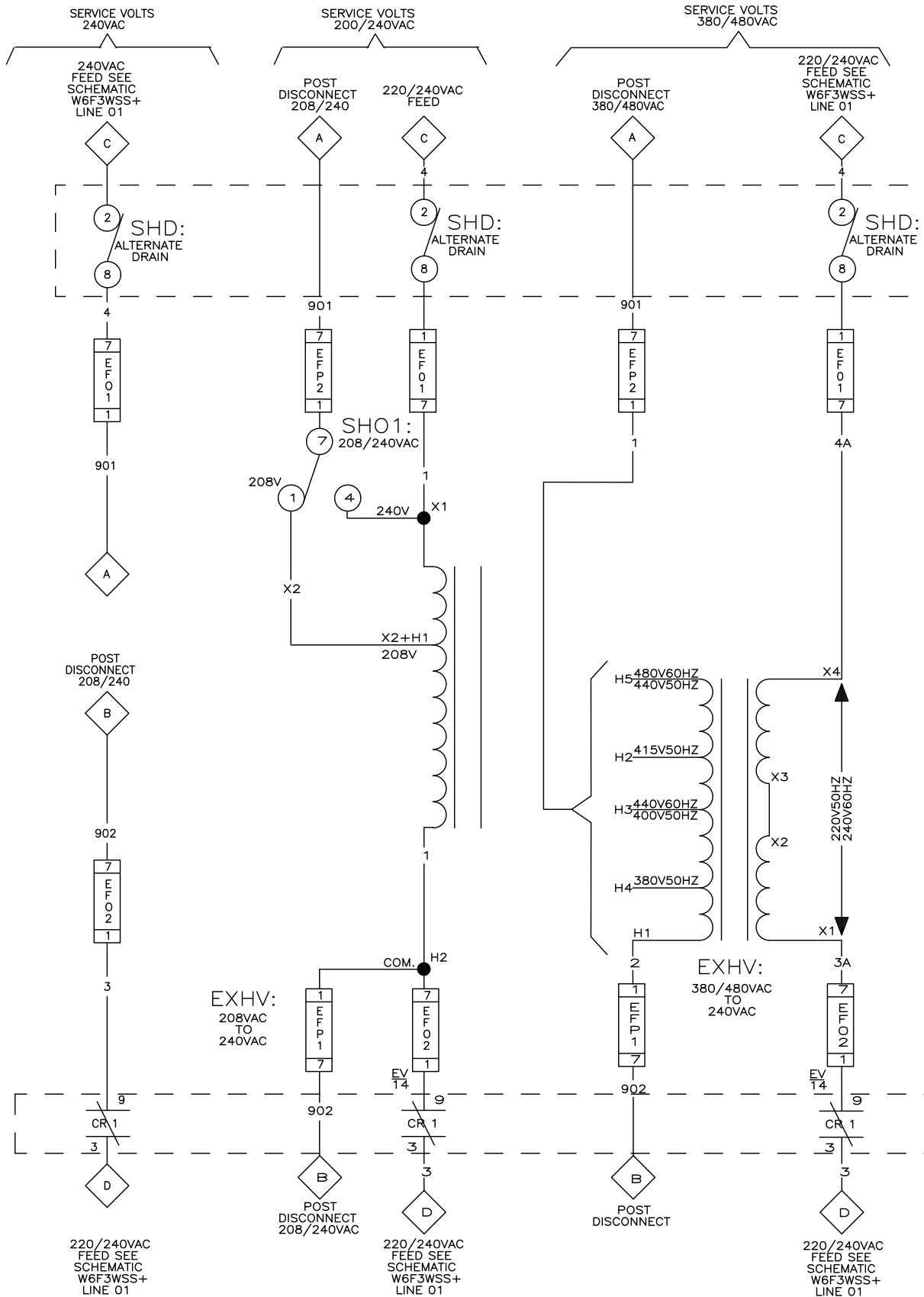
MARK V

SCHEMATIC: KEYPAD (SERIAL CONTROLS)

PELLERIN MILNOR CORPORATION

W6F3WSKP
2007482B

W6F3WSKP
2007482B



00

01

02

03

04

05

06

07

08

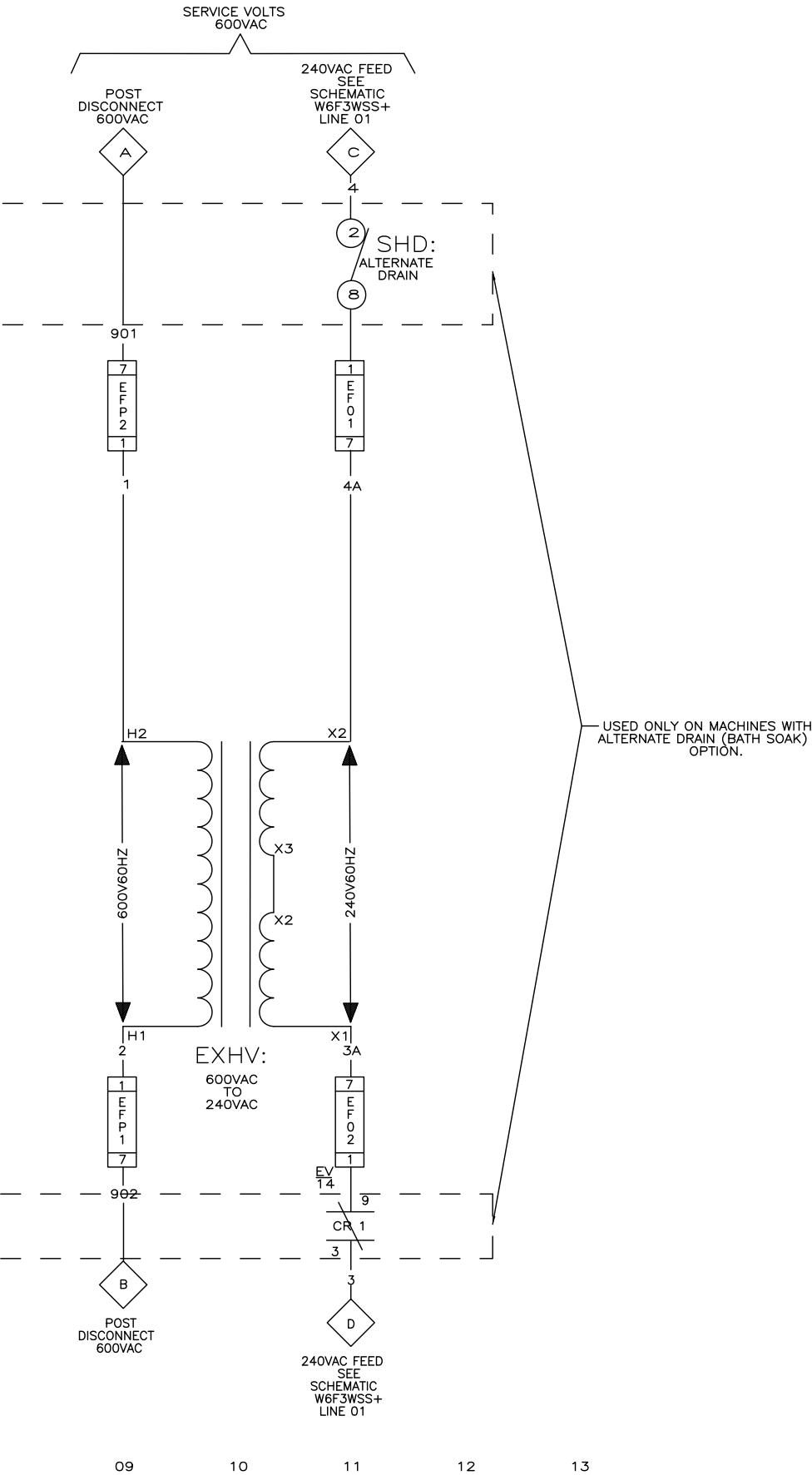
W6F3WSLV

MICRO 6 SYSTEMS MARK V

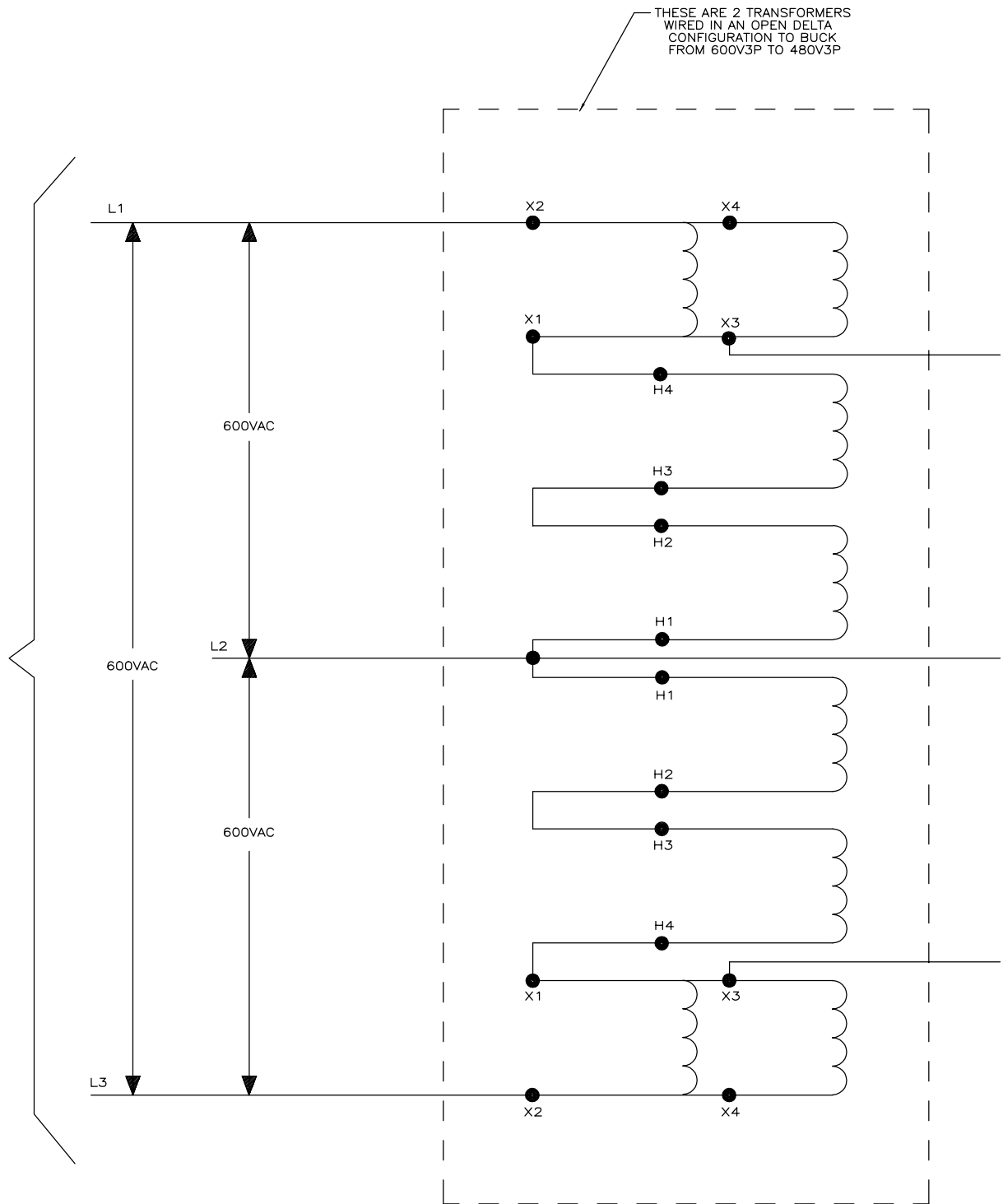
SCHEMATIC:CONTROL CIRCUIT TRANSFORMER

220V1P50HZ/240V1P60HZ

PELLERIN MILNOR CORPORATION



1
REMOVE THE 3 PHASE
FEED FROM L1, L2, AND L3
OF THE VARIABLE SPEED
CONTROLLER AND CONNECT
TO THE TRANSFORMERS

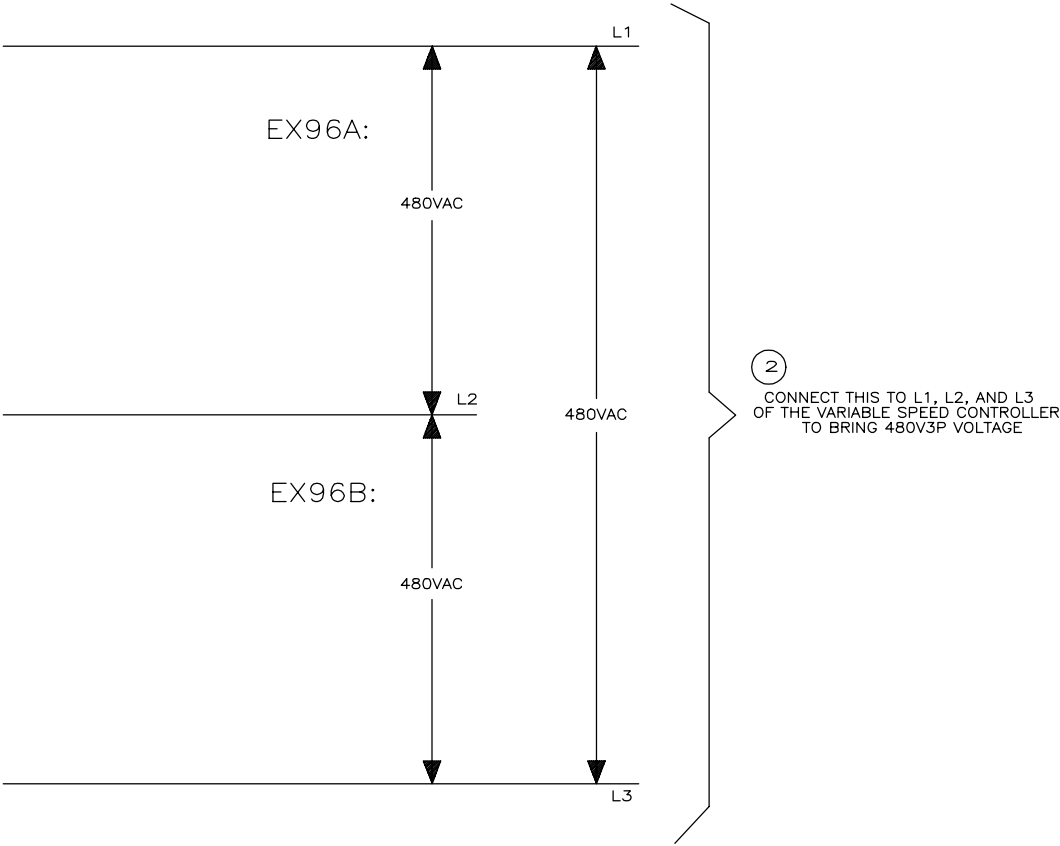


00 01 02 03 04 05 06 07 08 09 10

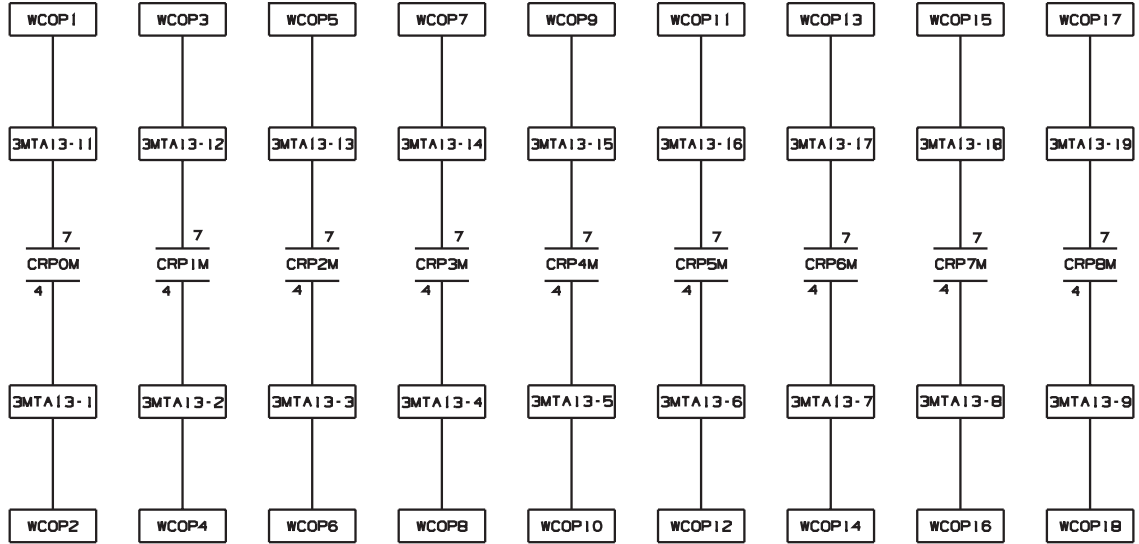
W6F3WSMT6
2003124B

INPUT (SUPPLY SYSTEM)	DESIRED OUTPUT CONNECTION	
DELTA 3 WIRE	WYE 3 OR 4 WIRE	DO NOT USE
OPEN DELTA 3 WIRE	WYE 3 OR 4 WIRE	DO NOT USE
WYE 3 OR 4 WIRE	CLOSED DELTA 3 WIRE	DO NOT USE
WYE 4 WIRE	WYE 3 OR 4 WIRE	OK
WYE 3 OR 4 WIRE	OPEN DELTA 3 WIRE	OK
CLOSED DELTA 3 WIRE	OPEN DELTA 3 WIRE	OK

W6F3WSMT6
2003124B



W6F3WSMT6
MICRO 6 SYSTEMS
MARK V CONTROLS
SCHEMATIC: 600V MACHINES
600V TO 480 VOLT STEP DOWN
PELLERIN MILNOR CORPORATION



00

01

02

03

04

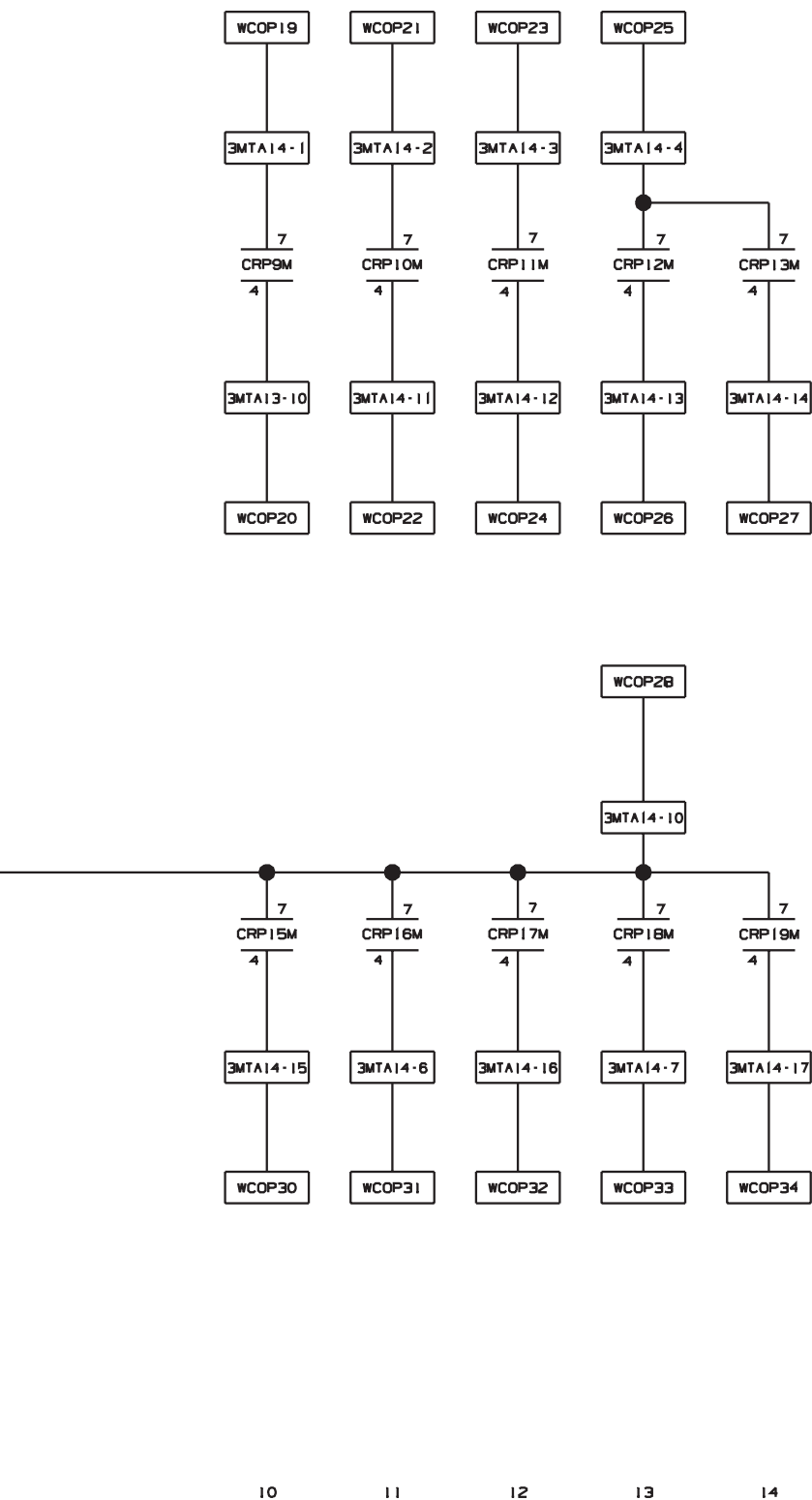
05

06

07

08

09



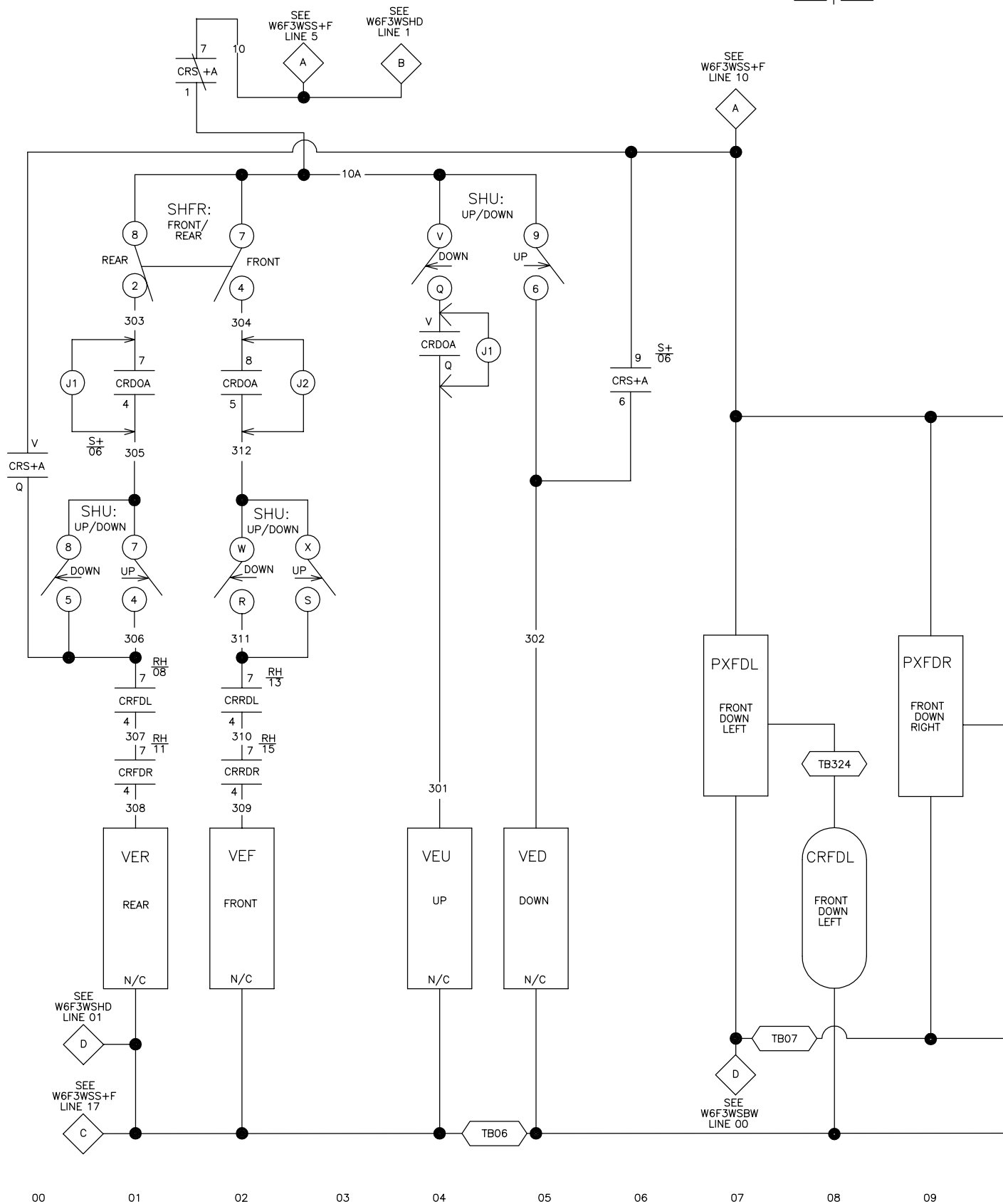
W6F3WSOP

MICRO 6 SYSTEMS SERIAL CONTROLS

SCHEMATIC: 20 OPTIONAL PROGRAMMABLE OUTPUTS

PELLERIN MILNOR CORPORATION

RH01
S+F05



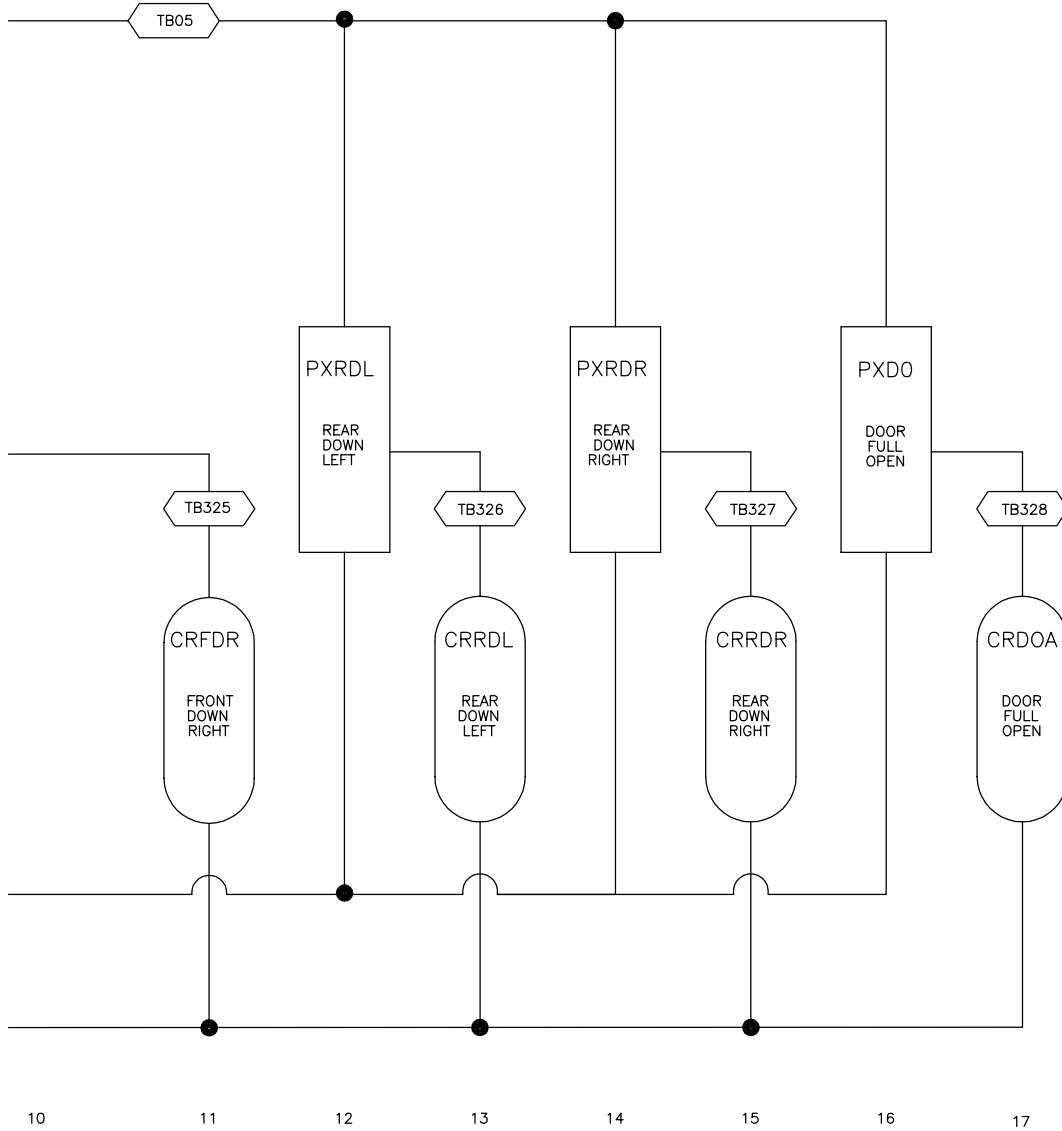
RH01
 S+F05

RH02
 S+F05

RH02
 S+F05

RH01
 RH02

W6F3WSRH
 2008105B

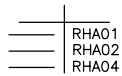
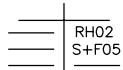


REMOVE (J1)
 FOR AUTO DOOR OPTION

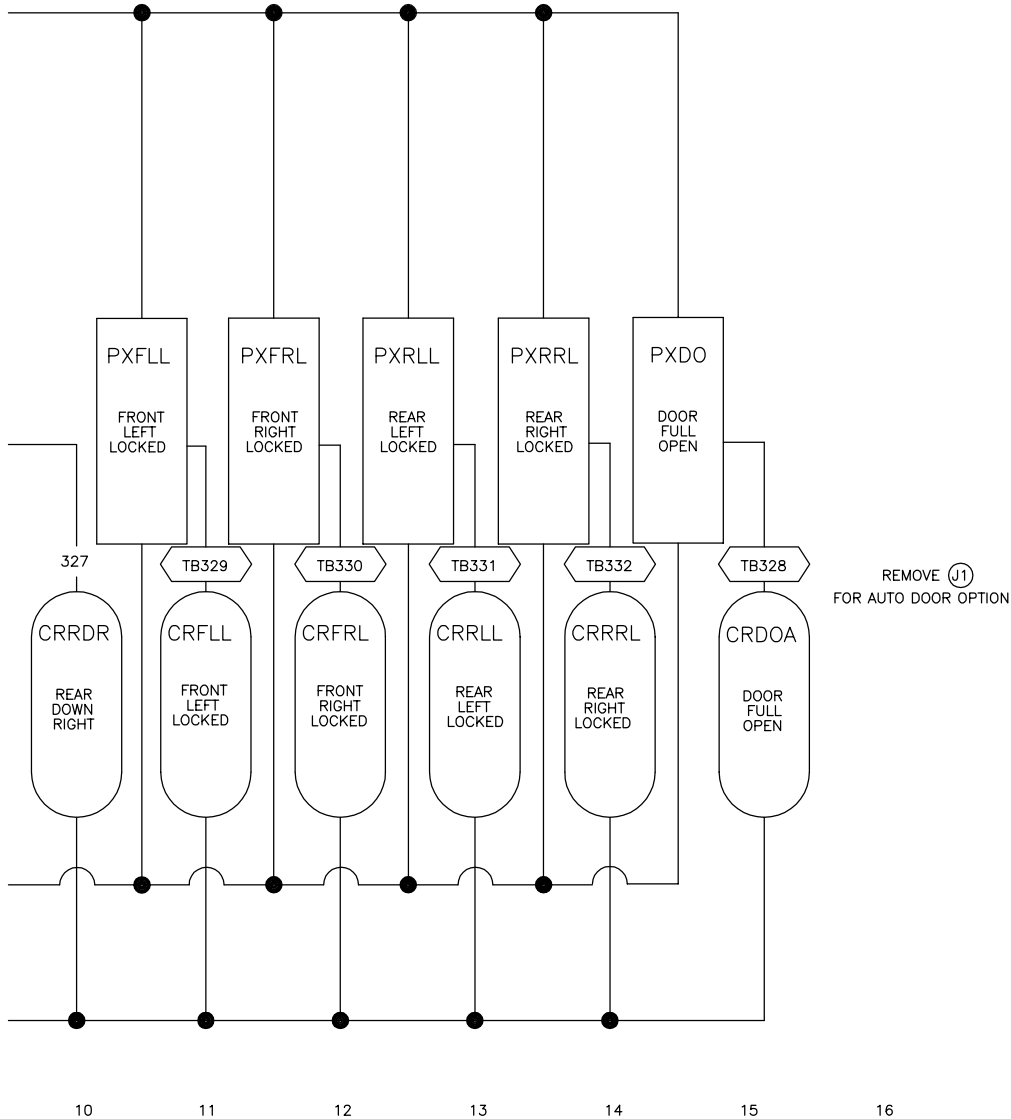
W6F3WSRH
 MICRO 6 SYSTEMS
 MARK V CONTROLS
 SCHEMATIC; RAISE HOUSE
 FOR 48040 F7N ONLY
 220V1P50HZ/240V1P60HZ
 PELLERIN MILNOR CORPORATION

10 11 12 13 14 15 16 17

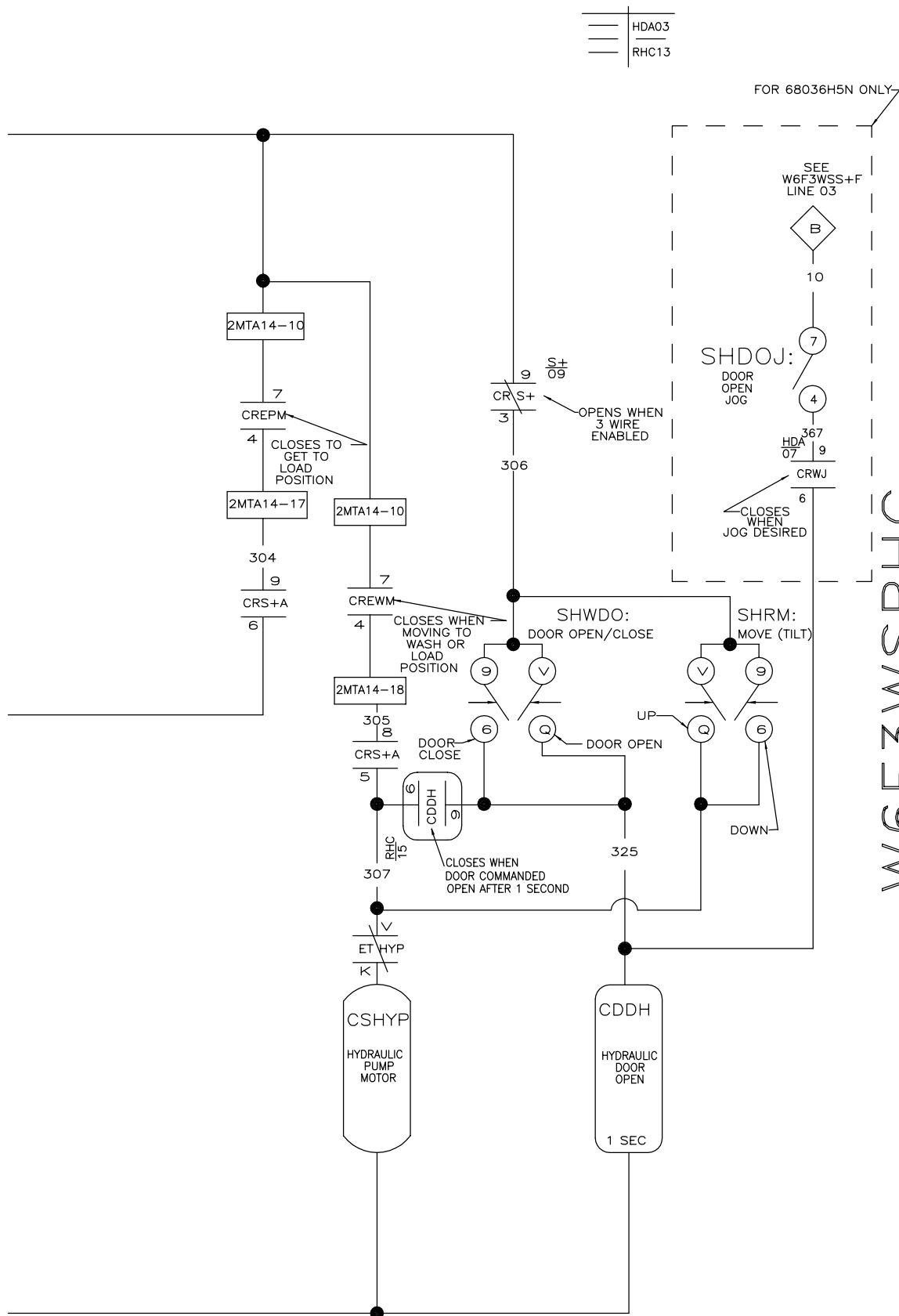
W6F3WSRH
 2008105B



W6F3WSRHA
2008105B

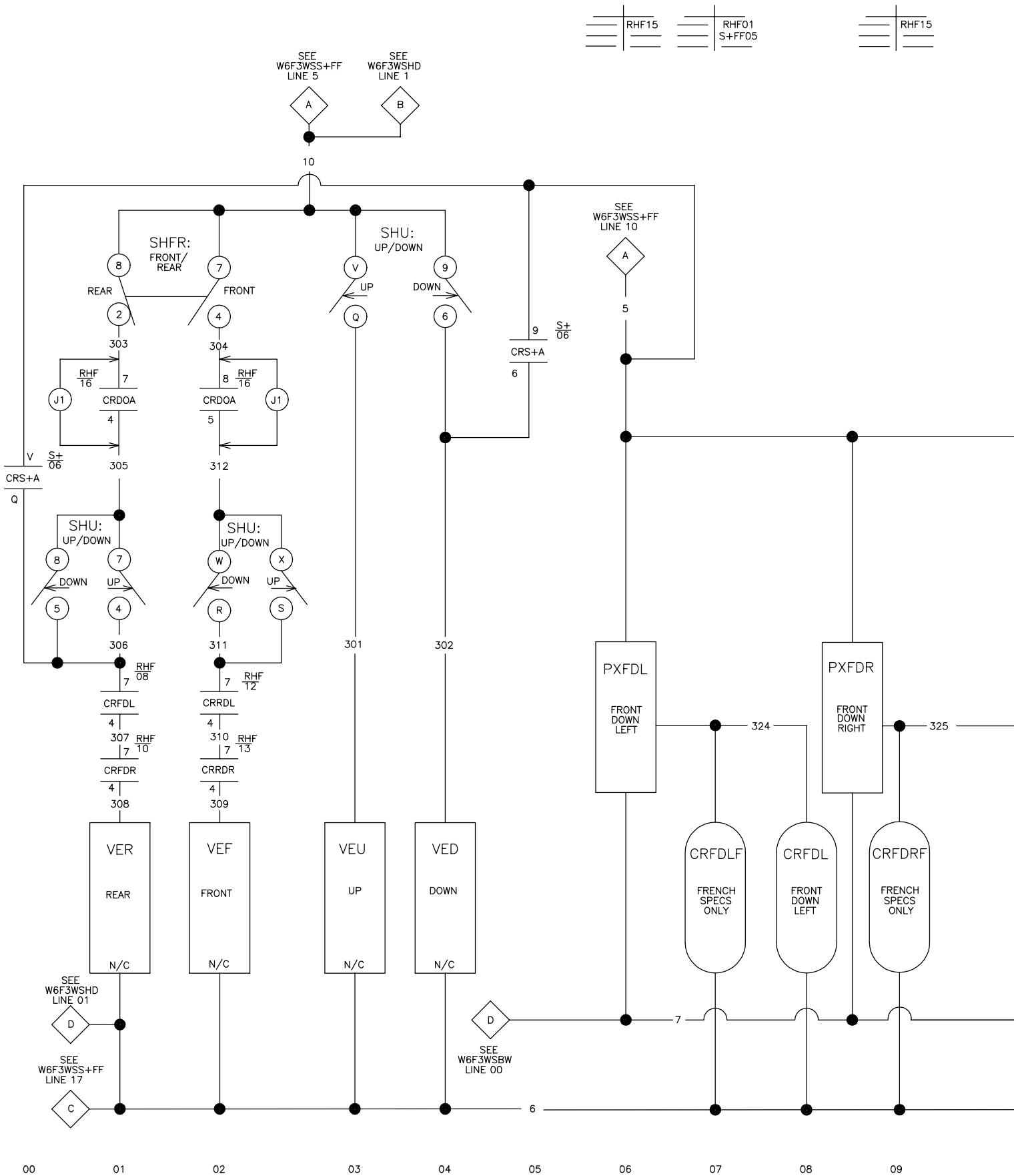


W6F3WSRHA
MICRO 6 SYSTEMS
MARK V CONTROLS
SCHEMATIC; RAISE HOUSE
FOR 6836 F5N ONLY
220V1P50HZ/240V1P60HZ
PELLERIN MILNOR CORPORATION



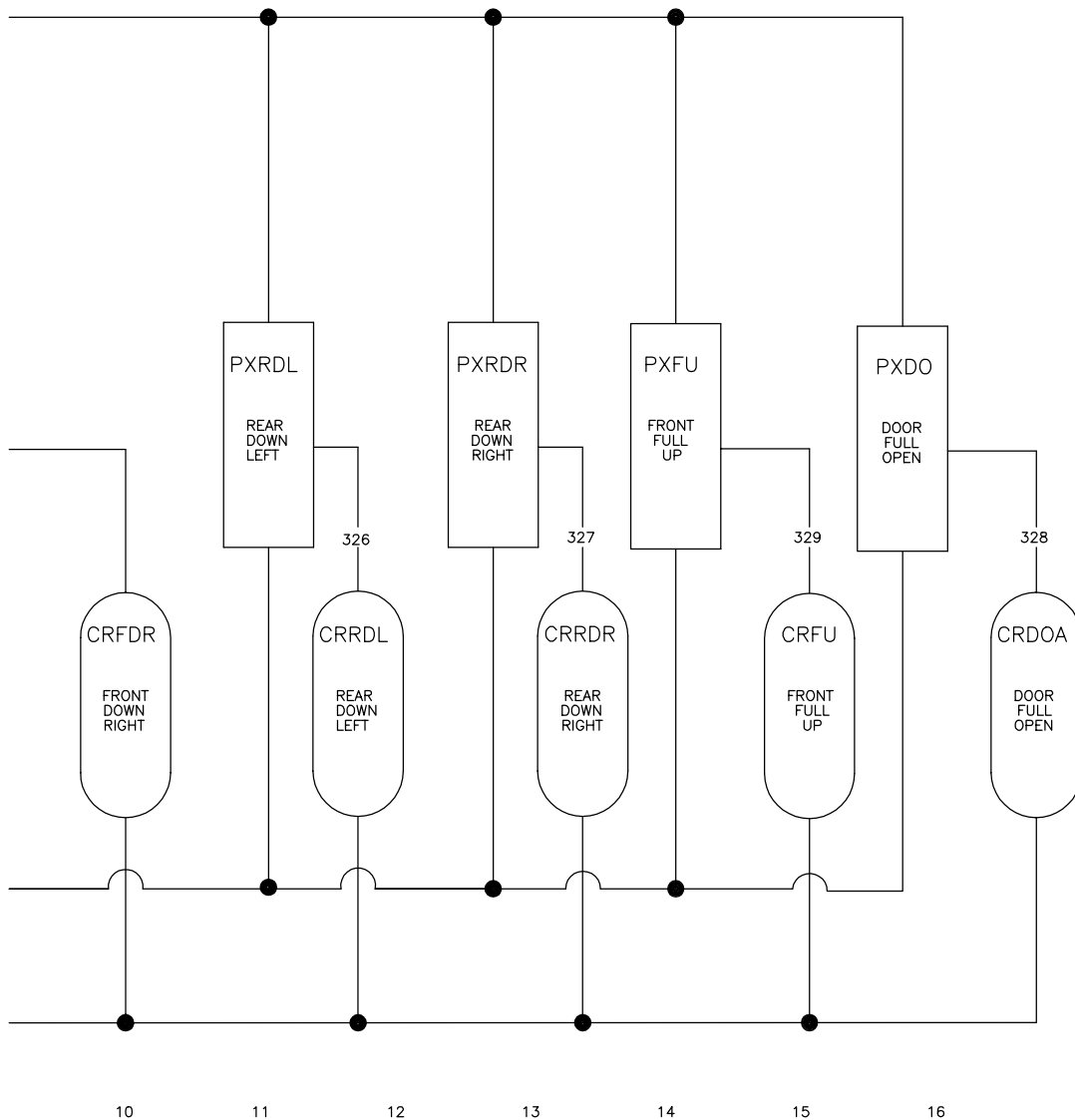
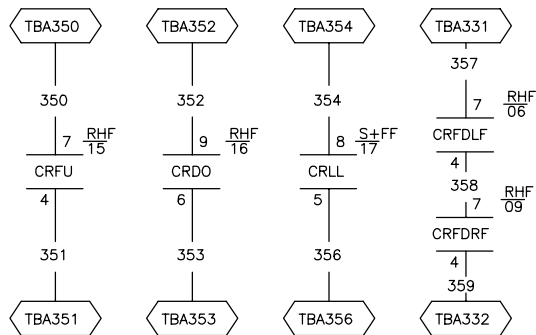
W6F3WSRHC
MICRO 6 SYSTEMS
MARK VI
SCHEMATIC: RAISE HOUSE
FOR HYDRAULIC TILT ONLY

220V1P50HZ/240V1P60HZ
PELLERIN MILNOR CORPORATION





W6F3WSRHF
2005174B



REMOVE (J1)
FOR AUTO DOOR OPTION

W6F3WSRHF
MICRO 6 SYSTEMS
MARK V CONTROLS
SCHEMATIC; RAISE HOUSE
FOR 48040 F7N WITH FRENCH MODS ONLY
220V1P50HZ/240V1P60HZ
PELLERIN MILNOR CORPORATION

W6F3WSRHF
2005174B

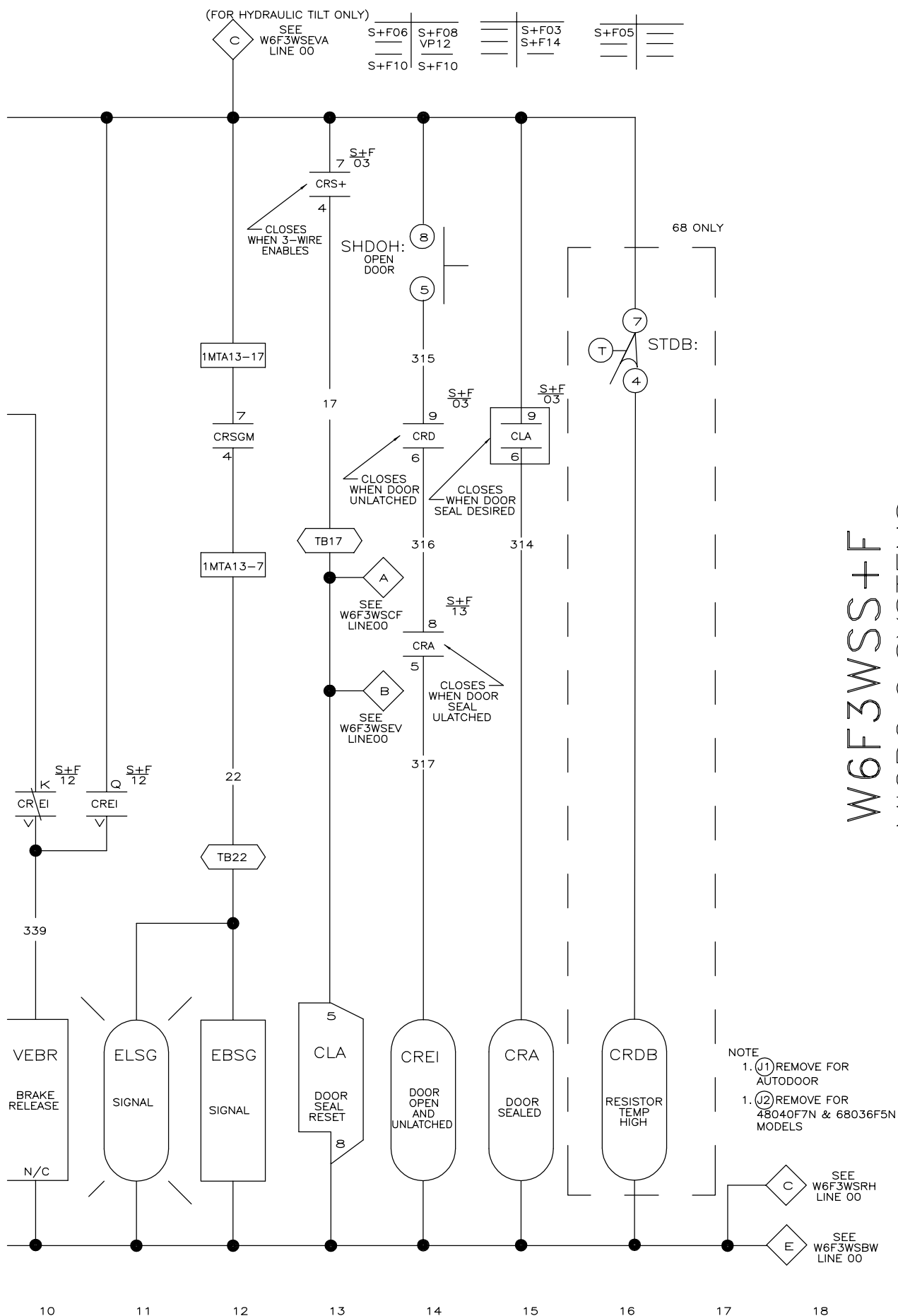
W6F3WSS+F

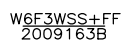
MICRO 6 SYSTEMS

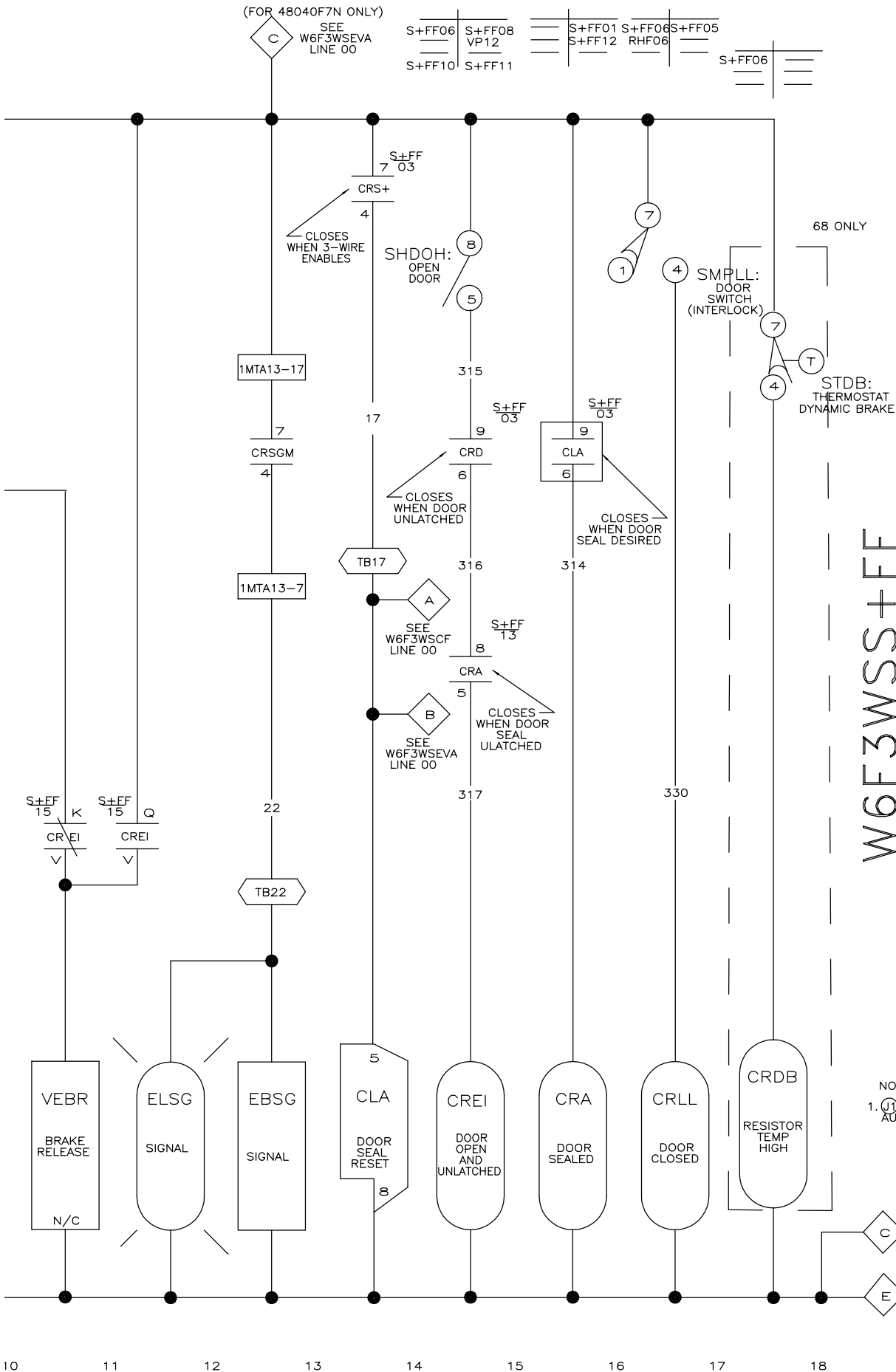
SCHEMATIC: 3-WIRE CIRCUIT

FOR 48040F7N.H7N & 68036F5N.H5N TILTING W/E

220V1P50HZ/240V1P60HZ
PELLERIN MILNOR CORPORATION







W6F3WSS+FF
2009163B

W6F3WSS+FF

MICRO 6 SYSTEMS

SCHEMATIC: 3-WIRE CIRCUIT

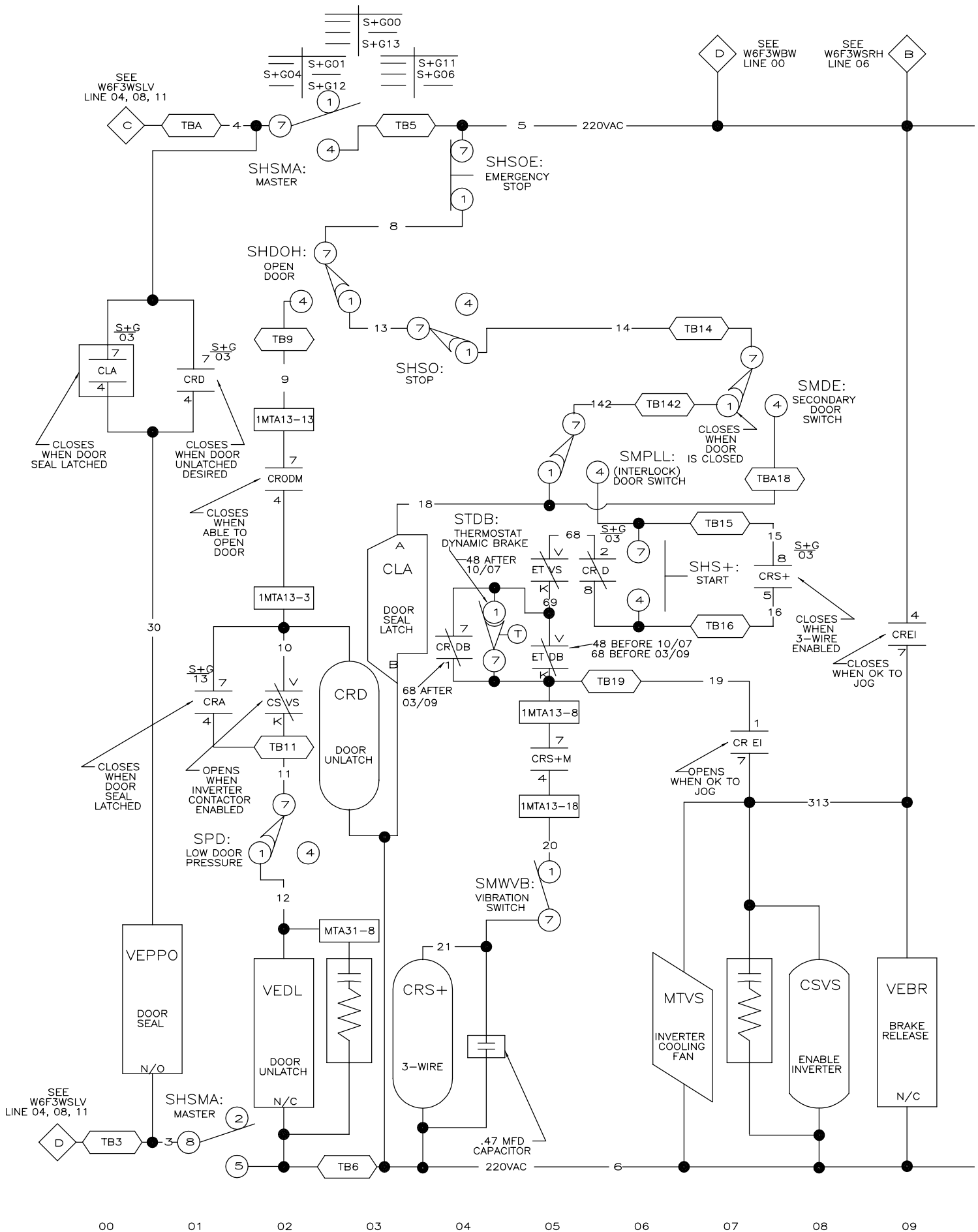
FOR 48040F7N/68036F5N WITH FRENCH MODS

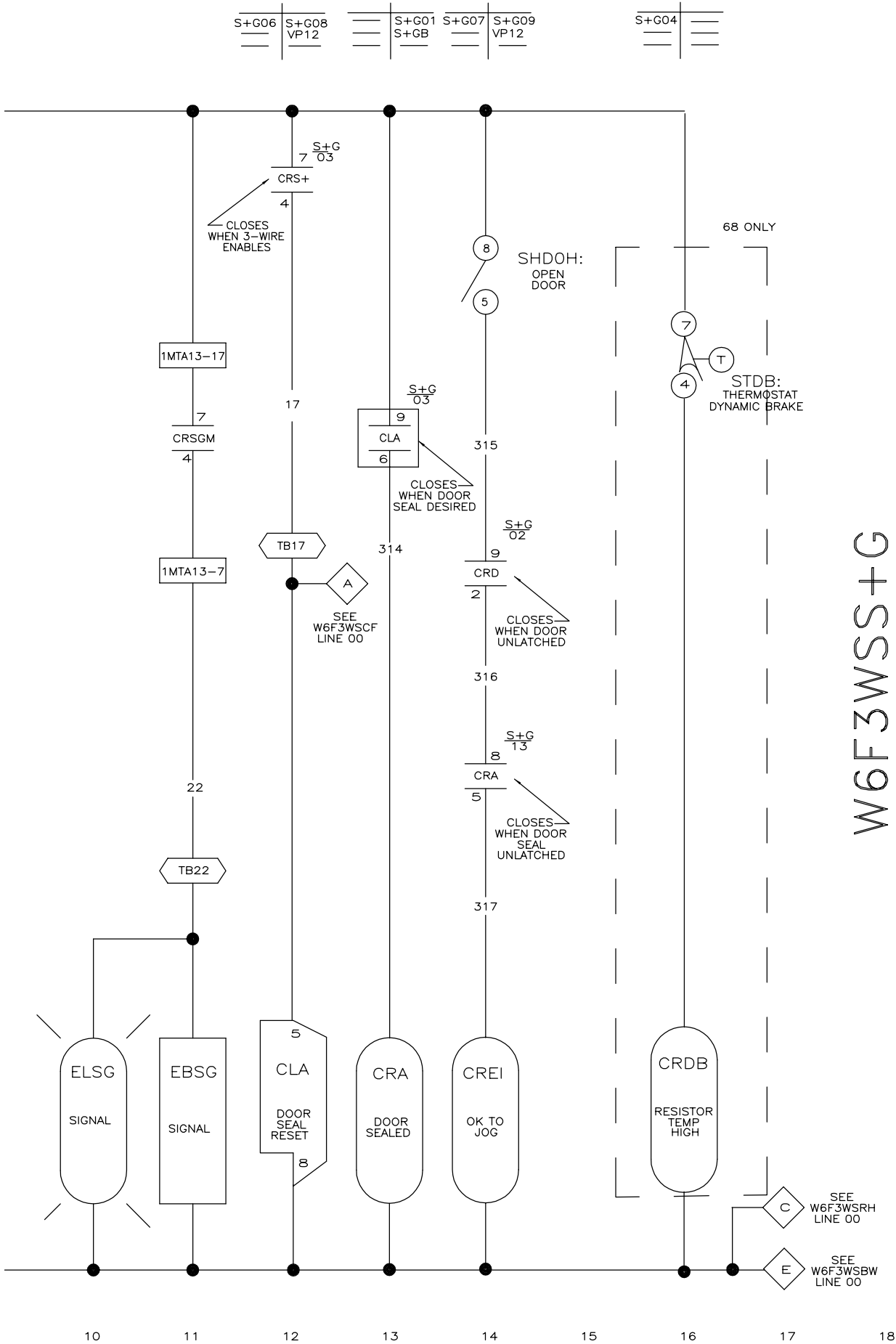
220V1P50HZ/240V1P60HZ

PELLERIN MILNOR CORPORATION

10 11 12 13 14 15 16 17 18 19

W6F3WSS+FF
2009163B

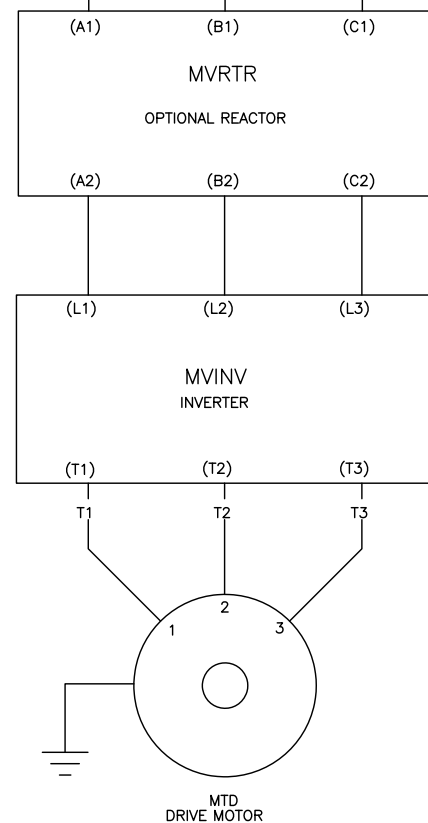
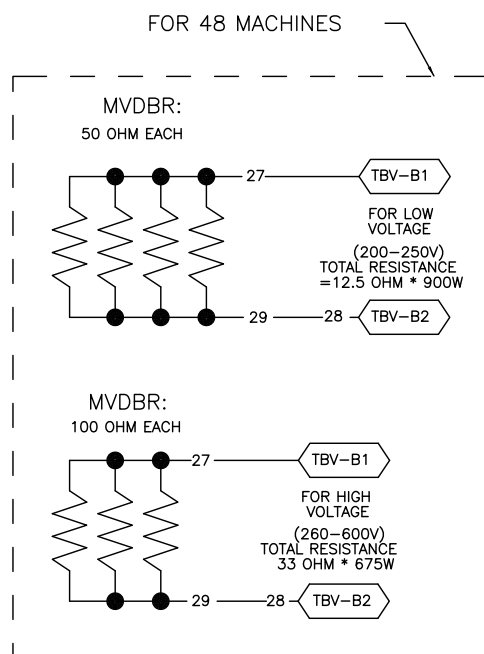
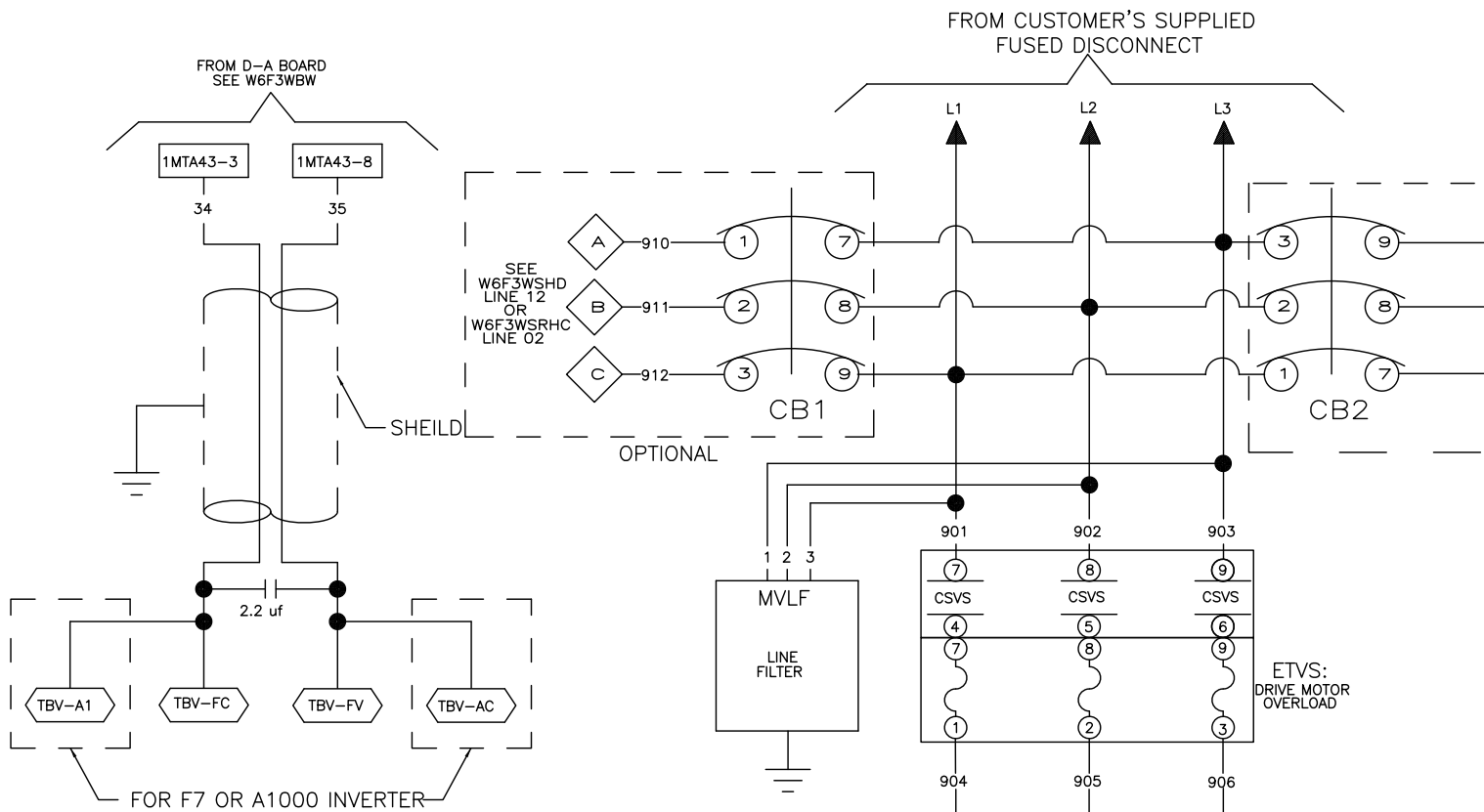




W6F3WSS+G
 MICRO 6 SYSTEMS
 SCHEMATIC: 3-WIRE CIRCUIT
 FOR 48040F7W/68036F5W NON TILTING W/E
 220V1P50HZ/240V1P60HZ
 PELLERIN MILNOR CORPORATION

W6F3WSS+G
2009163B

19
W6F3WSS+G
2009163B



00

01

02

03

04

05

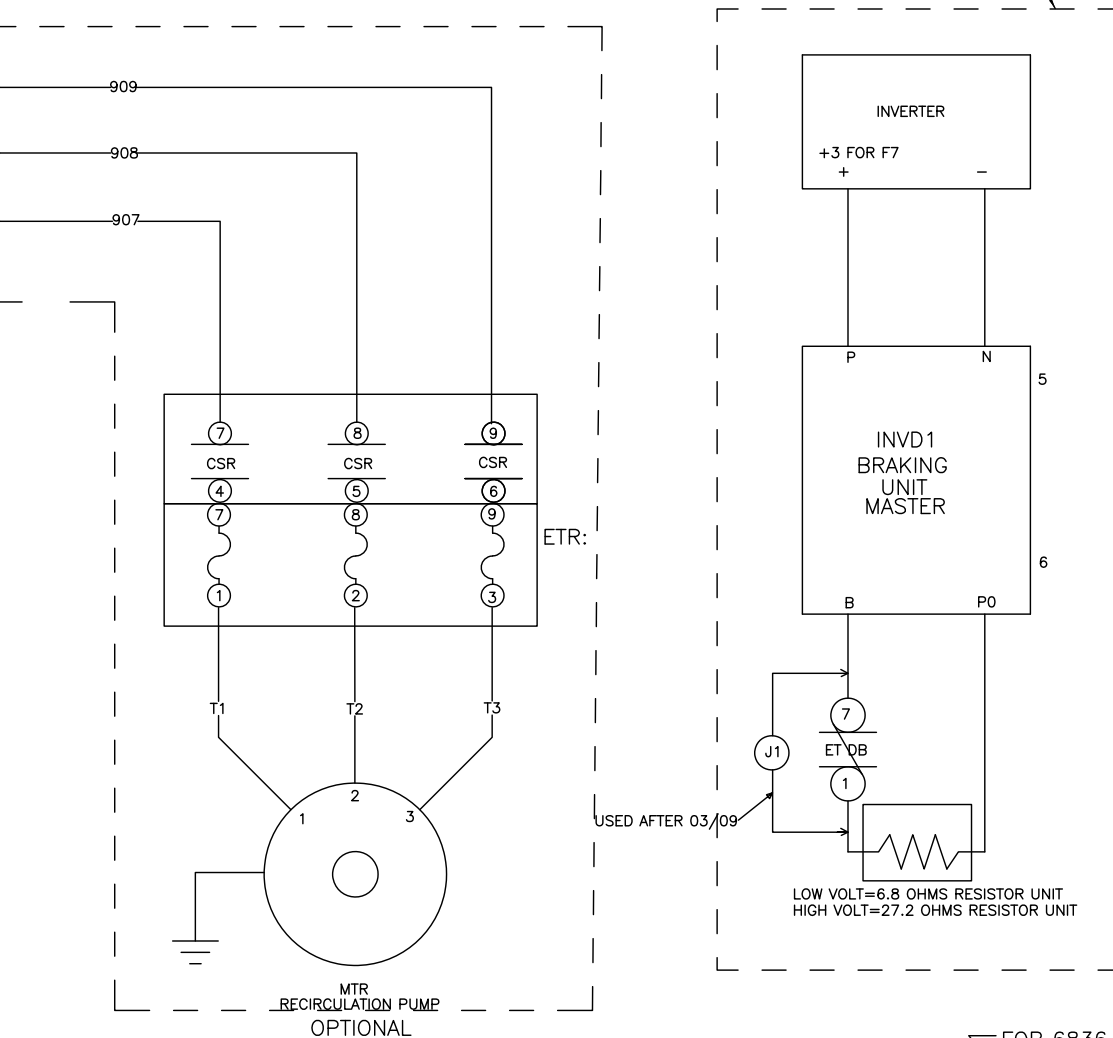
06

07

08

09

FOR 6836 MACHINES



W6F3WSVP

MICRO 6 SYSTEMS
SCHEMATIC: INVERTOR WIRING
FOR 48040H7N, F7W & 68036H5N
WITH GPD505/506, A1000 OR F7 INVERTER
220V1P50HZ/240V1P60HZ
PELLERIN MILNOR CORPORATION

