

Published Manual Number/ECN: ME6HF5P1AE/2021312A

- Publishing System: TPAS2
- Access date: 07/30/2021
- Document ECNs: Latest



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

Schematic/Electrical Parts

68036F5P

with Dryell Loading

MARK VI CONTROLS

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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>
	>>>CONTROL BOX LAYOUTS				
001	DETAIL-68036 F5P/W CONTROL BOX	W6F3ZSTG1	B2T2007014	68036 F5P/W CONTROL BOX	SEE FUNCTION
002	DETAIL-186 PROCESSOR CONTROL BOX	W6F3ZSTG1	B2TAG98040	186 PROCESSOR BOX	SEE FUNCTION
003	DETAIL-INPUT AND OUTPUT BOARDS	W6F3ZSTG1	B2TAG96034	CONTROL BOARDS INPUTS/OUTPUTS	SEE FUNCTION
004	DETAIL-68036 HIGH VOLTAGE CONTROL BX	W6F3ZSTG2	B2T2003003	68036 F5W/N HIGH VOLT CNTRL BX	SEE FUNCTION
005	DETAIL-DRYEL INTERFACE J BOX	W6F3ZSTG2	B2T2009013	TAG:68036F5PW DRYEL INTERFACE J BOX	SEE FUNCTION
006	DETAIL-VALVE SET 68036 F5W/N	W6F3ZSTG2	B2T2009007	TAG:68036F5P VALVE SET	SEE FUNCTION
ACBA	BOARD-ACCELEROMETER	W6F3ZSEB	EACCLRM5	ASSY:ACCEL 1-5G ADXL 105+TEST	SHELL FRONT
BA	>>>PRINTED CIRCUIT BOARDS				
BAD-1	BOARD-ANALOG TO DIGITAL CONVERTER	W6F3ZSBWA	08BSADCT	BD: SERIAL A-D CONVERT->TEST	CONTROL BOX
BAD-1	BOARD-ANALOG TO DIGITAL CONVERTER	W6F3ZSEC	08BSADCT	BD: SERIAL A-D CONVERT->TEST	CONTROL BOX
BAS	BOARD-16 SNUBBER CIRCUITS	W6F3ZSEVA	08BNCMBT	COIN MACHINE SNUBBER->TESTED	CONROL BOX
BAS	BOARD-16 SNUBBER CIRCUITS	W6F3ZSHD	08BNCMBT	COIN MACHINE SNUBBER->TESTED	CONROL BOX
BBAD-1	BOARD-ANALOG TO DIGITAL CONVERTER	W6F3ZSEB	08BSADCT	BD: SERIAL A-D CONVERT->TEST	CONTROL BOX
BBB-1	BOARD-MEMORY BATTERY BACKUP	W6F3ZSBWA	08BSBB1T	BOARD: SER BATT BACKUP-TEST	PROCESSOR BX
BDA-1	BOARD-DIGITAL TO ANALOG CONVERTOR	W6F3ZSBWA	08BSDACHT	BD:HI-RES SERIAL D-A->TEST	CONTROL BOX
BDFP	DISPLAY-MICROPROCESSOR-COLOR FP	W6F3ZSDF	08EFD320A	DISPLAY#AV05114KIT#BT057PM	SWITCH PANEL
BFPC	BOARD-FLAT PNL CONTROLLER	W6F3ZSDF	MESSAGE EW	INCLUDED IN KIT FOR BDFP ABOVE	SWITCH PANEL
BFPI	BOARD-FLAT PNL INTERFACE	W6F3ZSDF	08BSAT3AT	BD:FLAT PNL DISP INF->TESTED	SWITCH PANEL
BIO-1	BOARD-8OUTPUT/16INPUT #1	W6F3ZSBWA	08BS816CHT	BD 8OUT-16IN HIGH SPD->TEST	CONTROL BOX
BLB	BOARD-LEVEL TRANSDUCER	W6F3ZSEC	08BNLT	LEVEL TRANSDUCER BOARD->TEST	CONTROL BOX
BMTH	BOARD-5 CHANNEL MOTHER	W6F3ZSBWA	08BS8MTHAT	BD:SERIAL 5 CARD MOTHER->TEST	CONTROL BOX
BMTH	BOARD-5 CHANNEL MOTHER	W6F3ZSEB	08BS8MTHAT	BD:SERIAL 5 CARD MOTHER->TEST	CONTROL BOX
BO24-1	BOARD-24 OUTPUT #1	W6F3ZSBWA	08BSO24AT	BD:SERIAL 24 OUTPUT->TEST	CONTROL BOX
BO24-2	BOARD-24 OUTPUT #2	W6F3ZSBWA	08BSO24AT	BD:SERIAL 24 OUTPUT->TEST	CONTROL BOX
BO24-3	BOARD-24 OUTPUT #2	W6F3ZSBWA	08BSO24AT	BD:SERIAL 24 OUTPUT->TEST	CONTROL BOX
BPB	BOARD-186 PROCESSOR	W6F3ZSBWA	08BSPE2T	SERIAL 186 PROC BD+FP->TEST	PROCESSOR BX
BSP	BOARD-SPEED SENSING	W6F3ZSBWA	08BNDSRAT	BD DRY SAFETY ROTATION->TEST	CONTROL BOX
CL	>>>RELAY-LATCH				
CP	>>>PHOTOEYE				
CPLCB	PHOTOEYE-LOAD CHUTE RECEIVER	W6F3ZSI2A	09RPE006B	PHOTOEYE RECEIVER 24/120V AC	LOAD CHUTE
CPLCB	PHOTOEYE-LOAD CHUTE RECEIVER	W6F3ZSI2A	09RPE007C	P.E. PWR.BLK. 240V-OUT 240V-IN	LOAD CHUTE
CPLCB	PHOTOEYE-LOAD CHUTE RECEIVER	W6F3ZSI2A	09RP007B2	PHOTOEYE ON/OFF LOGICMOD #LM3	LOAD CHUTE

COMPONENT PARTS LIST

<u>COMPONENT NUMBER</u>	<u>FUNCTION OF THIS COMPONENT NUMBER</u>	<u>WHERE TO FIND THIS COMPONENT</u>	<u>MILNOR PIN</u>	<u>DESCRIPTION</u>	<u>LOCATION</u>
CPLCC	PHOTOEYE-LOAD CHUTE SENDER	W6F3ZSI2A	09RPE006A	PHOTOEYE EMITTER 24/120V AC,	LOAD CHUTE
CPLCC	PHOTOEYE-LOAD CHUTE SENDER	W6F3ZSI2A	09RPE007A	P.E. PWR.BLK. NO-OUT 120V-IN	LOAD CHUTE
CPSP	PHOTOEYE-SPEED 48" DIA. AND GREATER	W6F3ZSBWA	09RPE013Q	SENSOR E-Z BEAM QUICK CONN DC	MAIN PULLEY
CR	>>>RELAY-PILOT OR CONTROL				
CRDOA	RELAY-DOOR FULL OPEN	W6F3ZSRHA	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	CONTROL BOX
CRFDL	RELAY-FRONT DOWN LEFT	W6F3ZSRHA	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	CONTROL BOX
CRFDR	RELAY-FRONT DOWN RIGHT	W6F3ZSRHA	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	CONTROL BOX
CRFFU	RELAY-FRONT FULL UP	W6F3ZSRF	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	CONTROL BOX
CRFLL	RELAY-FRONT LEFT LOCKED	W6F3ZSRHA	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	CONTROL BOX
CRFRL	RELAY-FRONT RIGHT LOCKED	W6F3ZSRHA	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	CONTROL BOX
CRLCB	RELAY-LOAD CHUTE BLOCKED	W6F3ZSI2A	09C024D71	RELAY 4PDT DIFGLD 14PN 240V	CONTROL BOX
CRPLL	RELAY-DOOR CLOSED	W6F3ZSDR	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	ALT DRAIN BX
CRRDL	RELAY-REAR DOWN LEFT	W6F3ZSRHA	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	CONTROL BOX
CRRDR	RELAY-REAR DOWN RIGHT	W6F3ZSRHA	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	CONTROL BOX
CRRFU	RELAY-REAR FULL UP	W6F3ZSRF	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	CONTROL BOX
CRRLL	RELAY-REAR LEFT LOCKED	W6F3ZSRHA	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	CONTROL BOX
CRRRL	RELAY-REAR RIGHT LOCKED	W6F3ZSRHA	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	CONTROL BOX
CRS+	RELAY-START 3-WIRE	W6F3ZSS+	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	CONTROL BOX
CRSSF	RELAY-SLOW SHIFT FRONT	W6F3ZSDE	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	CONTROL BOX
CRSSR	RELAY-SLOW SHIFT REAR	W6F3ZSDE	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	CONTROL BOX
CRTB	RELAY-TILTING BACK OF MACHINE	W6F3ZSRF	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	CONTROL BOX
CRTD	RELAY-TILT DOWN	W6F3ZSRF	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	CONTROL BOX
CRTF	RELAY-TILTING FRONT OF MACHINE	W6F3ZSRF	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	CONTROL BOX
CRTU	RELAY-TILT UP	W6F3ZSRF	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	CONTROL BOX
CS	>>>CONTACTOR-MOTOR STARTER				
CSDO	CONTACTOR-HYDRAULIC DOOR OPEN	W6F3ZSHD	09MC08C371	16A 3P MCS CONT NR 240V5/6	CONTROL BOX
CSVs	CONTACTOR-INVERTER	W6F3ZSS+	09MC08N371	37A 3P MCS CONT NR 240V5/6	CONTROL BOX
CSVs	CONTACTOR-INVERTER	W6F3ZSVP	09MC08N371	37A 3P MCS CONT NR 240V5/6	CONTROL BOX
EB	>>>BUZZER OR AUDIBLE SIGNAL				
EBSG	BUZZER-SIGNAL AUDIBLE	W6F3ZSS+	09H016	BUZZ. 230V W/6-32 CTR+6" LEADS	SWITCH PANEL
EF	>>>FUSE OR FUSE HOLDER				
EF01	FUSE-CONTROL CIRCUIT	W6F3ZSLV	09FF006AMA	FUSE BK/ABC 6 AMP 250V BUSS	CONTROL BOX
EF02	FUSE-CONTROL CIRCUIT	W6F3ZSLV	09FF006AMA	FUSE BK/ABC 6 AMP 250V BUSS	CONTROL BOX

COMPONENT PARTS LIST

W6F3ZSPL/2009264N

<u>COMPONENT NUMBER</u>	<u>FUNCTION OF THIS COMPONENT NUMBER</u>	<u>WHERE TO FIND THIS COMPONENT</u>	<u>MILNOR P/N</u>	<u>DESCRIPTION</u>	<u>LOCATION</u>
EF1	FUSE-INVERTER OVERLOAD	W6F3ZSVP			CONTROL BOX
EF2	FUSE-INVERTER OVERLOAD	W6F3ZSVP			CONTROL BOX
EF3	FUSE-INVERTER OVERLOAD	W6F3ZSVP			CONTROL BOX
EFP1	FUSE-CONTROL CIRCUIT	W6F3ZSLV	09FF005AWN	FUSE #KTK 5A600V=HPS HOLDER	CONTROL BOX
EFP2	FUSE-CONTROL CIRCUIT	W6F3ZSLV	09FF005AWN	FUSE #KTK 5A600V=HPS HOLDER	CONTROL BOX
EL	>>>LIGHT-PILOT OR INDICATOR				
ELSG	LIGHT-SIGNAL VISUAL	W6F3ZSS+	09J060A71	LAMP 1/2" AMB 250V IDI 1051QC3	SWITCH PANEL
ES	>>>POWER SUPPLY-ELECTRONIC				
ESPS	POWER SUPPLY-MICROPROCESSOR	W6F3ZSBWA	08PSS3401T	40 WATT POWER SUPPLY TESTED	CONTROL BOX
ET	>>>THERMAL OVERLOAD DEVICES				
ETDO	OVERLOAD-DOOR OPEN MOTOR	W6F3ZSHD	09FTD0037T	MCS OL RELAY ADJ. RANGE 3.7-12	CONTROL BOX
ETVS	OVERLOAD-VARIABLE SPEED INVERTER	W6F3ZSVP	09FTD0230T	MCS OL RELAY ADJ. RANGE 23-75	CONTROL BOX
EX	>>>TRANSFORMERS				
EXHV	TRXFRMR-INCOMING VOLTAGE TO 240	W6F3ZSLV	SEE BELOW		CONTROL BOX
EXHV	TRXFRMR-208-240V	W6F3ZSLV	09U250AT71	AUTOXFMR- 280V-230V 250VA	CONTROL BOX
EXHV	TRXFRMR-380/480 TO 240VAC	W6F3ZSLV	09U200AAB	XFMR 380-480V/240-120-250VA	CONTROL BOX
	>>>INVERTER BRAKING UNIT				
INVB	INVERTER-BRAKING UNIT	W6F3ZSVP	09MVB725LC	BRAKEMODULE OPEN CHASIS INVERT	CONTROL BOX
INVR	REACTOR-DRIVE MOTOR	W6F3ZSVP	09MX600A74	REACTOR 150HP 230V 200A	CONTROL BOX
KB	>>>KEYBOARD-ELECTRONIC				
KBM	KEYPAD-MICROPROCESSOR	W6F3ZSKP	08ND5X6WE	KEYPAD:5X6MATRIX WASHER-EXT	SWITCH PANEL
MT	>>>MOTORS				
MTD	MOTOR-DRIVE	W6F3ZSVP	MESSAGE SO	SEE SPECIFIC COMPONENT+NAMEPLATE	MACHINE
MTDH	MOTOR-HYDRAULIC	W6F3ZSHD	MESSAGE SO	SEE SPECIFIC COMPONENT+NAMEPLATE	MACHINE
MTVS	FAN-INVERTOR COOLING	W6F3ZSS+	13AF235A71	FAN 235CFM 230V 50/60	BACK C-BOX
MV	>>>MOTOR POWER INVERTERS				
MVINV-H	INVERTER-6836F5N/W 380-460 VOLTS	W6F3ZSVP	09MV075A96	F7 INVERTER 75 AMP	CONTROL BOX
MVINV-L	INVERTER-6836F5N/W 200-240V/VOLTS	W6F3ZSVP	09MWA14574	F7 INVERTER 145 AMPS	CONTROL BOX
MVLF	FILTER-LINE	W6F3ZSVP	09MVFITLR1	RFI NOISE INPUT FILTER	CONTROL BOX
PXDO	PROX SW-DOOR FULL OPEN	W6F3ZSRHA	09RPS18CAS	PRXSW QKCO 18M NO-AC SHLD	SHELL FRONT
PXEBD	PROX SWITCH-ELBOW DOWN	W6F3ZS2A	09RPS18ADU	PRXSW QK CONN 18M NO-DC UNSHLD	LOAD CHUTE
PXFDL	PROX SW-FRONT DOWN LEFT	W6F3ZSRHA	09RPS12AAS	PROXSW QD CONN 12M NO-AC SHLD	SIDE OF MACH
PXFDR	PROX SW-FRONT DOWN RIGHT	W6F3ZSRHA	09RPS12AAS	PROXSW QD CONN 12M NO-AC SHLD	SIDE OF MACH

COMPONENT PARTS LIST

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PXFFU	PROX SW-FRONT FULL UP	W6F3ZSRF	09RPS18AAS	PROXSW QD CON 12M NO-AC SHLD	SIDE OF MACH
PXFL	PROX SW-FRONT LEFT LOCKED	W6F3ZSRHA	09RPS12AAS	PROXSW QD CONN 12M NO-AC SHLD	BASE OF MACH
PXFRL	PROX SW-FRONT RIGHT LOCKED	W6F3ZSRHA	09RPS12AAS	PROXSW QD CONN 12M NO-AC SHLD	SIDE OF MACH
PXRDL	PROX SW-REAR DOWN LEFT	W6F3ZSRHA	09RPS12AAS	PROXSW QD CONN 12M NO-AC SHLD	SIDE OF MACH
PXRDR	PROX SW-REAR DOWN RIGHT	W6F3ZSRHA	09RPS12AAS	PROXSW QD CONN 12M NO-AC SHLD	SIDE OF MACH
PXRFU	PROX SW-REAR FULL UP	W6F3ZSRF	09RPS18AAS	PROXSW QD CON 12M NO-AC SHLD	SIDE OF MACH
PXRLL	PROX SW-REAR LEFT LOCKED	W6F3ZSRHA	09RPS12AAS	PROXSW QD CONN 12M NO-AC SHLD	BASE OF MACH
PXRRL	PROX SW-REAR RIGHT LOCKED	W6F3ZSRHA	09RPS12AAS	PROXSW QD CONN 12M NO-AC SHLD	SIDE OF MACH
PXSSF	PROX SWITCH- SLOW SHIFT FRONT	W6F3ZSDE	09RPS12AAS	PROXSW QD CONN 12M NO-AC SHLD	CONTROL BOX
PXSSR	PROX SWITCH- SLOW SHIFT REAR	W6F3ZSDE	09RPS12AAS	PROXSW QD CONN 12M NO-AC SHLD	CONTROL BOX
SH	>>>SWITCH-HAND OPERATED				
SH01	SWITCH-208-240V SELECT	W6F3ZSLV	09N050	TOGSW SPDT NO OFF 10A250V	CONTROL BOX
SHDO	SWITCH-DOOR FULL OPEN	W6F3ZSRHA	09N405PB11	SWASS PBBK 1NO/1NC	SWITCH PANEL
SHFL	SWITCH-MANUAL FLUSH	W6F3ZSCF	09N405PB10	SWASS PBBK 1NO	SIDE OF MACH
SHMD	SWITCH-LOCAL/REMOTE	W6F3ZSI1A	09N405M210	SWASS M2W 1NO	SIDE OF MACH
SHMF	SWITCH-MANUAL FLUSH	W6F3ZSCF	09N405PB10	SWASS PBBK 1NO	SUPPLY INJEC
SHS+	SWITCH-START	W6F3ZSS+	09N405PG10	SWASS PBGN 1NO	SWITCH PANEL
SHSG	SWITCH-SIGNAL CANCEL	W6F3ZSI1A	09N405PY10	SWASS PB YELLOW INO	SWITCH PANEL
SHSMA	SWITCH-MASTER	W6F3ZSS+	09N405M210	SWASS M2W 1NO	SWITCH PANEL
SHSOE	SWITCH-EMERGENCY STOP	W6F3ZSS+	09N505	SW ASSY EMER STOP	SWITCH PANEL
SK	>>>SWITCH-KEYLOCK				
SKPR	SWITCH-RUN/PROGRAM (KEY OP)	W6F3ZSI1A	09N127C	KEYSW SPST 7A120VAC SCREW TERM	SWITCH PANEL
SM	>>>SWITCH-MECHANICAL OPERATED				
SMDLUL	SWITCH-DRYELL LOCKED UP-LEFT	W6F3ZSI2A	09R012	MICSW SPDT PAINTED BZE6-RN 01	LOAD CHUTE
SMDLUR	SWITCH-DRYELL LOCKED UP-RIGHT	W6F3ZSI2A	09R012	MICSW SPDT PAINTED BZE6-RN 01	LOAD CHUTE
SMEB	SWITCH-EXCURSION	W6F3ZSI1A	09R008A	MICSW SPDT BZE6-2RN183	UNDER SHELL
SMPLL	SWITCH-DOOR SWITCH	W6F3ZSDR	09R014A	MINI-SW SPDT STAKON #V15G1C26K	DOOR LATCH
SMWVB	SWITCH-VIBRATION	W6F3ZSS+	09R020	SWITCH NC VIBR#WZ-2RW84429-P52	CONTROL BOX
SP	>>>SWITCH-PRESSURE OPERATED				
SPBP	PRESSURE SW-BEARING SEAL	W6F3ZSI1A	09N082B05	PRESSW NASON CLOSE @ 5 LB	AIR VALVE BX
SPBS	PRESSURE SW-BRAKE PRESSURE	W6F3ZSI1A	09N082A	PRESSW NASON CLOSE @ 62 LB	AIR VALVE BX
SPWDP	PRESS SWITCH-LOW DOOR PRESSURE	W6F3ZSDR	09N082B10	PRESSW NASON CLOSE @ 10 LB	AIR VALVE BX
ST	>>>SWITCH-TEMPERATURE OPERATED				

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STDB	SWITCH-THERMOSTAT	W6F3ZSS+	30RA175T	THERMOSTAT OPEN AT 175F	CONTROL BOX
VE	>>>VALVE-ELECTRIC OPERATED				
VEBP	VALVE-BEARING PRESSURE	W6F3ZSEVA	96TBC2BA71	1/4" N/C 2WAY 220V50/60C VALVE	AIR VALVE BX
VEBR	VALVE-BRAKE RELEASE	W6F3ZSS+	96R301A71	1/8" AIRPILOT 3W NC 240V50/60	AIR VALVE BOX
VEC01	VALVE-CHEMICAL #1 FLUSH	W6F3ZSCF	96P013G71	3/4" 2WAYPLASTCVAL 240V/60C	SUPPLY INJEC
VEC02	VALVE-CHEMICAL #2 FLUSH	W6F3ZSCF	96P013G71	3/4" 2WAYPLASTCVAL 240V/60C	SUPPLY INJEC
VEC03	VALVE-CHEMICAL #3 FLUSH	W6F3ZSCF	96P013G71	3/4" 2WAYPLASTCVAL 240V/60C	SUPPLY INJEC
VEC04	VALVE-CHEMICAL #4 FLUSH	W6F3ZSCF	96P013G71	3/4" 2WAYPLASTCVAL 240V/60C	SUPPLY INJEC
VEC05	VALVE-CHEMICAL #5 FLUSH	W6F3ZSCF	96P013G71	3/4" 2WAYPLASTCVAL 240V/60C	SUPPLY INJEC
VEC06	VALVE-CHEMICAL #6	W6F3ZSCX	96R301A71	1/8" AIRPILOT 3W NC 240V50/60	SUPPLY VLVST
VEC07	VALVE-CHEMICAL #7	W6F3ZSCX	96R301A71	1/8" AIRPILOT 3W NC 240V50/60	SUPPLY VLVST
VEC08	VALVE-CHEMICAL #8	W6F3ZSCX	96R301A71	1/8" AIRPILOT 3W NC 240V50/60	SUPPLY VLVST
VEC09	VALVE-CHEMICAL #9	W6F3ZSCX	96R301A71	1/8" AIRPILOT 3W NC 240V50/60	SUPPLY VLVST
VEC10	VALVE-CHEMICAL #10	W6F3ZSCX	96R301A71	1/8" AIRPILOT 3W NC 240V50/60	SUPPLY VLVST
VEC11	VALVE-CHEMICAL #11	W6F3ZSCX	96R301A71	1/8" AIRPILOT 3W NC 240V50/60	SUPPLY VLVST
VEC12	VALVE-CHEMICAL #12	W6F3ZSCX	96R301A71	1/8" AIRPILOT 3W NC 240V50/60	SUPPLY VLVST
VEC13	VALVE-CHEMICAL #13	W6F3ZSCX	96R301A71	1/8" AIRPILOT 3W NC 240V50/60	SUPPLY VLVST
VEC14	VALVE-CHEMICAL #14	W6F3ZSCX	96R301A71	1/8" AIRPILOT 3W NC 240V50/60	SUPPLY VLVST
VEC15	VALVE-CHEMICAL #15	W6F3ZSCX	96R301A71	1/8" AIRPILOT 3W NC 240V50/60	SUPPLY VLVST
VECFL	VALVE-FLUSH	W6F3ZSCF	96P013G71	3/4" 2WAYPLASTCVAL 240V/60C	SUPPLY INJEC
VED	VALVE-DOWN	W6F3ZSRHA	96R301A71	1/8" AIRPILOT 3W NC 240V50/60	AIR VALVE BX
VEDBL	VALVE-DRYELL BLOW	W6F3ZSDE	96R301B71	1/8" AIRPILOT 3W NC 240V50/60	CONTROL BOX
VEDFL	VALVE-DRYELL FLUSH	W6F3ZSDE	96R301B71	1/8" AIRPILOT 3W NC 240V50/60	CONTROL BOX
VEDL	VALVE D OOR UNLATCH	W6F3ZSDR	96R301A71	1/8" AIRPILOT 3W NC 240V50/60	AIR VALVE BX
VEDRR	VALVE-REUSE DRAIN	W6F3ZSEVA	96R302B71	1/8" AIRPILOT 3W NO 240V50/60	AIR VALVE BX
VEDRS	VALVE-DRAIN	W6F3ZSEVA	96R301A71	1/8" AIRPILOT 3W NC 240V50/60	REAR OF MACH
VEDUD	VALVE-DRYELL DOWN LOCK RELEASE	W6F3ZSDE	96R301B71	1/8" AIRPILOT 3W NC 240V50/60	CONTROL BOX
VEDUU	VALVE-DRYELL UP LOCK RELEASE	W6F3ZSDE	96R301B71	1/8" AIRPILOT 3W NC 240V50/60	CONTROL BOX
VEF	VALVE-FRONT	W6F3ZSRHA	96R301A71	1/8" AIRPILOT 3W NC 240V50/60	AIR VALVE BX
VEFL	VALVE-FLUSH	W6F3ZSCF	96P013G71	3/4" 2WAYPLASTCVAL 240V/60C	SUPPLY INJEC
VEHDC	VALVE-HYDRAULIC DOOR CLOSED	W6F3ZSHD	96RHT05E37	VALVE-HYD.VICKERS#DG4S4W012CB60	MACHINE REAR
VEHDL	VALVE-TILT DOOR UNLATCH	W6F3ZSDR	96R301A71	1/8" AIRPILOT 3W NC 240V50/60	AIR VALVE BX
VEHDO	VALVE-HYDRAULIC DOOR OPEN	W6F3ZSHD	96RHT05E37	VALVE-HYD.VICKERS#DG4S4W012CB60	MACHINE REAR

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>
VELDU	VALVE-DRYELL DOWN	W6F3ZSDE	96R301B71	1/8" AIRPILOT 3W NC 240V50/60	CONTROL BOX
VELRU	VALVE-DRYELL UP	W6F3ZSDE	96R301B71	1/8" AIRPILOT 3W NC 240V50/60	CONTROL BOX
VEMTM	VALVE-MACHINE TO MACHINE	W6F3ZSEVA	96R301A71	1/8" AIRPILOT 3W NC 240V50/60	AIR VALVE BX
VEMTT	VALVE-MACHINE TO TANK	W6F3ZSEVA	96R301A71	1/8" AIRPILOT 3W NC 240V50/60	AIR VALVE BX
VEPPO	VALVE-DOOR SEAL	W6F3ZSDR	96R301A71	1/8" AIRPILOT 3W NC 240V50/60	ALT DRAIN BX
VER	VALVE-REAR	W6F3ZSRHA	96R301A71	1/8" AIRPILOT 3W NC 240V50/60	AIR VALVE BX
VESST	VALVE-SLOW SHIFT TILT	W6F3ZSDE	96R301B71	1/8" AIRPILOT 3W NC 240V50/60	CONTROL BOX
VESTM	VALVE-STEAM	W6F3ZSEVA	96R301A71	1/8" AIRPILOT 3W NC 240V50/60	AIR VALVE BX
VEU	VALVE-UP	W6F3ZSRHA	96R301A71	1/8" AIRPILOT 3W NC 240V50/60	AIR VALVE BX
VEWC	VALVE-COLD WATER	W6F3ZSEVA	96R301A71	1/8" AIRPILOT 3W NC 240V50/60	AIR VALVE BX
VEWH	VALVE-HOT WATER	W6F3ZSEVA	96R301A71	1/8" AIRPILOT 3W NC 240V50/60	AIR VALVE BX
VEWVC	VALVE-COLD WATER	W6F3ZSEVA	96R301A71	1/8" AIRPILOT 3W NC 240V50/60	AIR VALVE BX
VEVVH	VALVE-HOT WATER	W6F3ZSEVA	96R301A71	1/8" AIRPILOT 3W NC 240V50/60	AIR VALVE BX
VEVVX	VALVE-EXTRA WATER	W6F3ZSEVA	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.

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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.

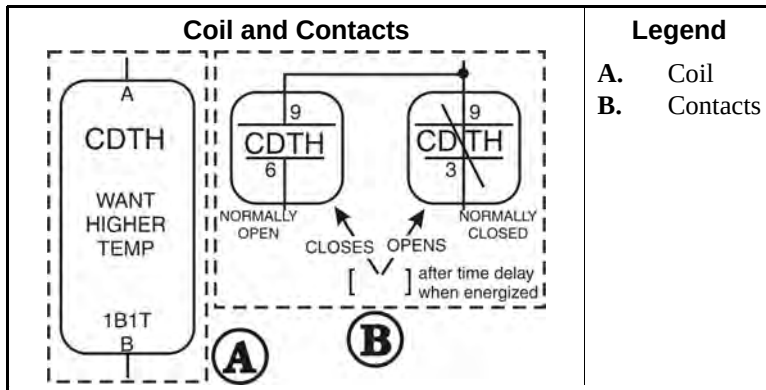
CB=Circuit Breaker (Figure 1)—Automatic switch that opens an electric circuit in abnormal current conditions (e.g., an overload).

Figure 1: Circuit Breaker (CB)



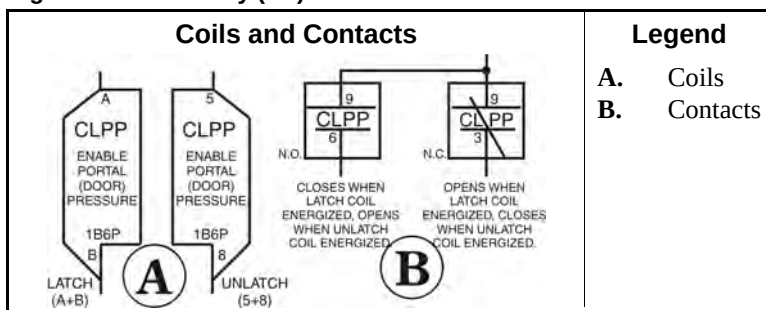
CD=Control, Time Delay Relay (Figure 2)—A relay whose contacts switch only after a fixed or adjustable delay, once voltage has been applied to its coil. The contacts switch back to normal (de-energized state) immediately when the voltage is removed.

Figure 2: Time Delay Relay (CD)



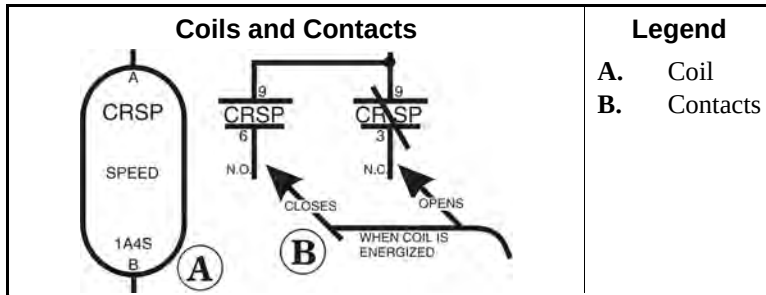
CL=Control, Latch Relay (Figure 3)—A relay which latches in an energized or set position when operated by one coil (the latch/set coil). The relay stays latched even though coil voltage is removed. The relay releases or unlatches when voltage is applied to a second coil (the unlatch/reset coil).

Figure 3: Latch Relay (CL)



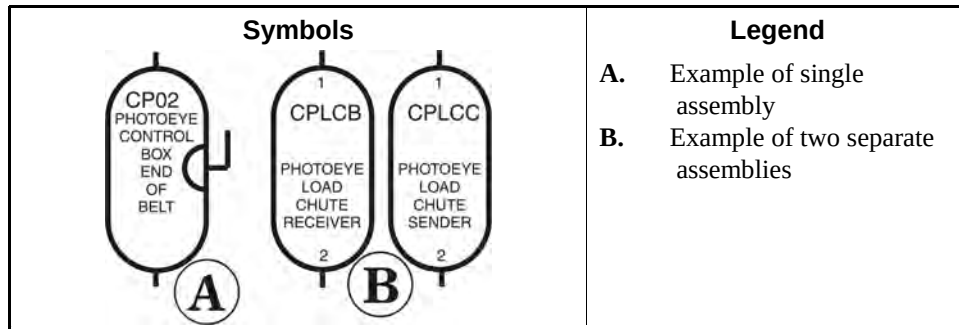
CR=Control, Relay (Figure 4)—A relay whose contacts switch immediately when voltage is applied to its coil and revert to normal when the voltage is removed.

Figure 4: Standard Relay (CR)



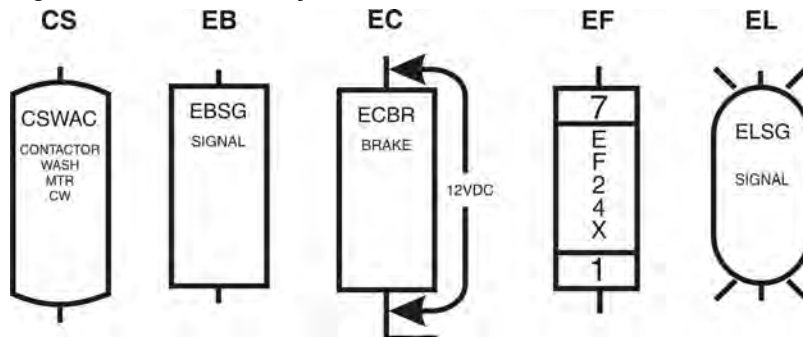
CP=Control, Photo-Eye (Figure 5)—Photo-eyes sense the presence of an object without direct physical contact. Photo-eyes consist of a transmitter, receiver, and output module. These components may be housed in one assembly with the transmitter bouncing light off of a reflector to the receiver, or these 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.

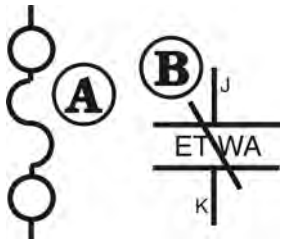
EL=Electric Light (Figure 6)—Indicator lights may be either incandescent or fluorescent.

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.

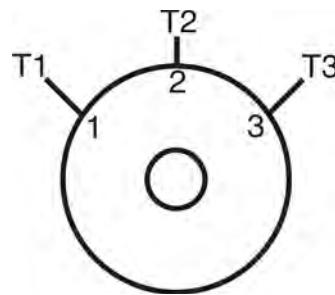
MN=Electronic Monitor (CRT)—A cathode ray tube used for visual presentation of data.

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

Figure 8: Transformer (EX)



Figure 9: Electric Motor (MR)

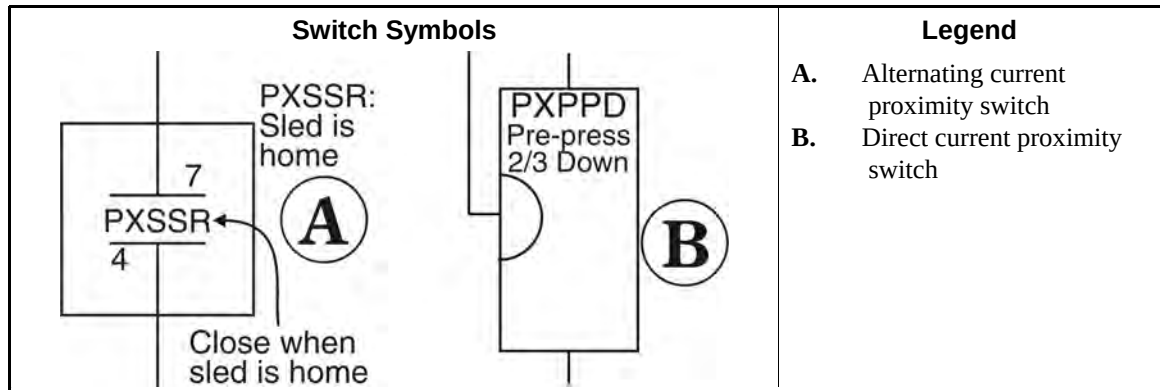


MV=Motor (Variable Speed) Inverter—To vary the speed of an AC motor, the volts to frequency ratio must be kept constant. The motor will overheat if this ratio is not maintained. The motor variable speed inverter converts three phase AC to DC. The inverter then uses this DC voltage to generate AC at the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

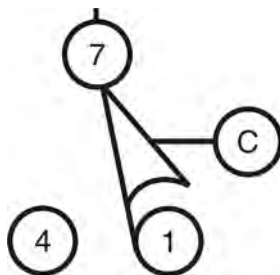
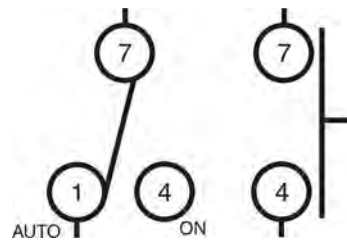


Figure 12: Hand Operated Switch (SH)



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)

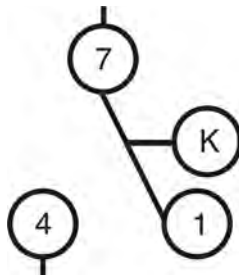
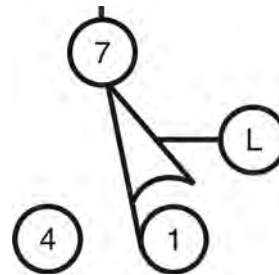


Figure 14: Level Switch (SL)



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)

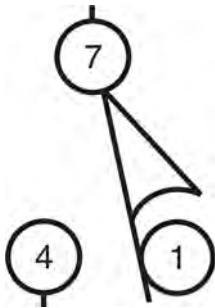
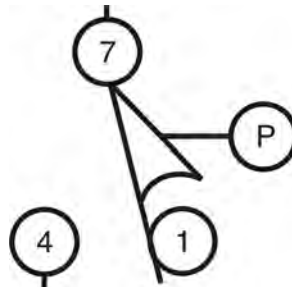


Figure 16: Pressure Switch (SP)



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)

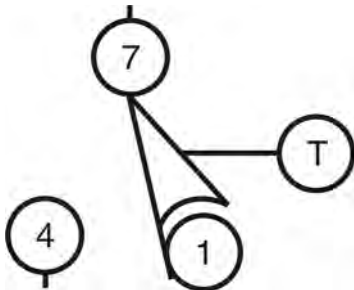
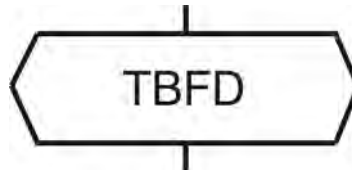


Figure 18: Terminal Board (TB)



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)

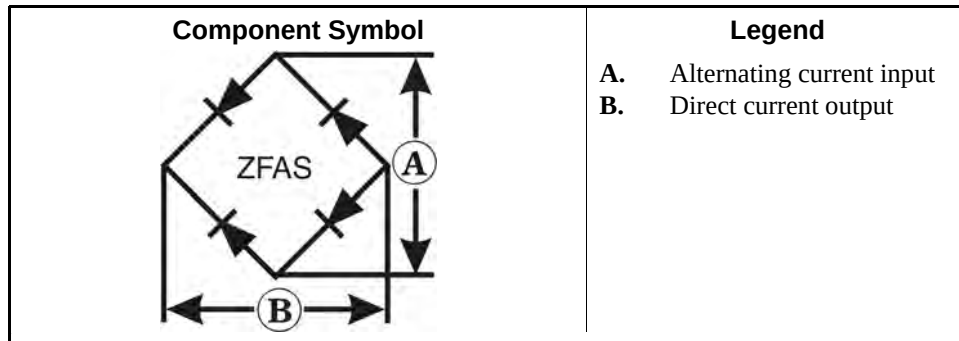
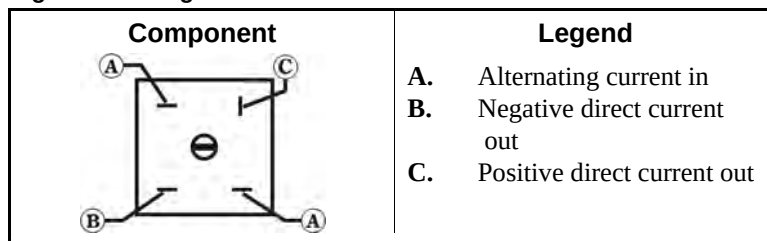


Figure 21: Bridge Rectifier



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.

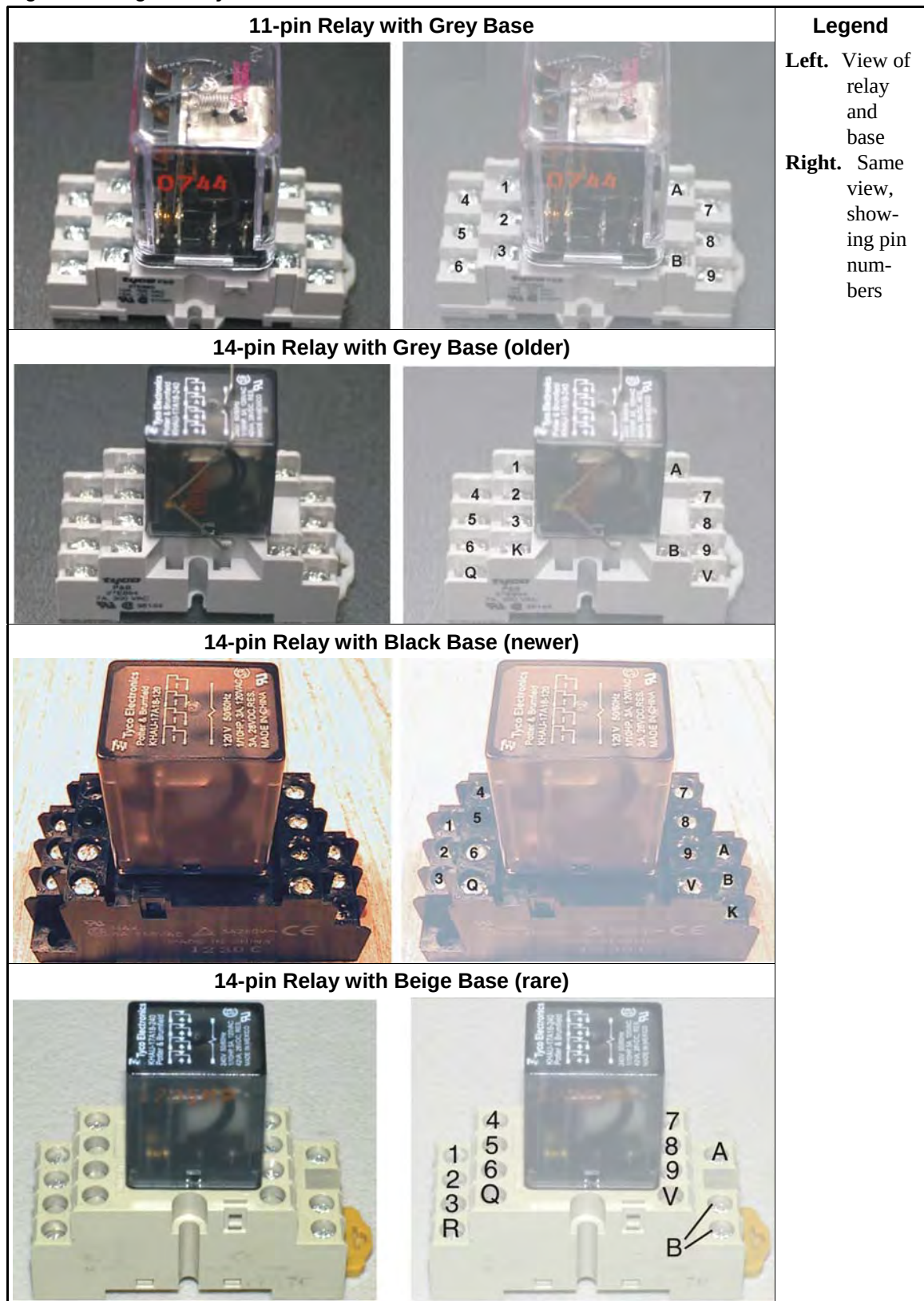
2. Component Terminal Numbering



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

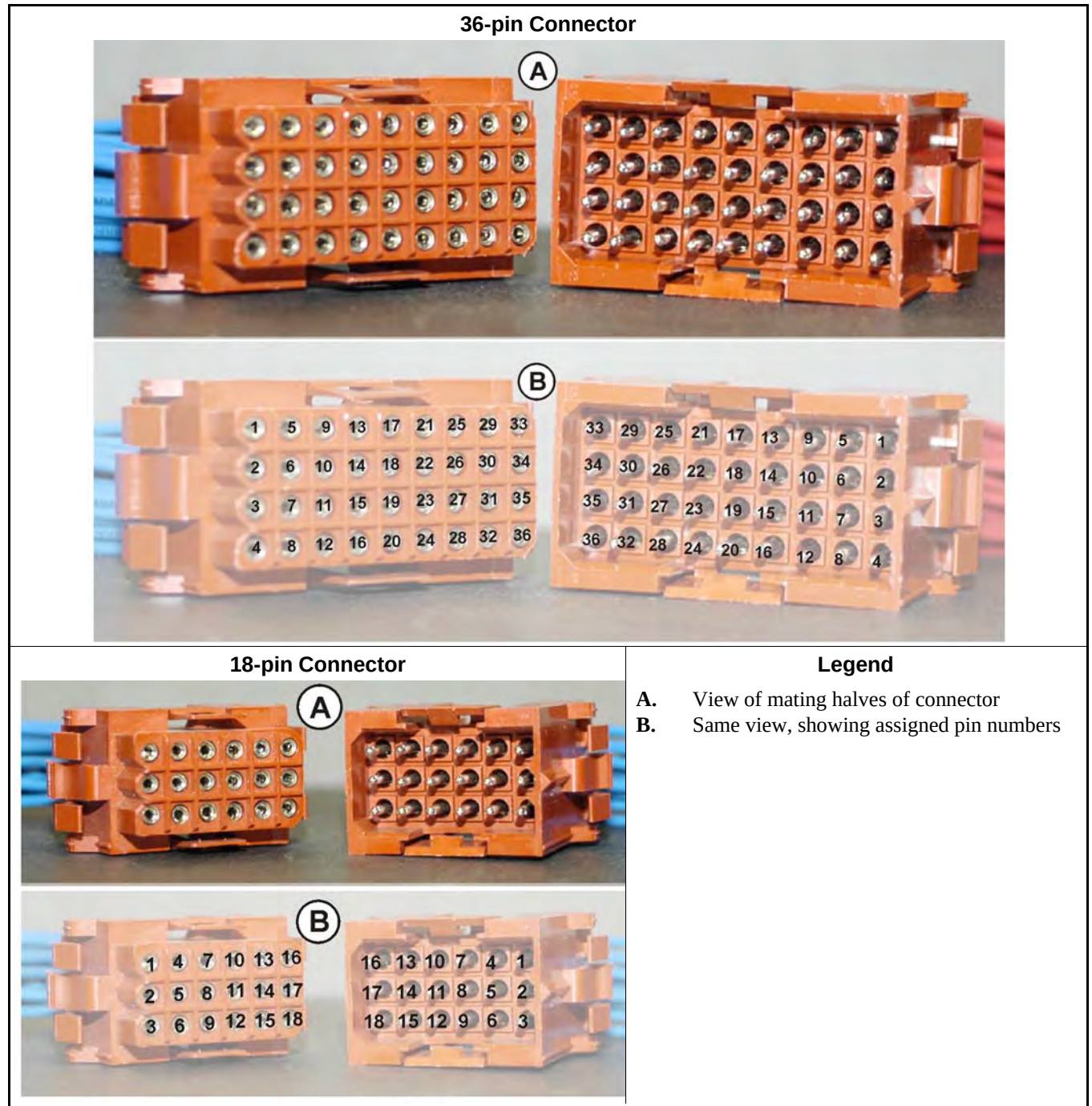


Figure 24: Molex Connector Pin Locations

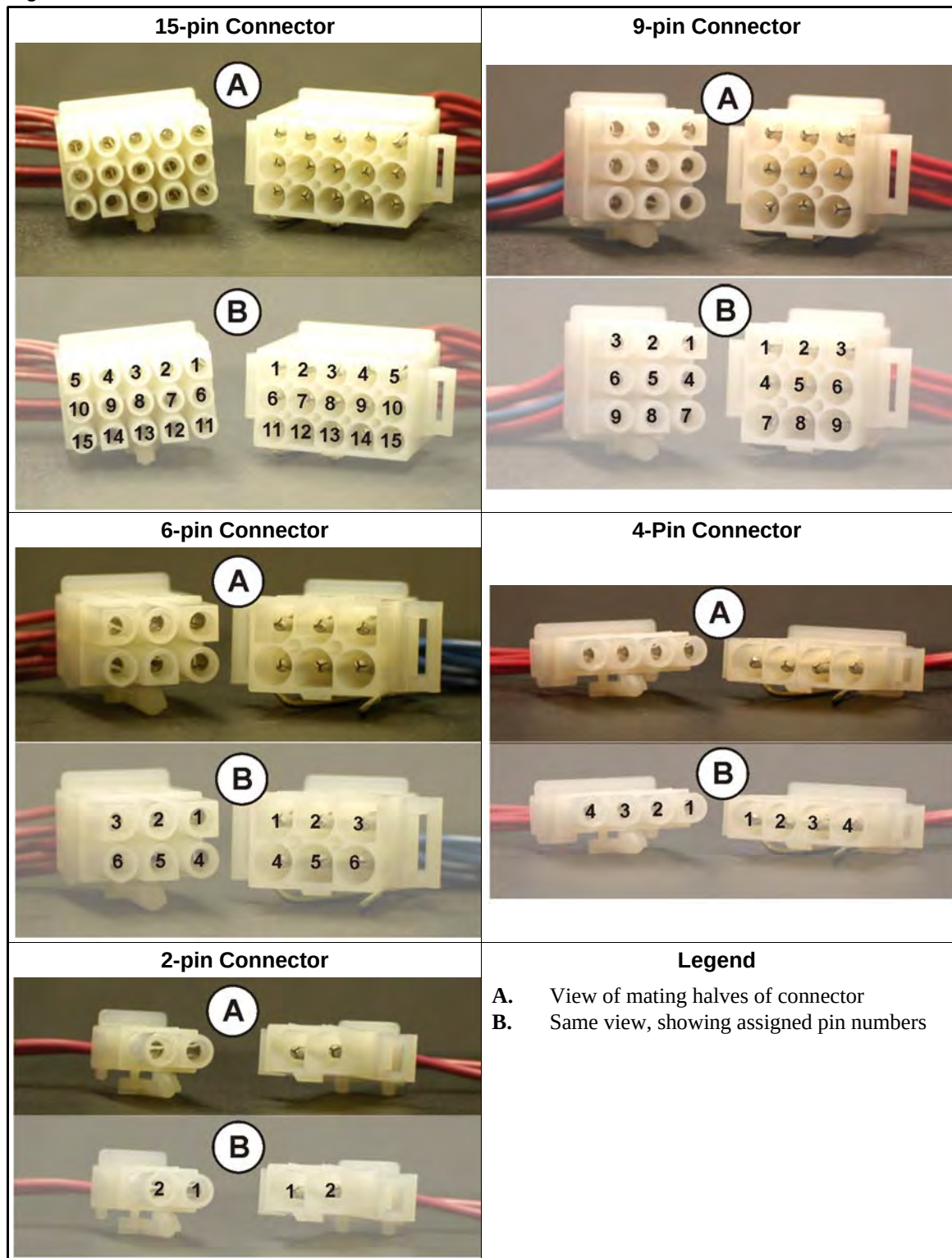


Figure 25: Pressure Switch

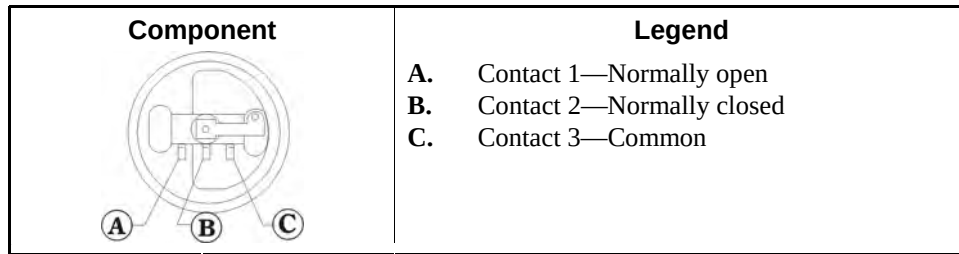


Figure 26: Toggle Switch

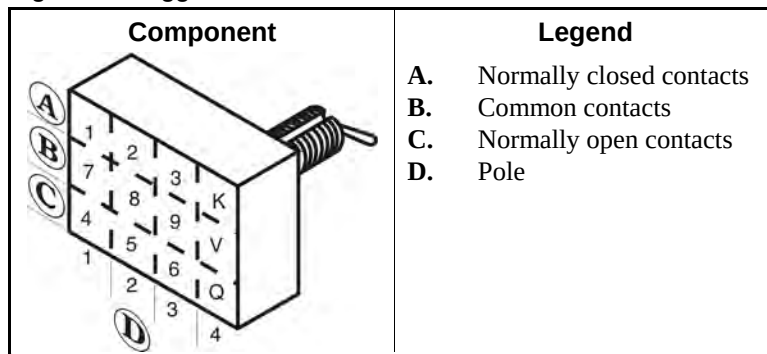
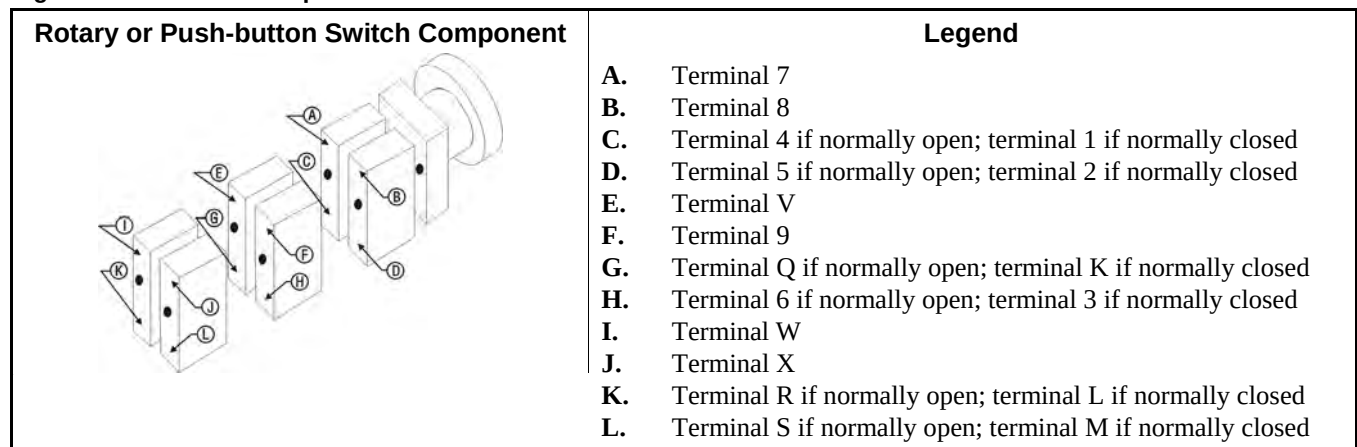


Figure 27: Switch with Replaceable Contact Blocks



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).

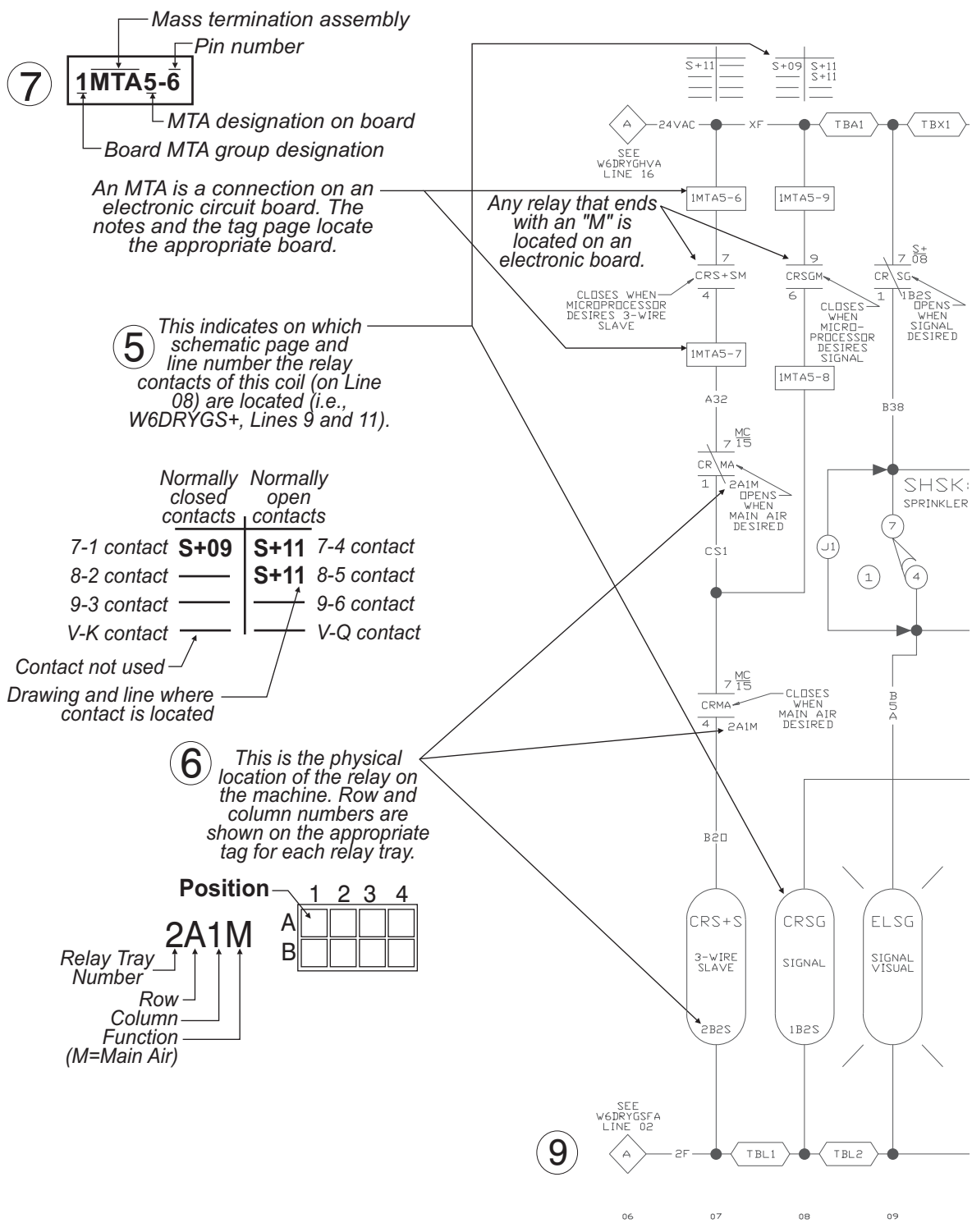
2. Included in the drawing title are the class of control system, the title of this circuit, and the circuit voltage.
3. Line numbers are provided along the bottom edge of the drawing. These permit service personnel in the field and at the Milnor® factory to quickly relate circuit locations when discussing 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

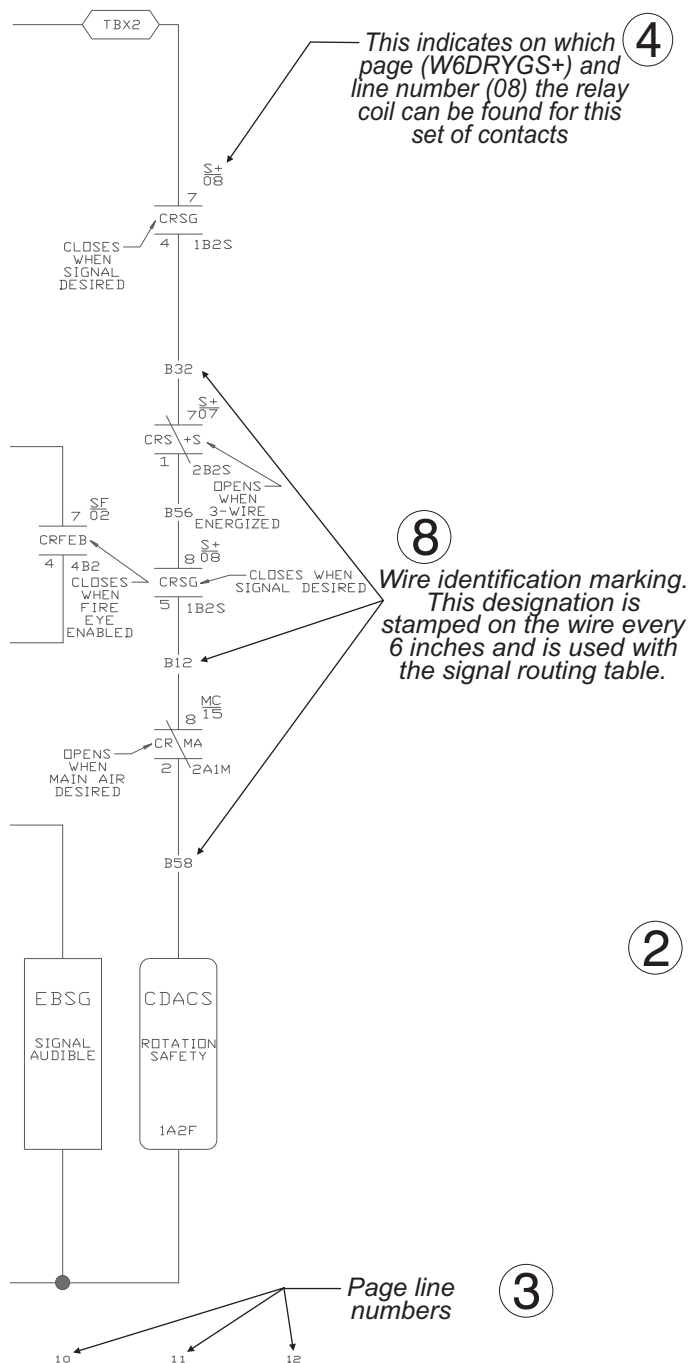
The complete listing of the boards utilized in a given control system can be found in the component list for that system.

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 —

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Major revision (letter)

1 Page number (S+)

Machine type (Gas fired dryer)

6th generation of controls

W = Wiring

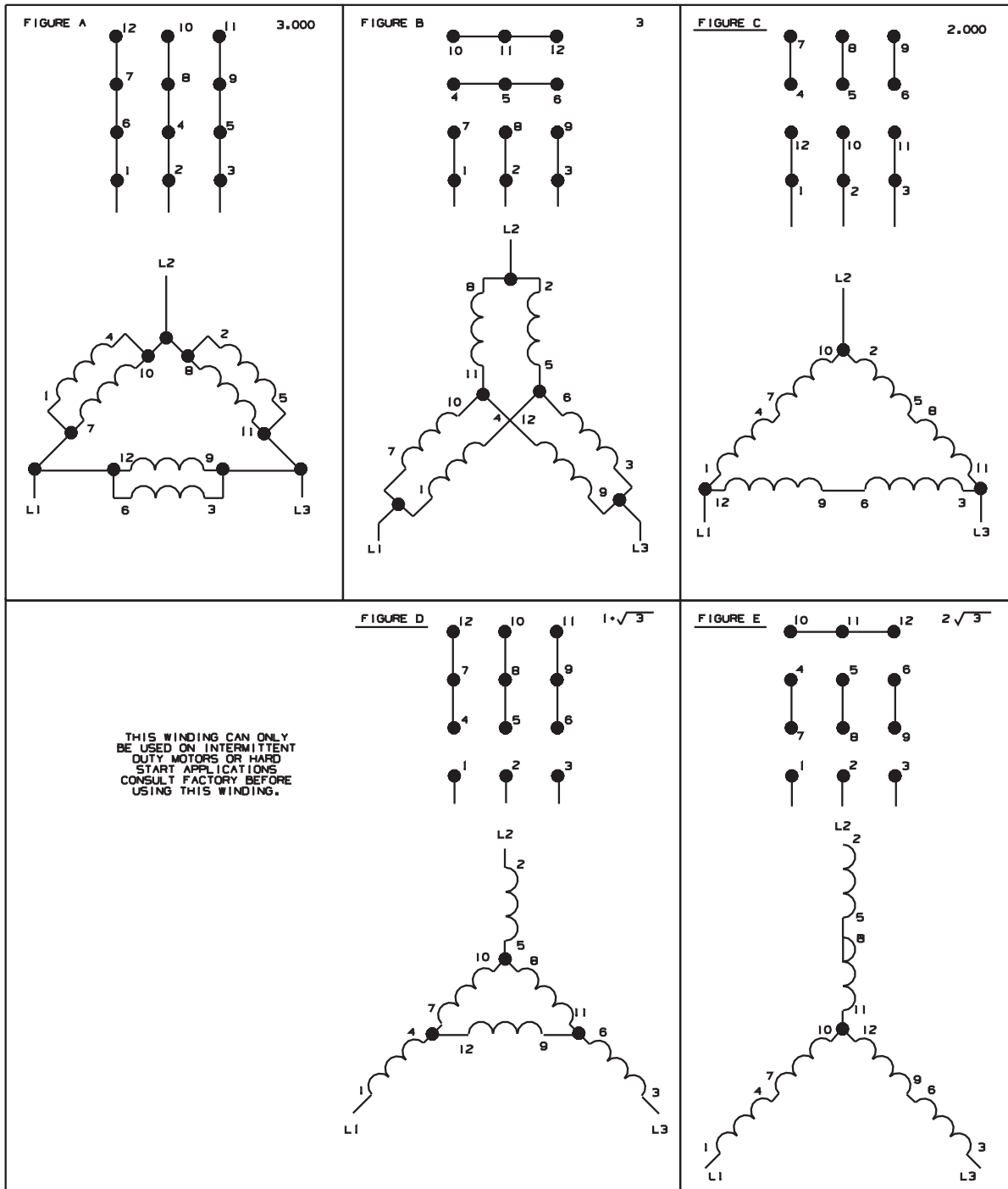
Class of control system

Title of this circuit
Voltage of this circuit

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 BID1 (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

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12

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14

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16

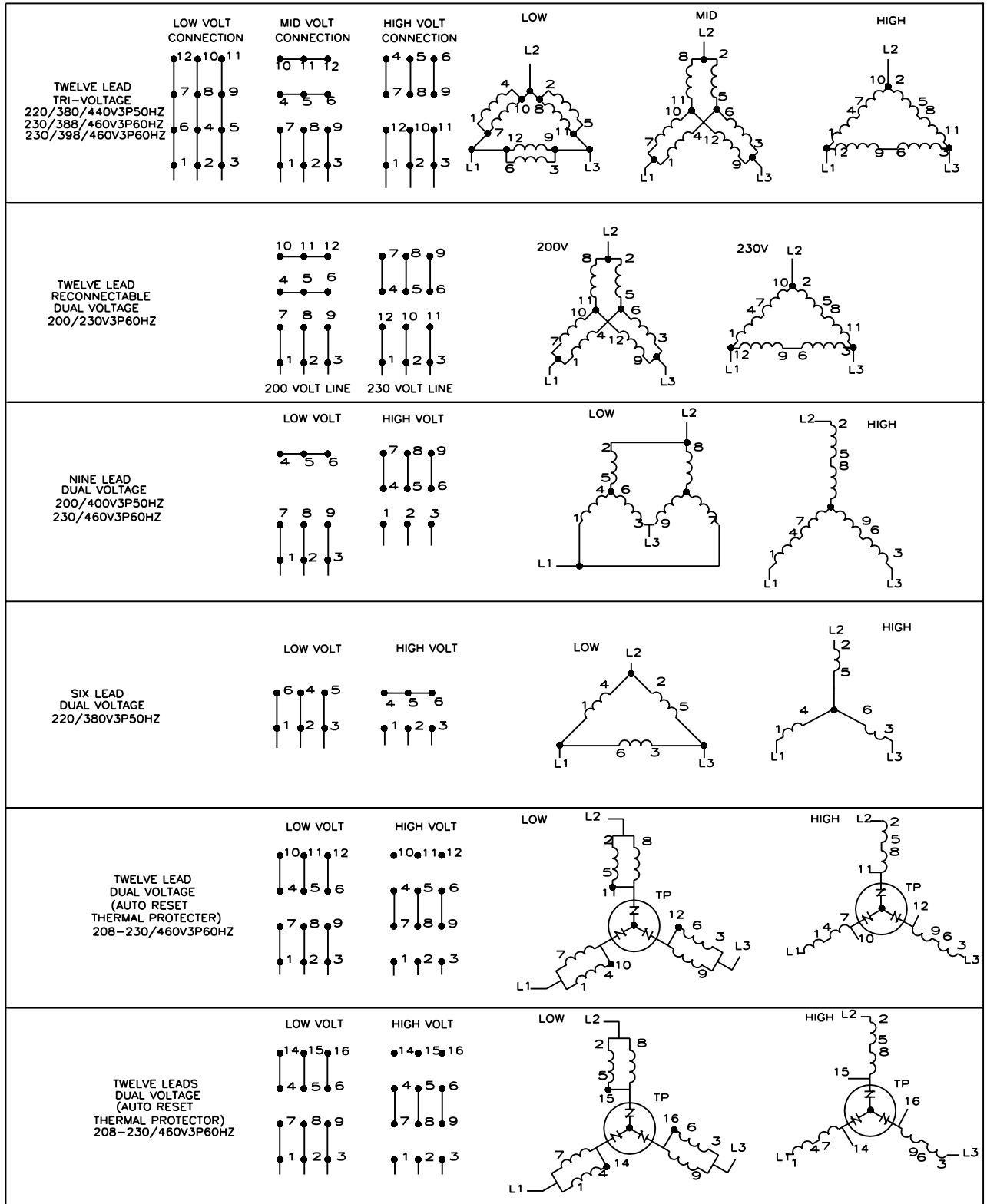
17

BMP850029

MOTOR CONNECTION DIAGRAMS

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

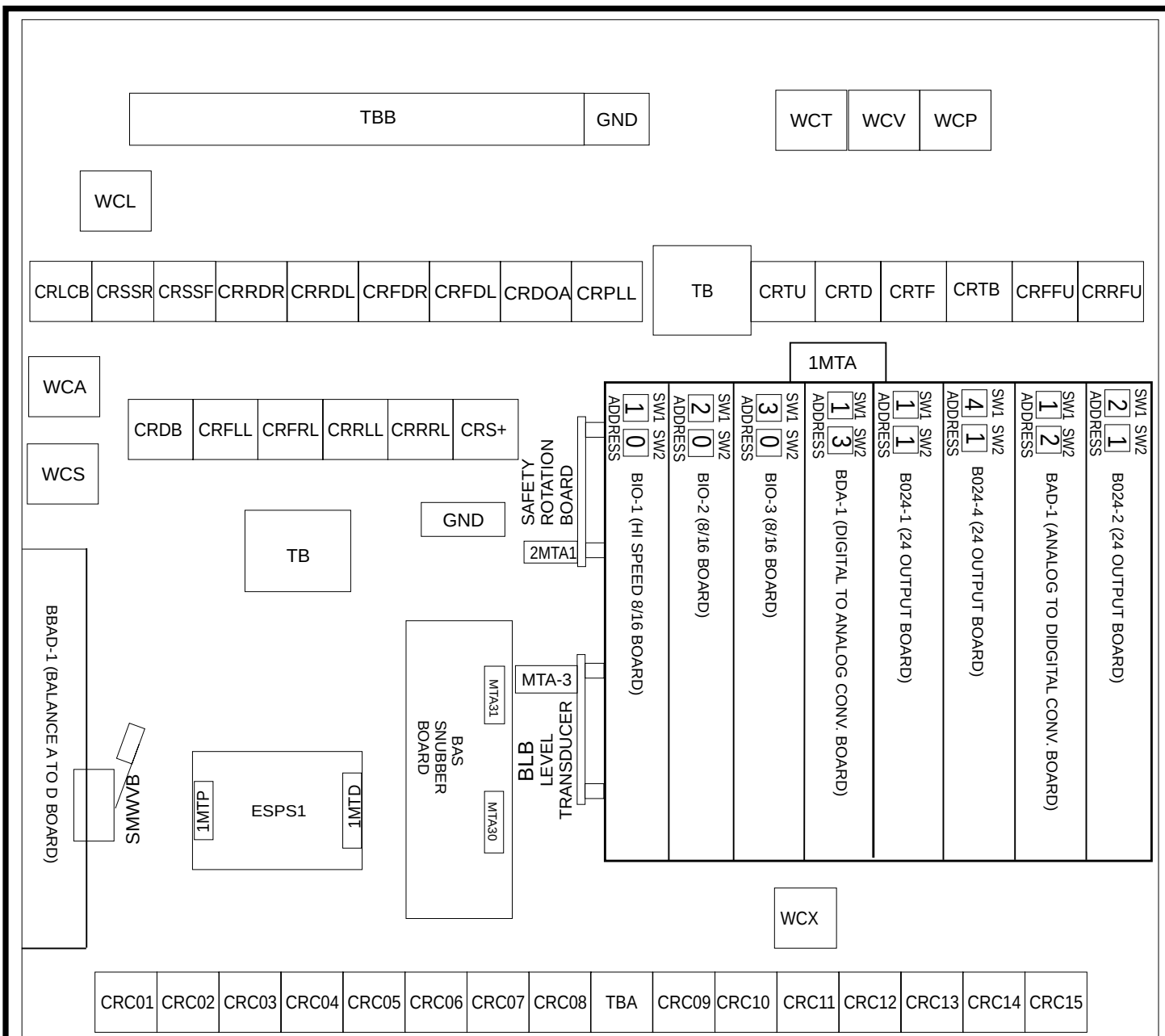
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W80008

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

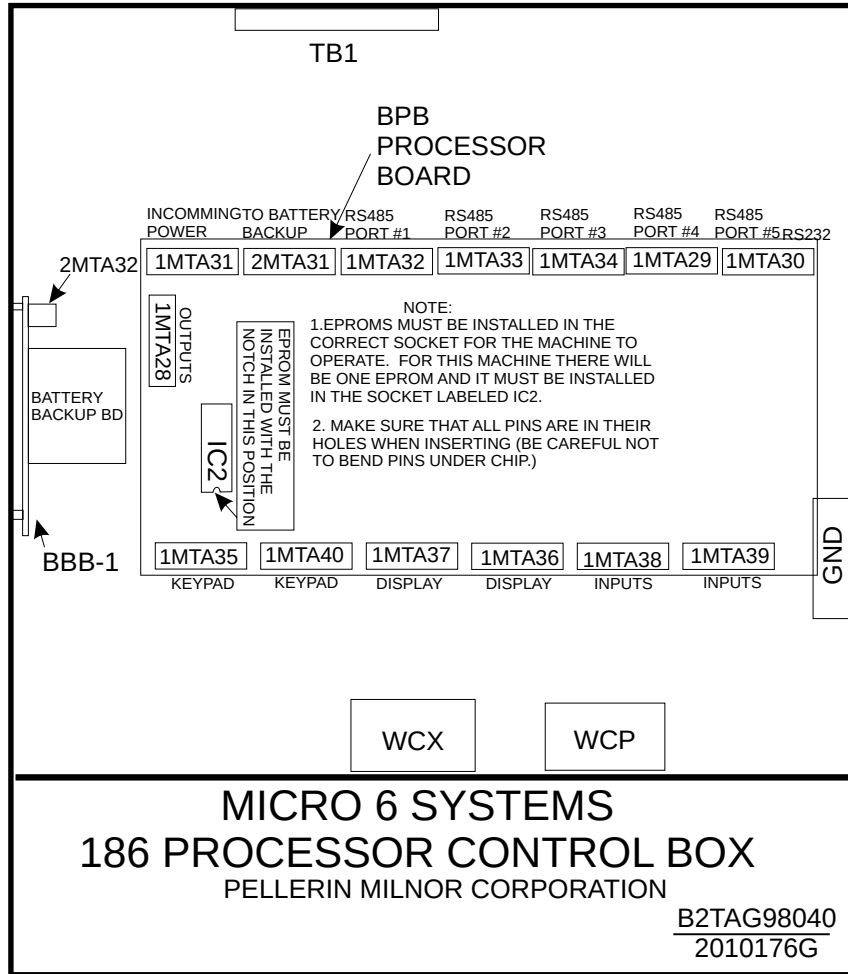
W80008
2001253A



MICRO 6 SYSTEMS 68036F5P W/ DRYEL LOW VOLTAGE CONTROL BOX

PELLERIN MILNOR CORPORATION

B2T2007014
2009245G

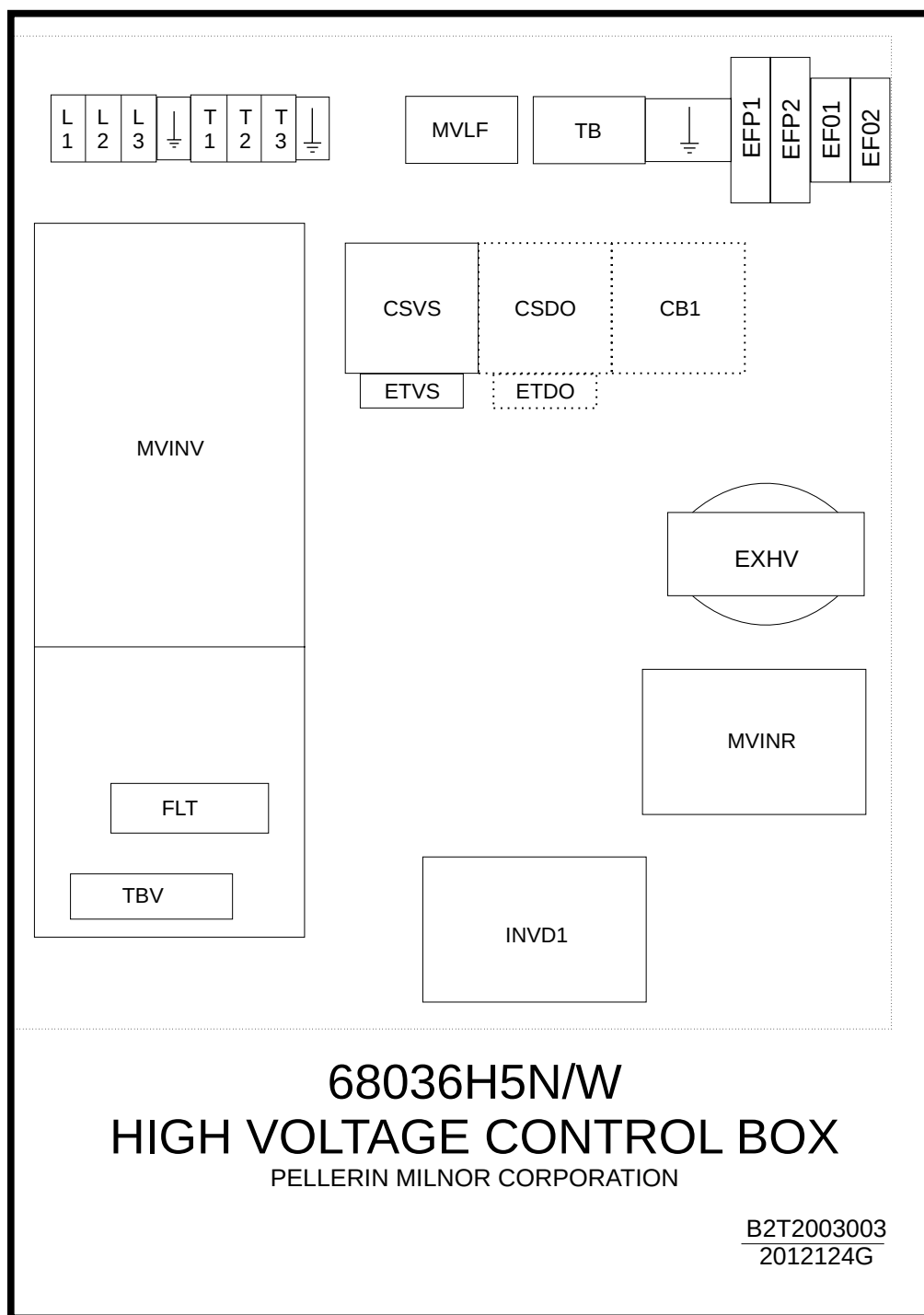


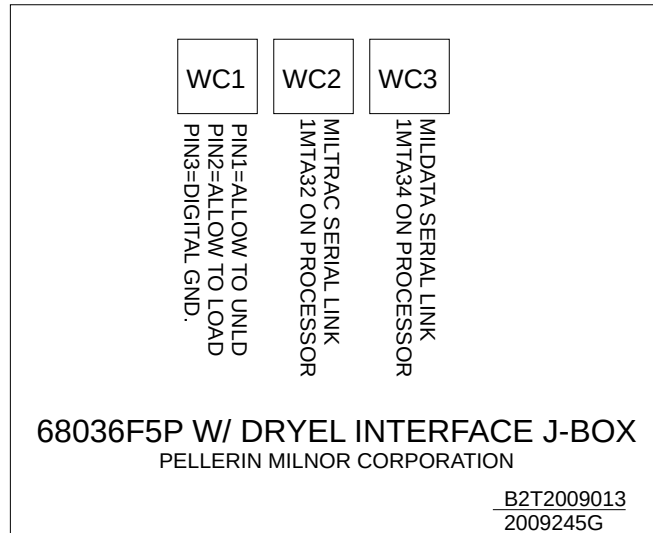
W6F3ZSTG1
MICRO 6 SYSTEMS
CONTROL BOX LAYOUTS
PELLERIN MILNOR CORPORATION

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

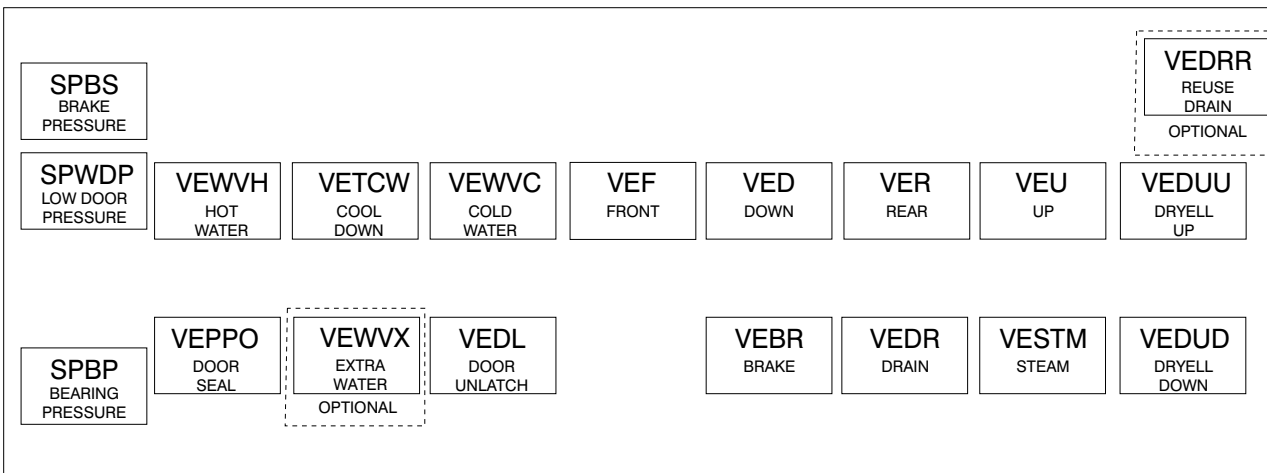
MICRO 6 SYSTEMS
WASHER EXTRACTOR
CONTROL BOARDS INPUTS/OUTPUTS
PELLERIN MILNOR CORPORATION

B2TAG96034
20121245G



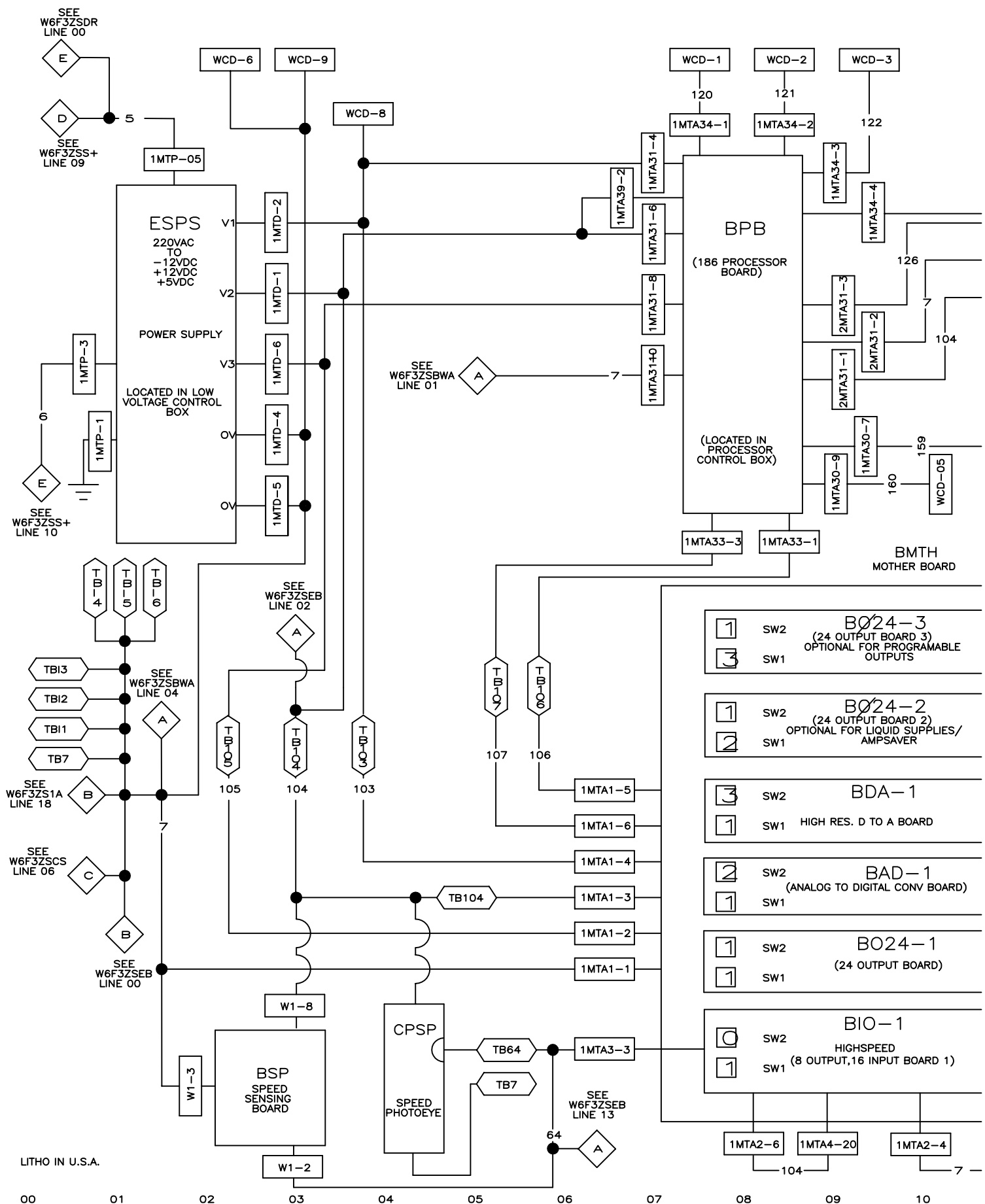


W6F3ZSTG2
MICRO 6 SYSTEMS
CONTROL BOX LAYOUTS
PELLERIN MILNOR CORPORATION



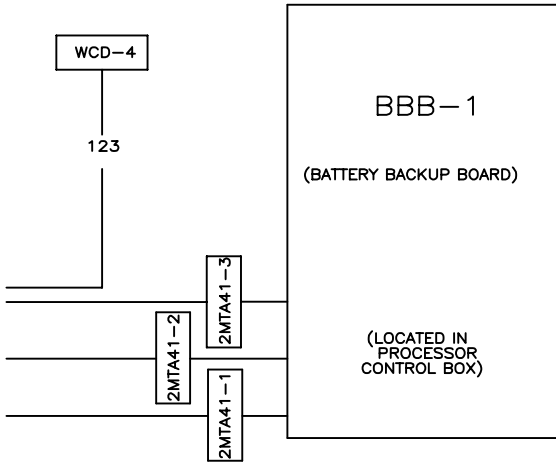
AIR VALVE BOX
68036F5P
PELLERIN MILNOR CORPORATION

B2T2009007
2009173A



LITHO IN U.S.A.

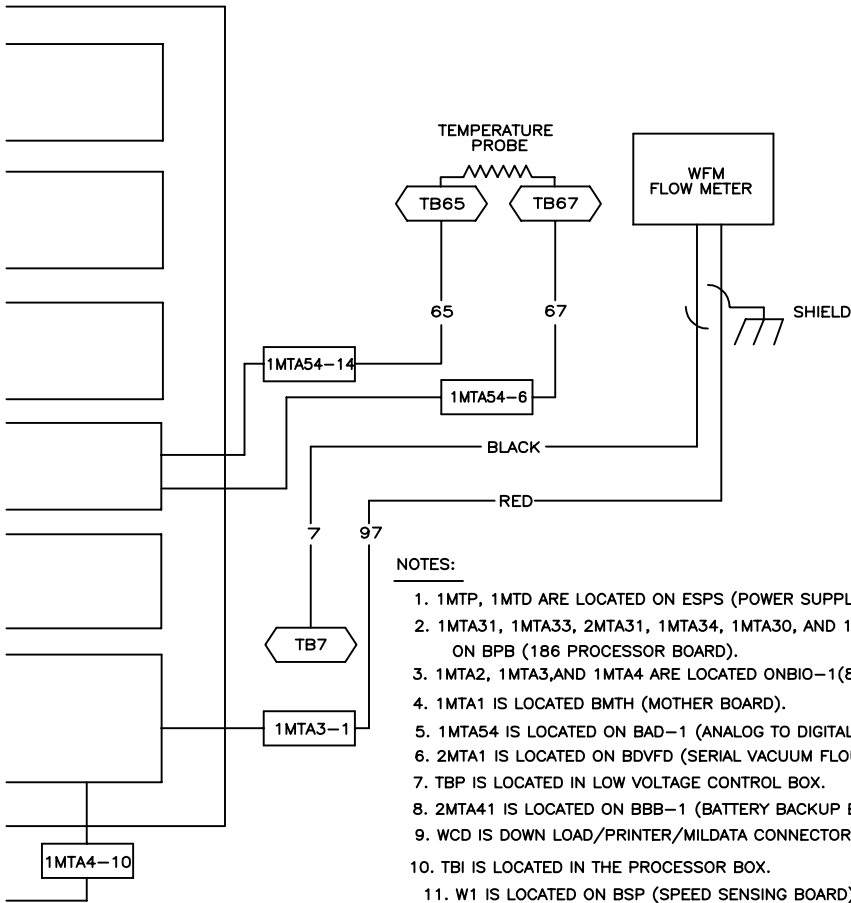
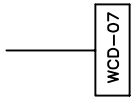
W6F3ZSBWA
2009264B



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:

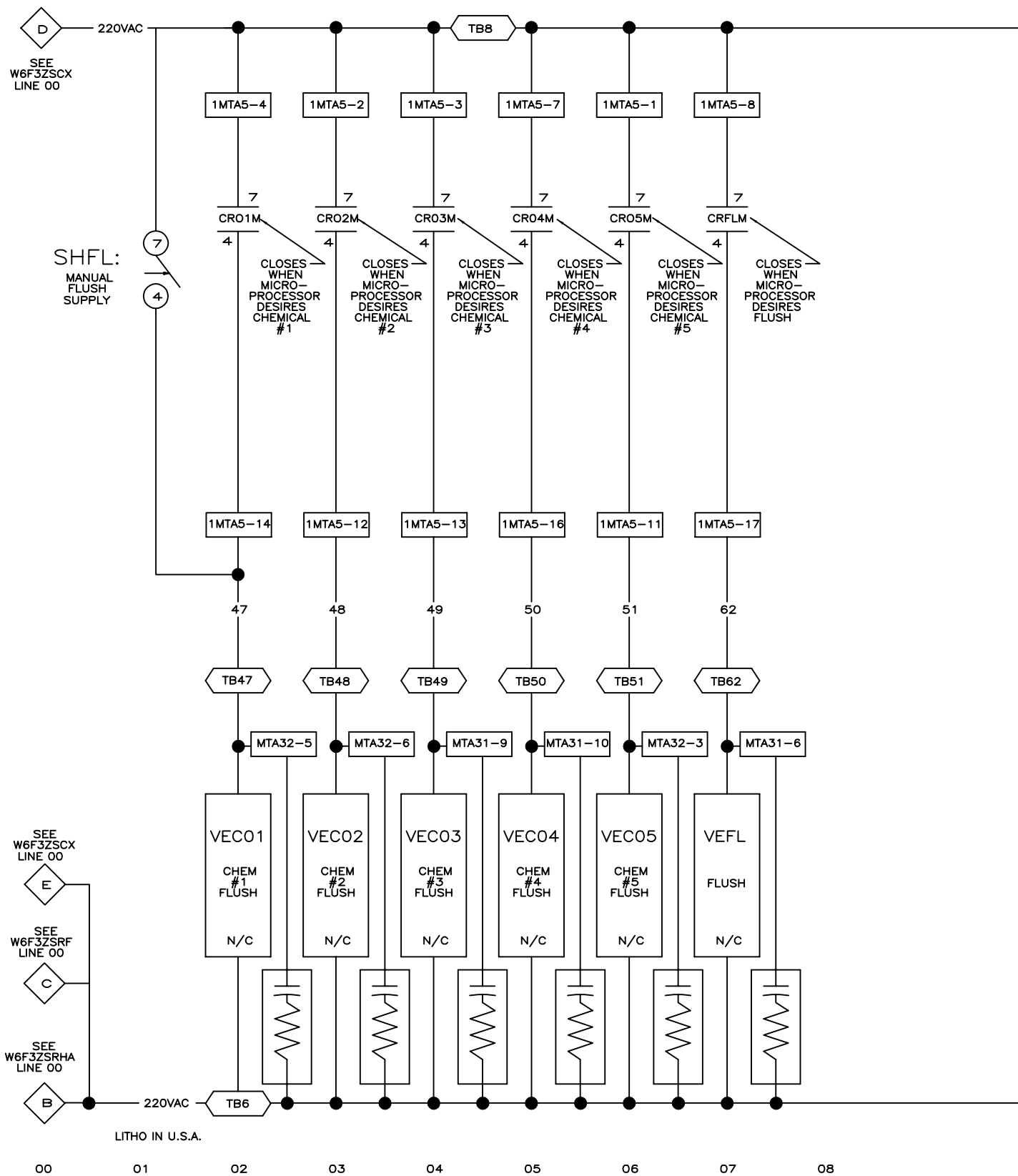
1. 1MTP, 1MTD ARE LOCATED ON ESPS (POWER SUPPLY).
2. 1MTA31, 1MTA33, 2MTA31, 1MTA34, 1MTA30, AND 1MTA39 ARE LOCATED ON BPB (186 PROCESSOR BOARD).
3. 1MTA2, 1MTA3, AND 1MTA4 ARE LOCATED ON BIO-1 (8 OUTPUT-16 INPUT BOARD).
4. 1MTA1 IS LOCATED BMTH (MOTHER BOARD).
5. 1MTA54 IS LOCATED ON BAD-1 (ANALOG TO 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).

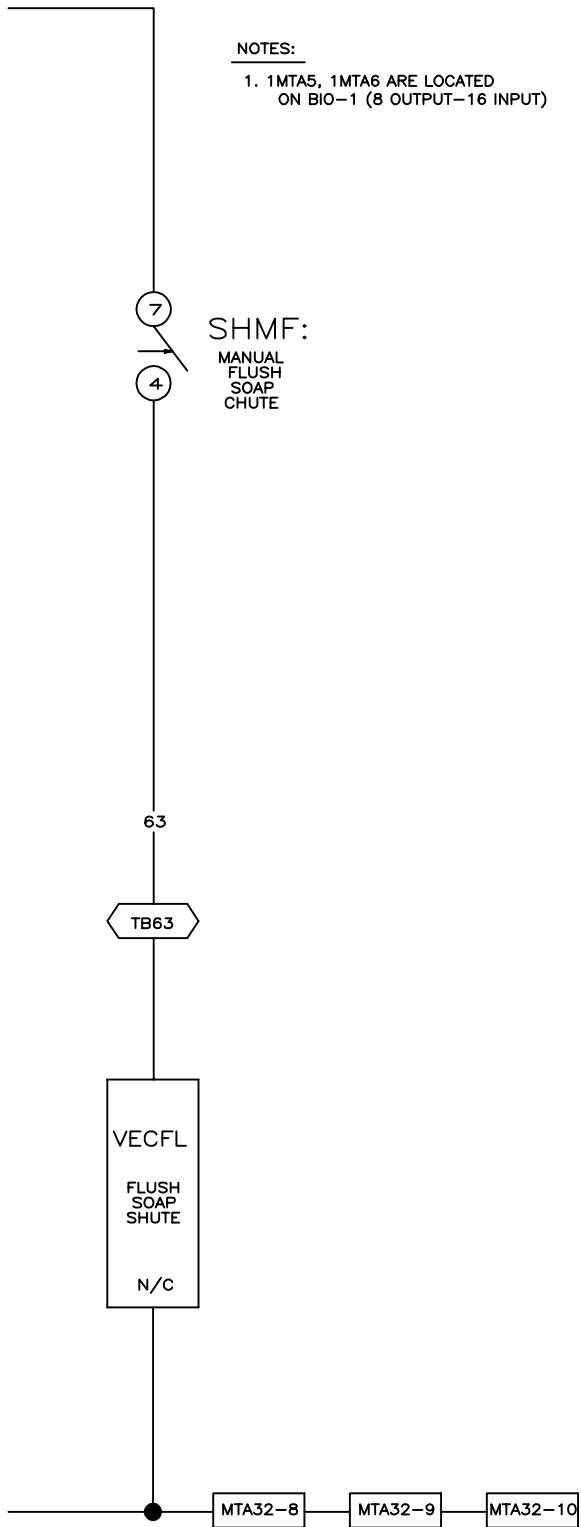
W6F3ZSBWA

MICRO 6 SYSTEMS SERIAL CONTROLS MARK V

SCHEMATIC: BOARD TO BOARD WIRING

PELLERIN MILNOR CORPORATION





W6F3ZSCF

MICRO 6 SYSTEMS SERIAL CONTROLS

MARK V

SCHEMATIC: FLUSHING SUPPLIES

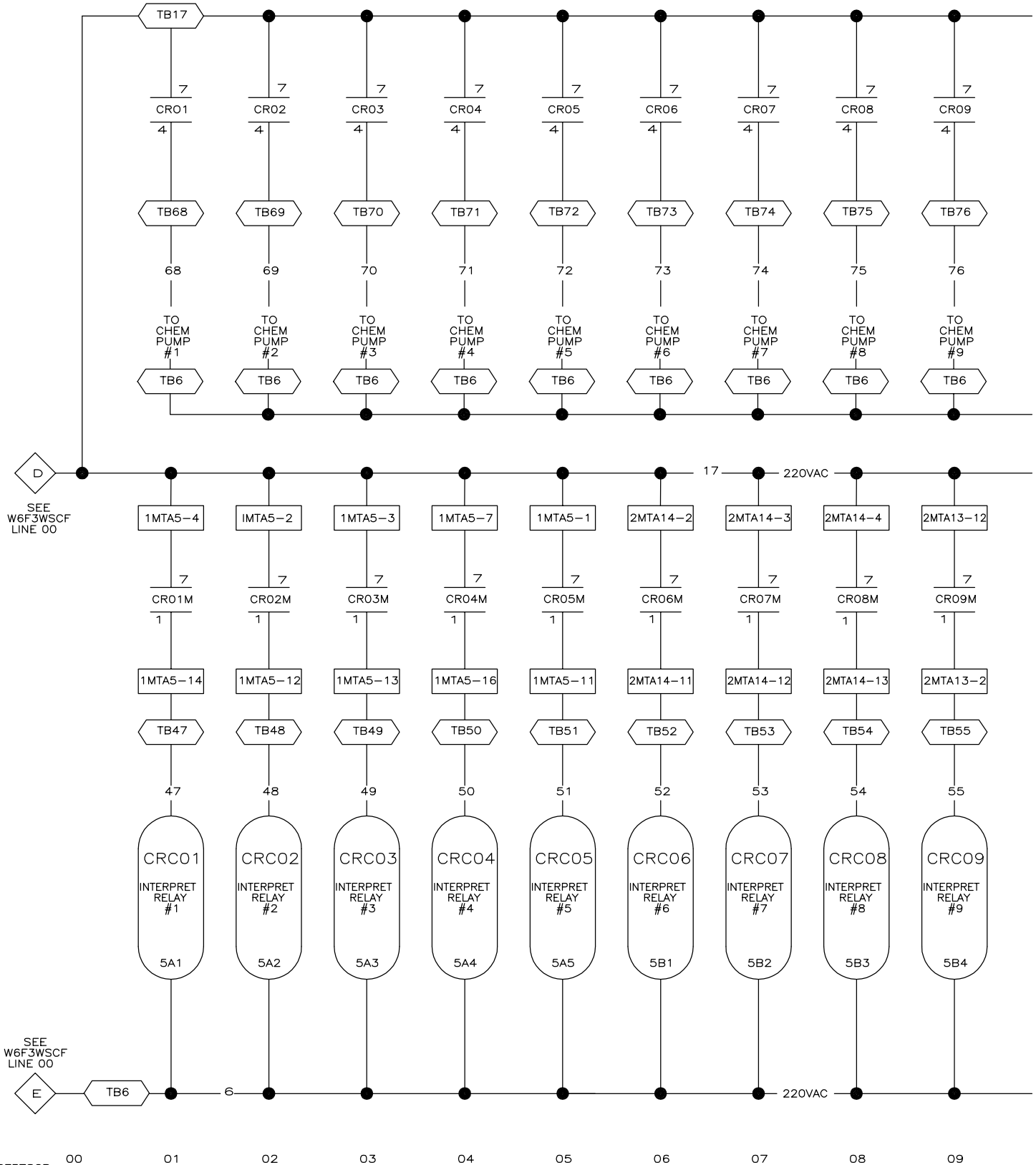
220V1P50HZ/240V1P60HZ

PELLERIN MILNOR CORPORATION

W6F3ZSCF
2009264B

W6F3ZSCF
2009264B

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.



W6F3ZSCP
2009264B

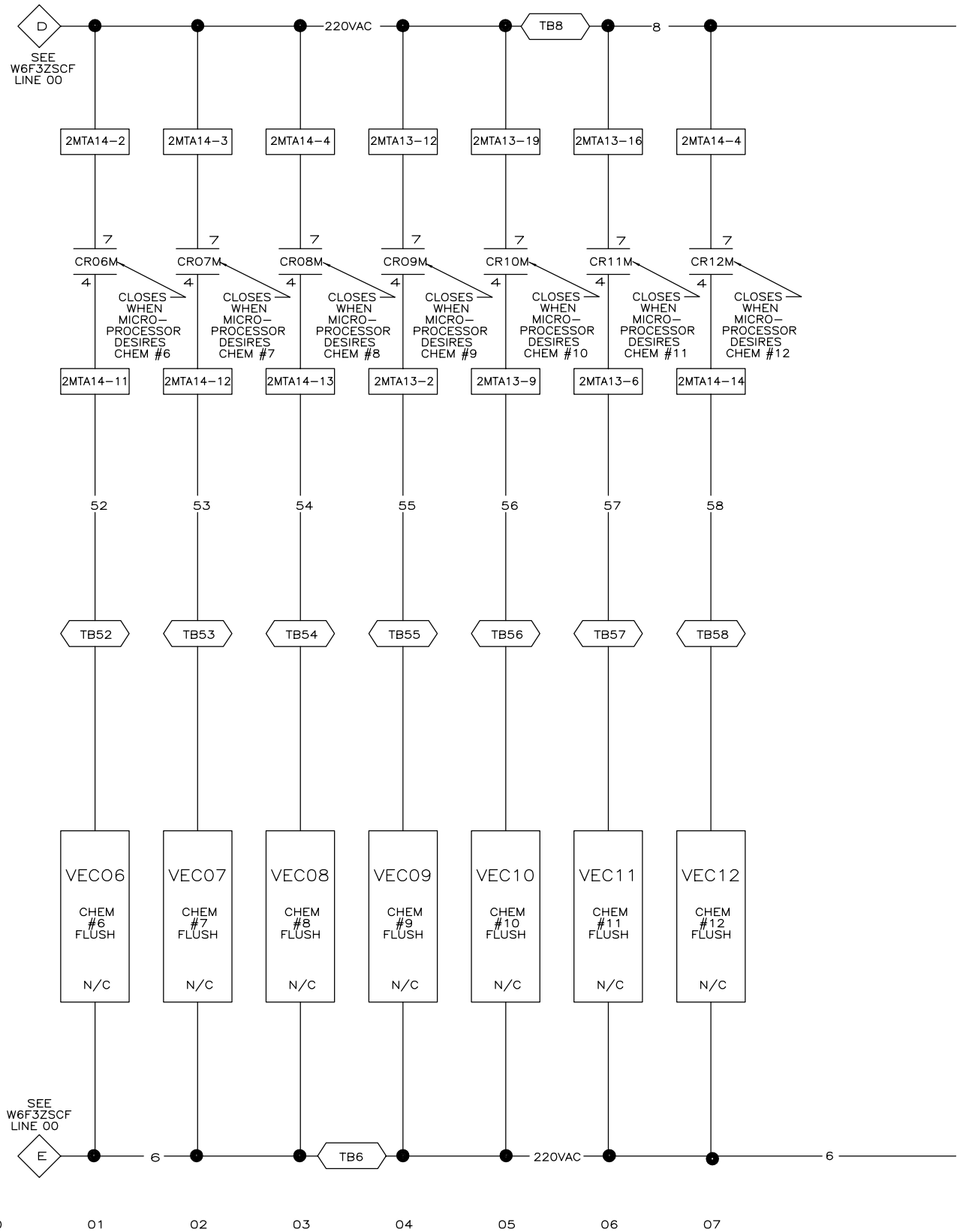


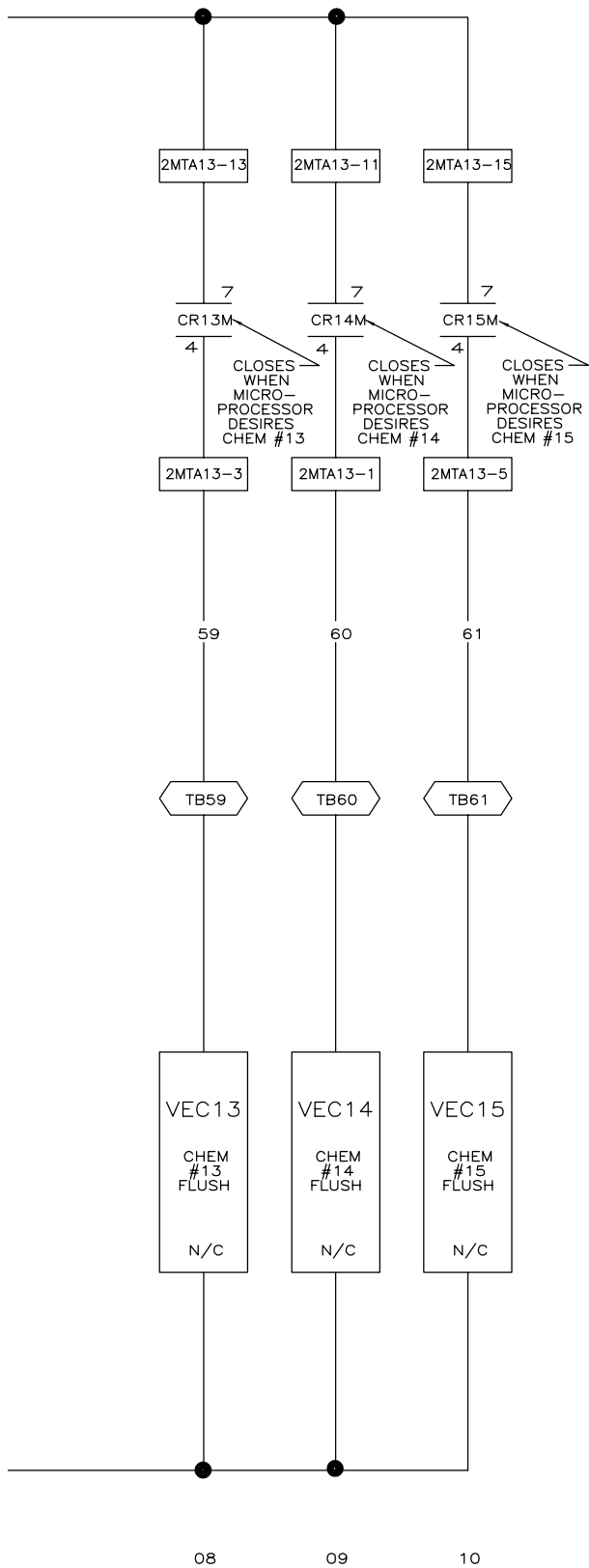
— DOTTED LINES REPRESENT
SIGNALS TO OTHER MILNOR
MACHINES SEE INDIVIDUAL
MACHINE SCHEMATICS FOR
CONNECTION. MTA & PLUG
CONNECTIONS MAY BE DIFFERENT
FOR OTHER MODELS.

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.

W6F3ZSCS
MICRO 6 SYSTEMS
MARK V
SCHEMATIC: CHEMICAL SAVE (OPTIONAL)
PELLERIN MILNOR CORPORATION





W6F3ZSCX

MICRO 6 SYSTEMS

SERIAL CONTROLS

MARK V

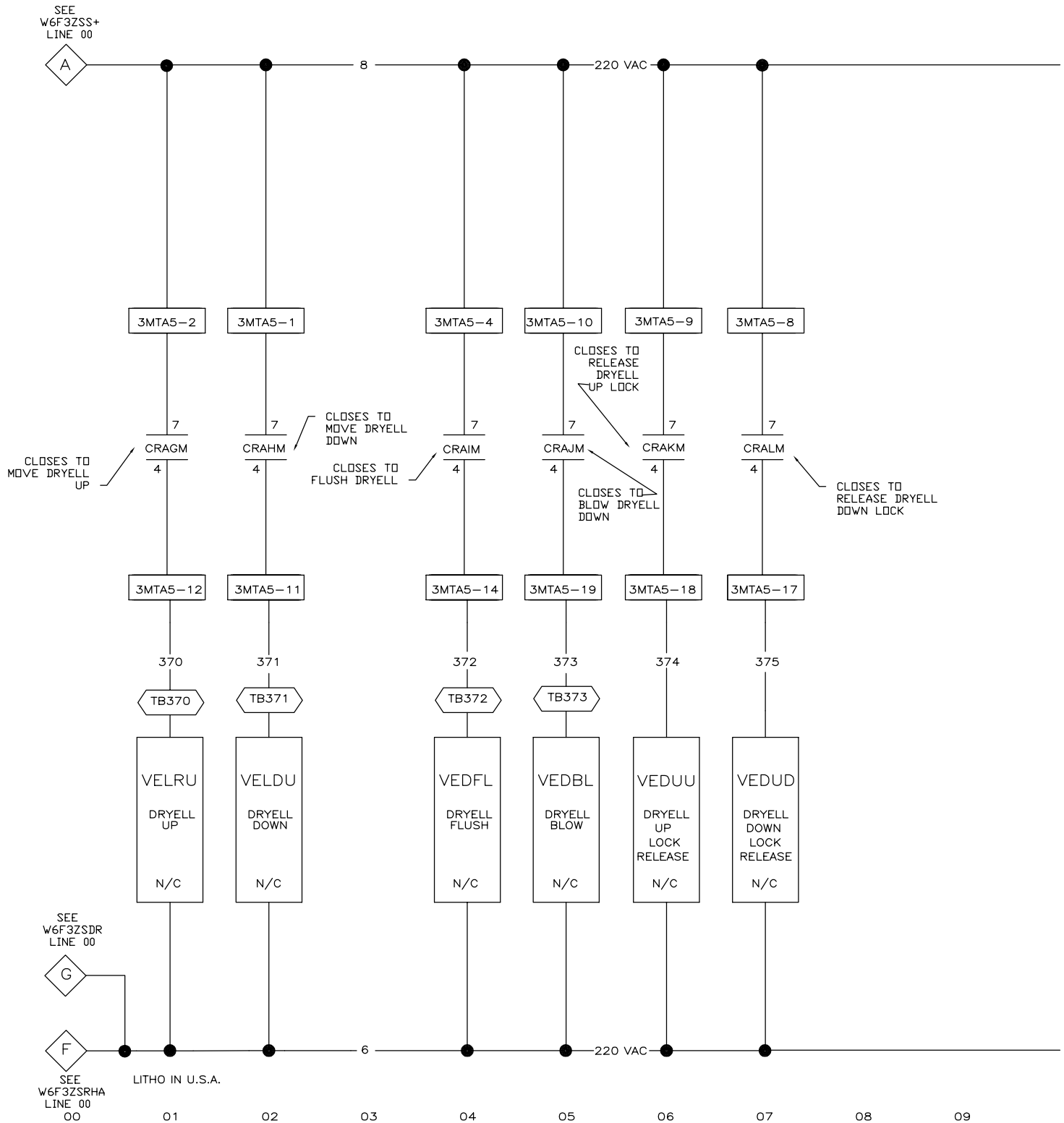
SCHEMATIC: CENTRAL LIQUID SUPPLY

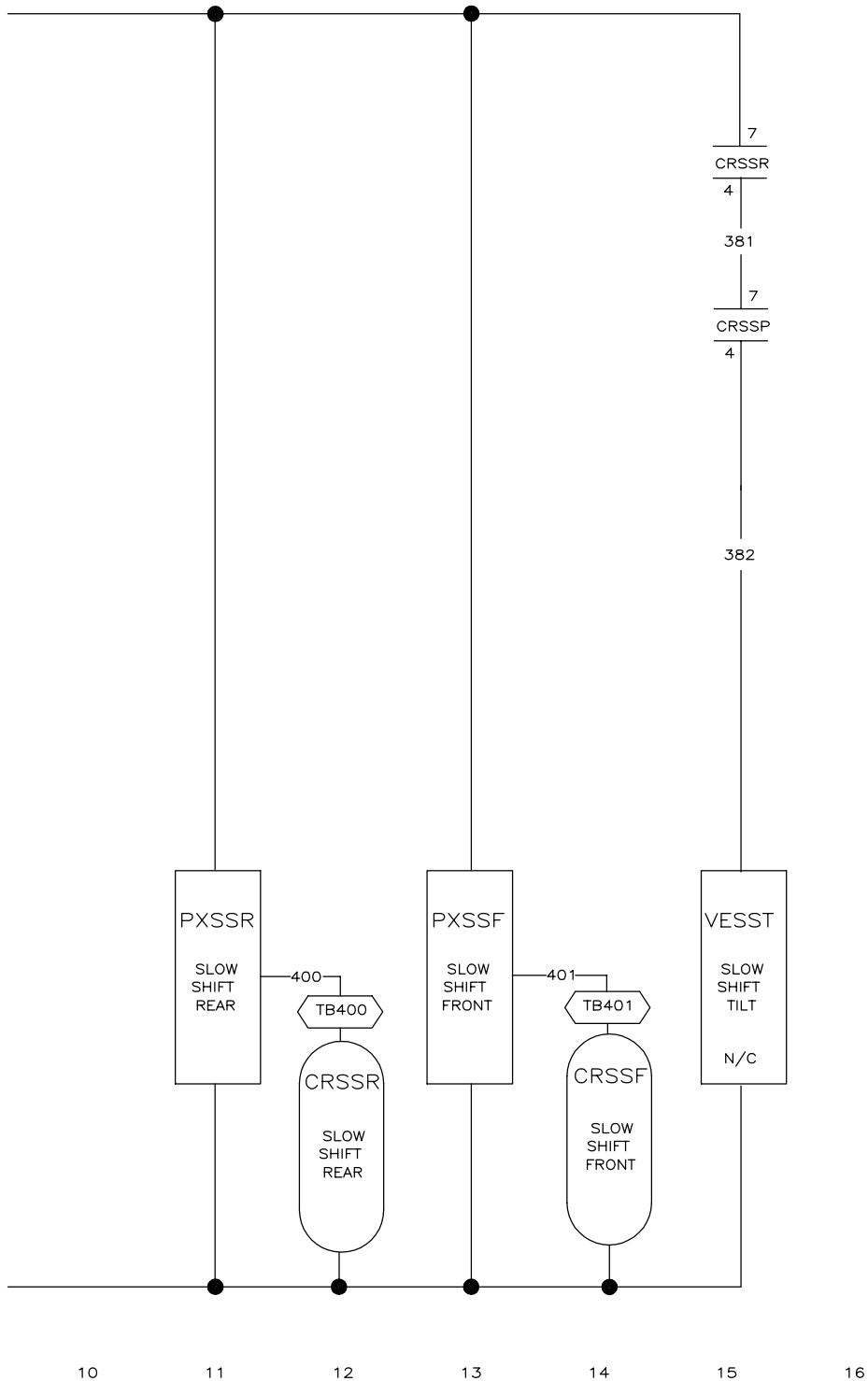
FLUSH 6 THRU 15

PELLERIN MILNOR CORPORATION

W6F3ZSCX
2009264B

W6F3ZSCX
2009264B





W6F3ZSDE

MICRO 6 SYSTEMS

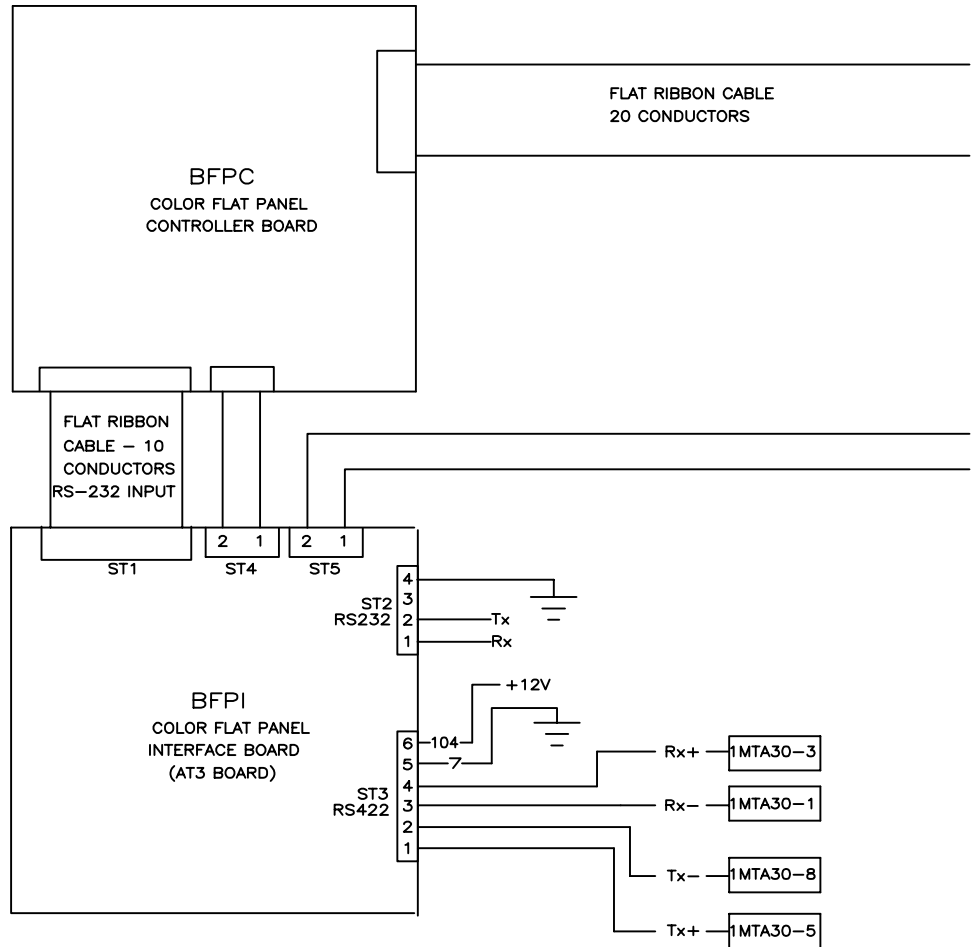
MARK V CONTROLS

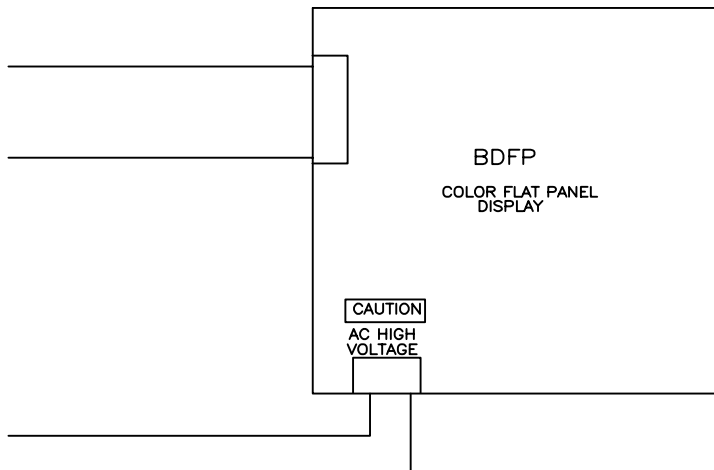
SCHEMATIC: DRYELL CONTROLS

220V1P50HZ/240V1P60HZ
PELLERIN MILNOR CORPORATION

W6F3ZSDE
2009264B

W6F3ZSDE
2009264B





NOTES

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

W6F3ZSDF

MICRO 6 SYSTEMS MARK V

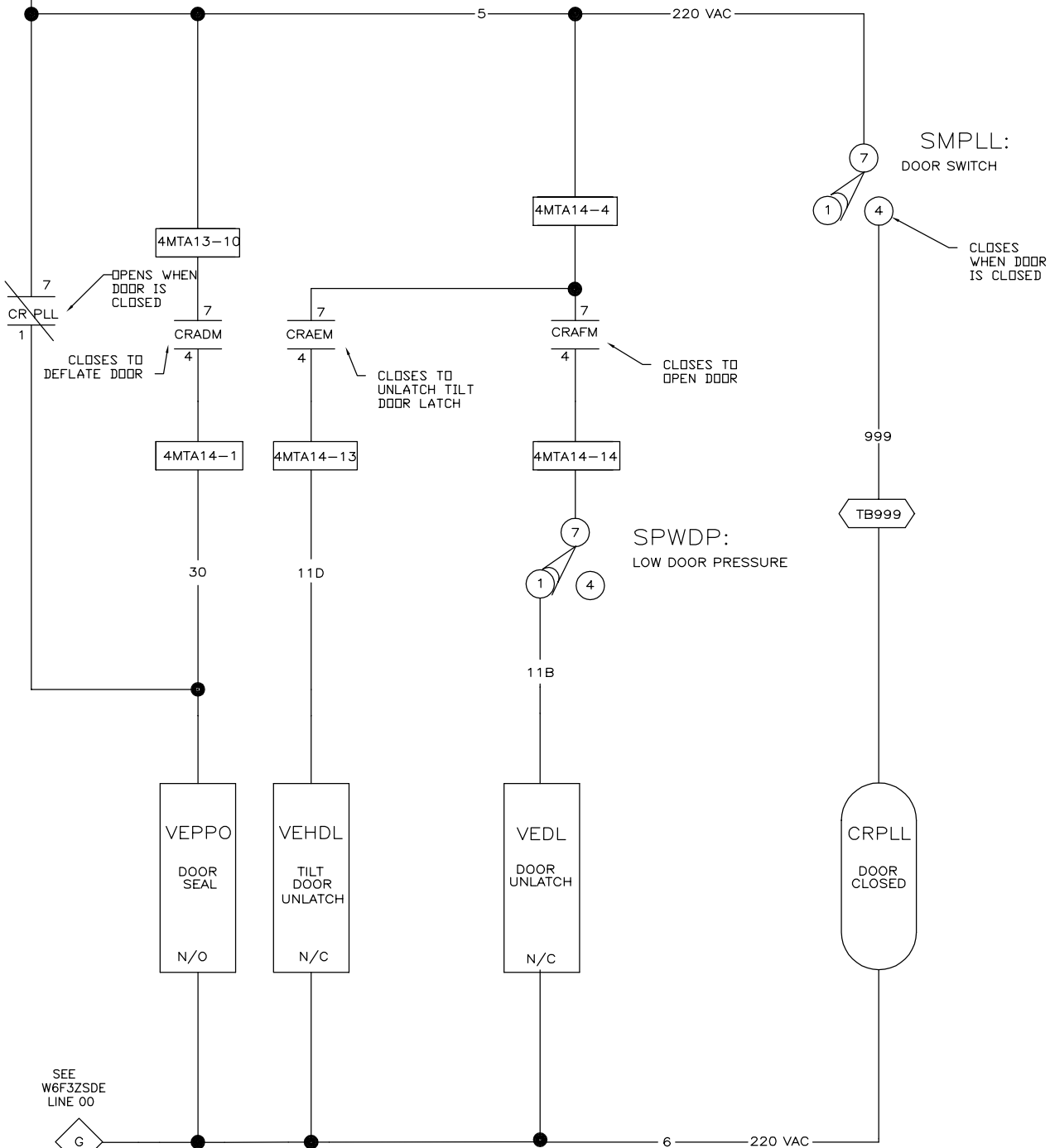
SCHEMATIC: COLOR FLAT PANEL DISPLAY

PELLERIN MILNOR CORPORATION

W6F3ZSDF
2009264B

SEE
W6F3ZSBWA
LINE 00

E



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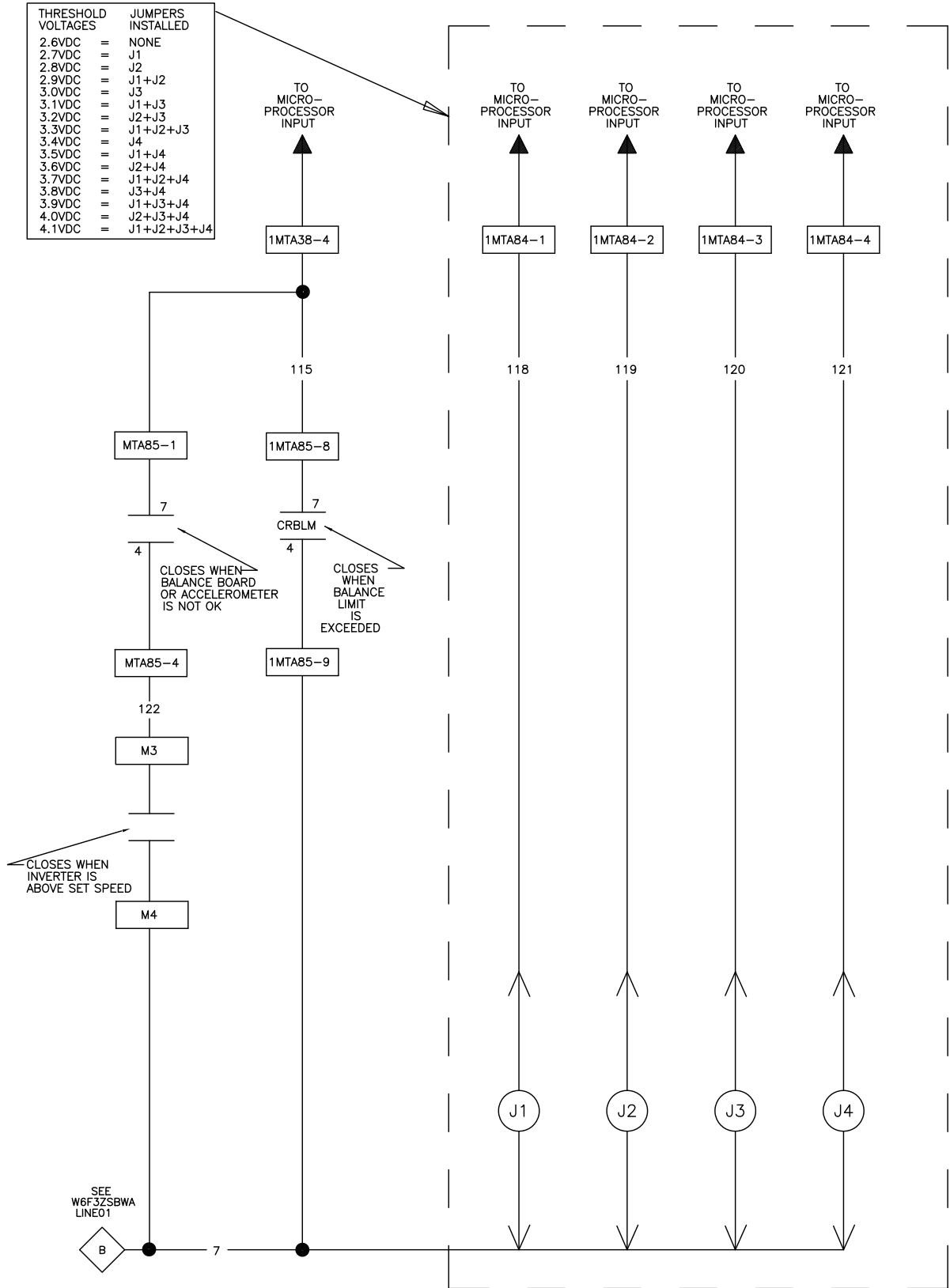
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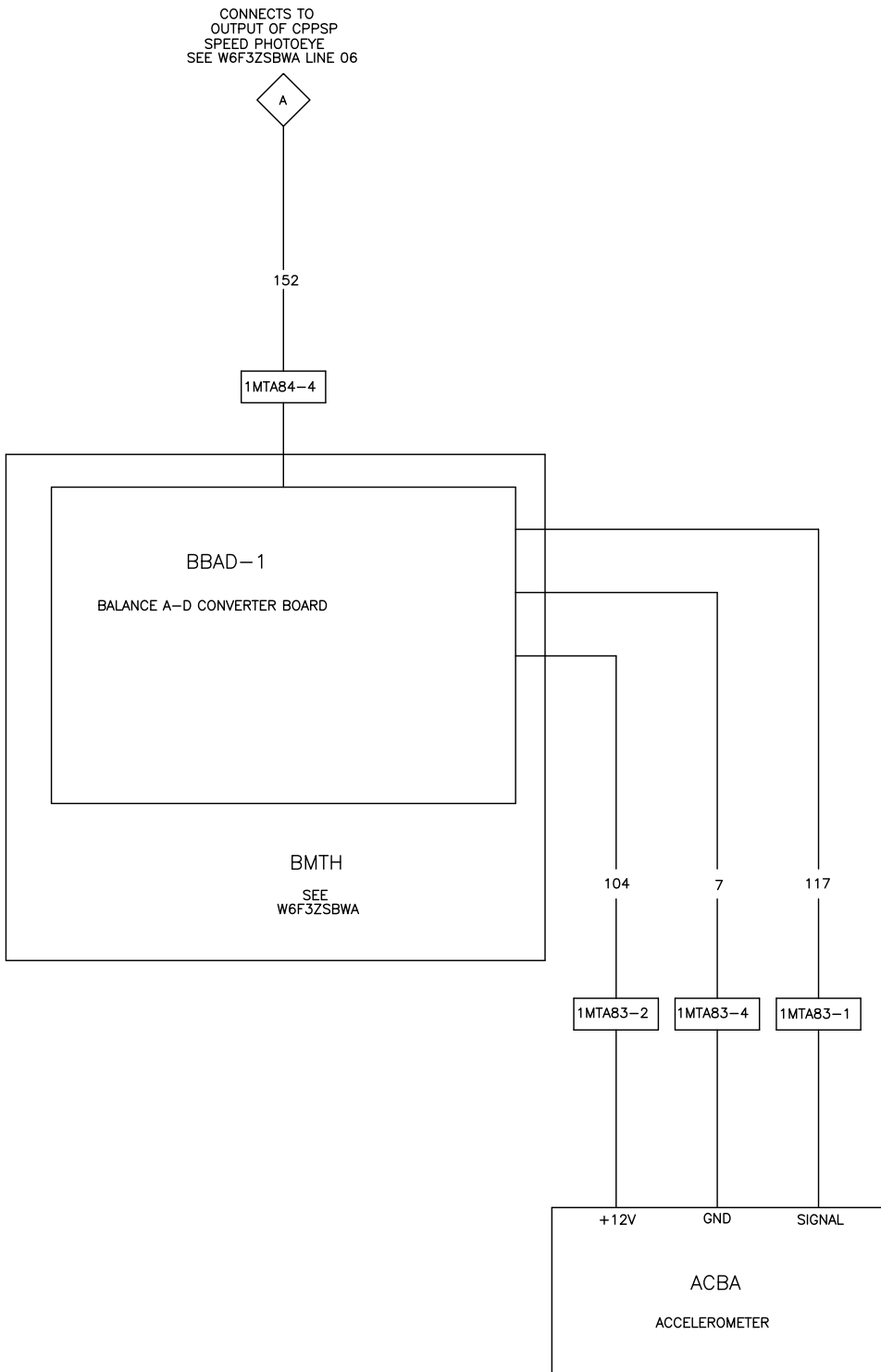
W6F3ZSDR
2009264B

W6F3ZSDR
MICRO 6 SYSTEMS
MARK V CONTROLS
SCHEMATIC:DOOR
220V1P50HZ/240V1P60HZ
PELLERIN MILNOR CORPORATION

SPEED LIMIT THRESHOLD
INPUTS ARE TO LIMIT
SPEED IN EXTRACT WHEN
THE MACHINE IS OUT OF BALANCE.
JUMPERS ARE ADDED AT THE
FACTORY TO ADJUST FOR VARIATIONS
IN ACCELEROMETERS.

THRESHOLD VOLTAGES	JUMPERS INSTALLED
2.6VDC	= NONE
2.7VDC	= J1
2.8VDC	= J2
2.9VDC	= J1+J2
3.0VDC	= J3
3.1VDC	= J1+J3
3.2VDC	= J2+J3
3.3VDC	= J1+J2+J3
3.4VDC	= J4
3.5VDC	= J1+J4
3.6VDC	= J2+J4
3.7VDC	= J1+J2+J4
3.8VDC	= J3+J4
3.9VDC	= J1+J3+J4
4.0VDC	= J2+J3+J4
4.1VDC	= J1+J2+J3+J4





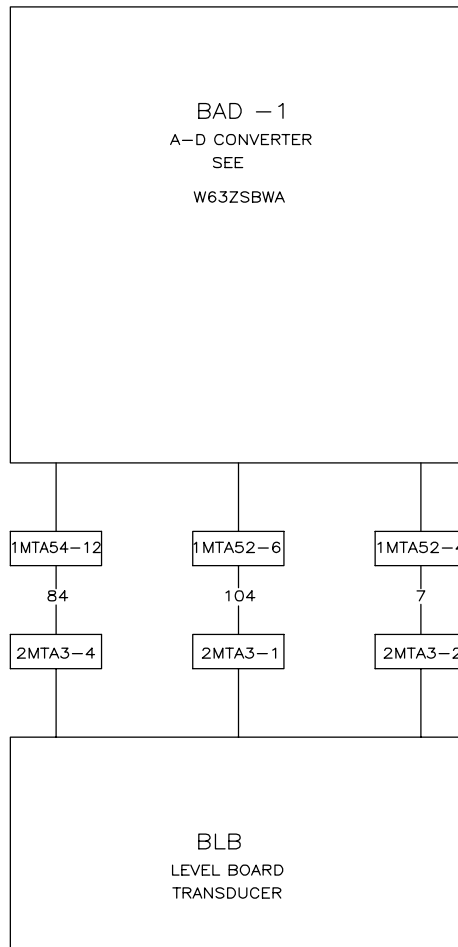
W6F3ZSEB

MICRO 6 SYSTEMS MARK V

SCHEMATIC: ELECTRONIC BALANCE

PELLERIN MILNOR CORPORATION

W6F3ZSEB
2019415B



W6F3ZSEC
MICRO 6 SYSTEMS
MARK V CONTROLS
SCHEMATIC:LEVEL TRANSDUCER
PELLERIN MILNOR CORPORATION

SEE
W6F3ZSHD
LINE 01

SEE
W6F3ZSS+
LINE 00

SEE
W6F3ZSS+
LINE 09

EV05

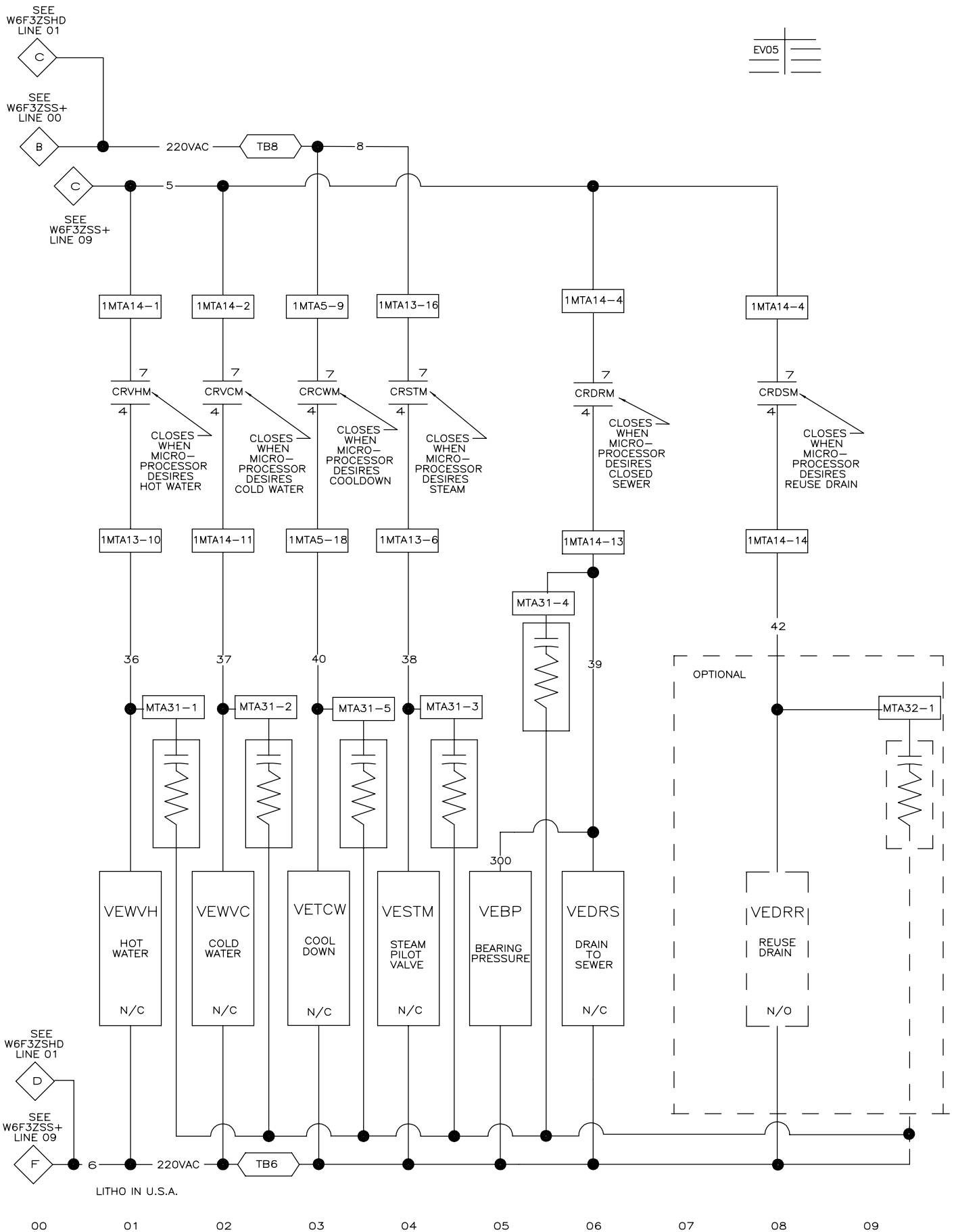
SEE
W6F3ZSHD
LINE 01

SEE
W6F3ZSS+
LINE 09

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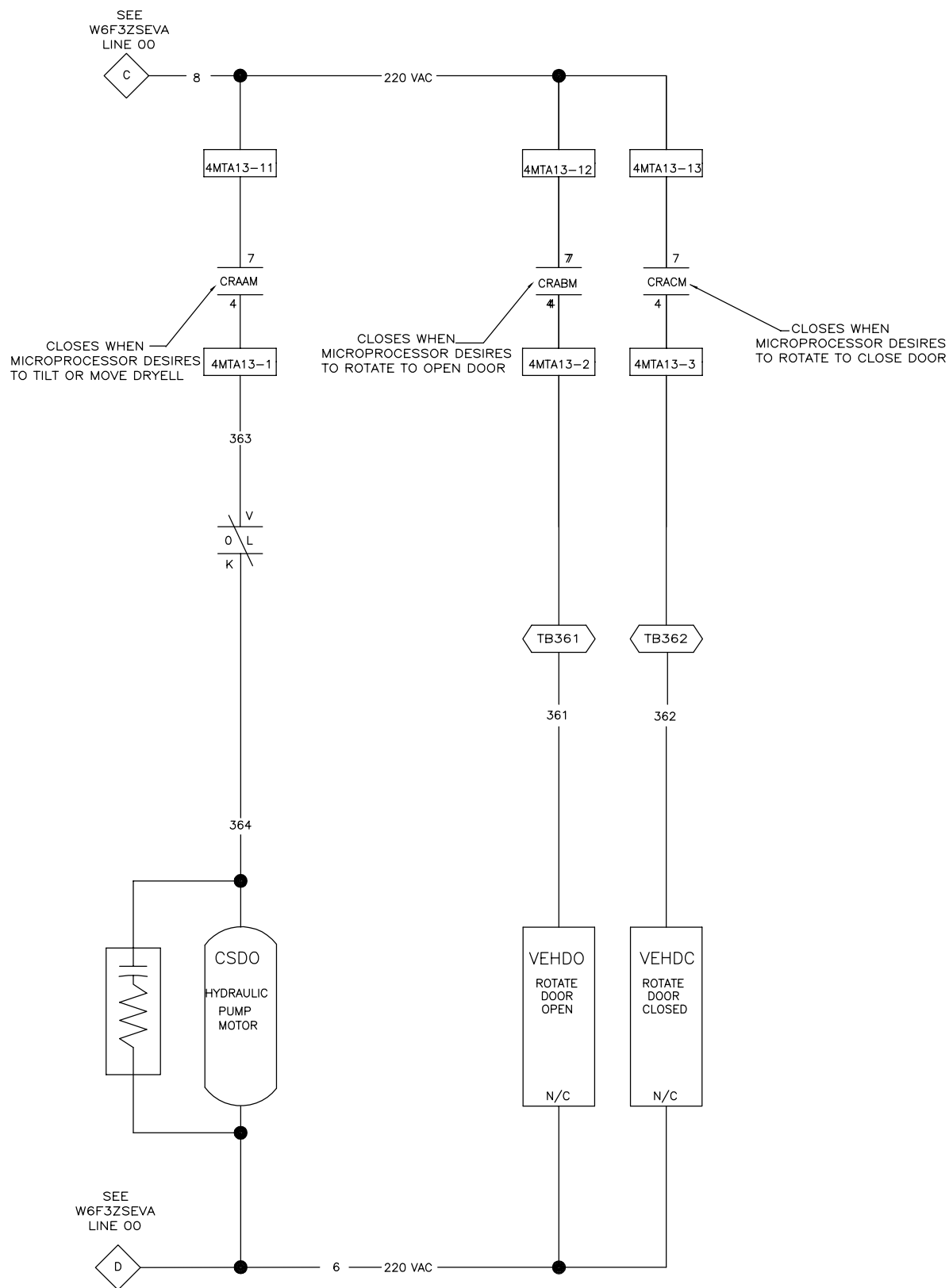
00 01 02 03 04 05 06 07 08 09

W6F3ZSEVA
2009264B



W6F3ZSEVA
MICRO 6 SYSTEMS
MARK V CONTROLS
SCHEMATIC: ELECTRICAL VALVES
220V1P50HZ/240V1P60HZ
PELLERIN MILNOR CORPORATION

W6F3ZSEVA
2009264B



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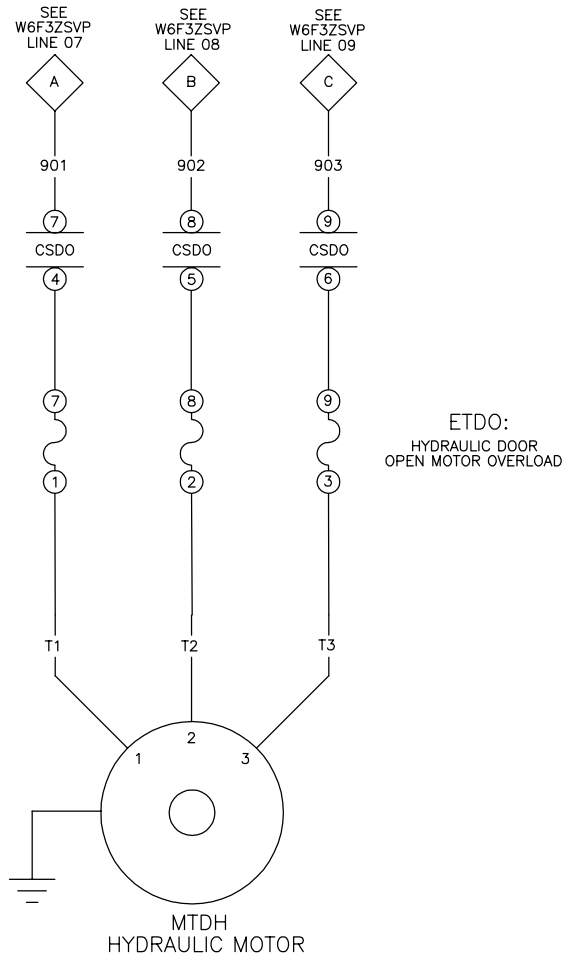
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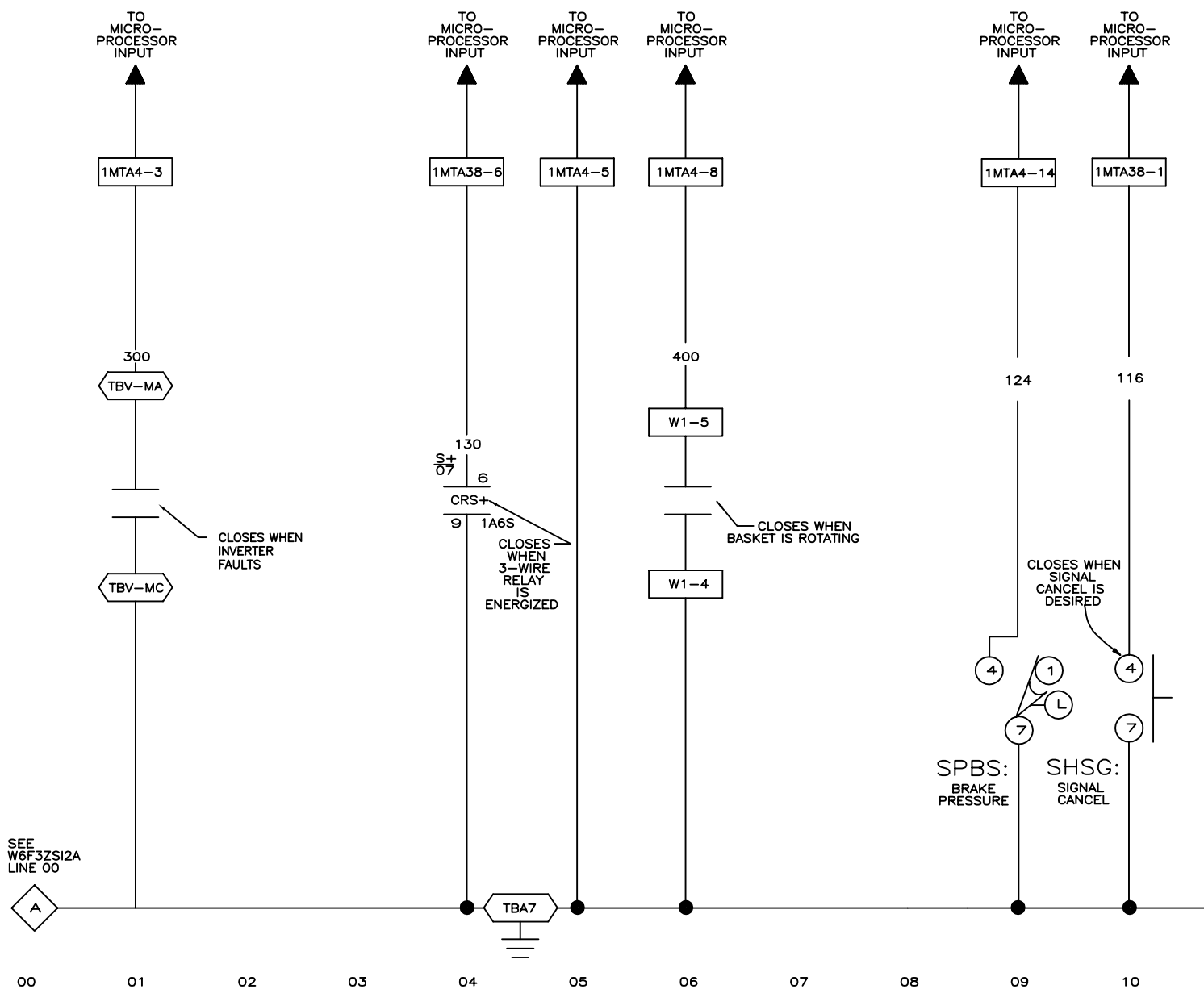
W6F3ZSHD

MICRO 6 SYSTEMS

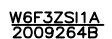
MARK V CONTROLS

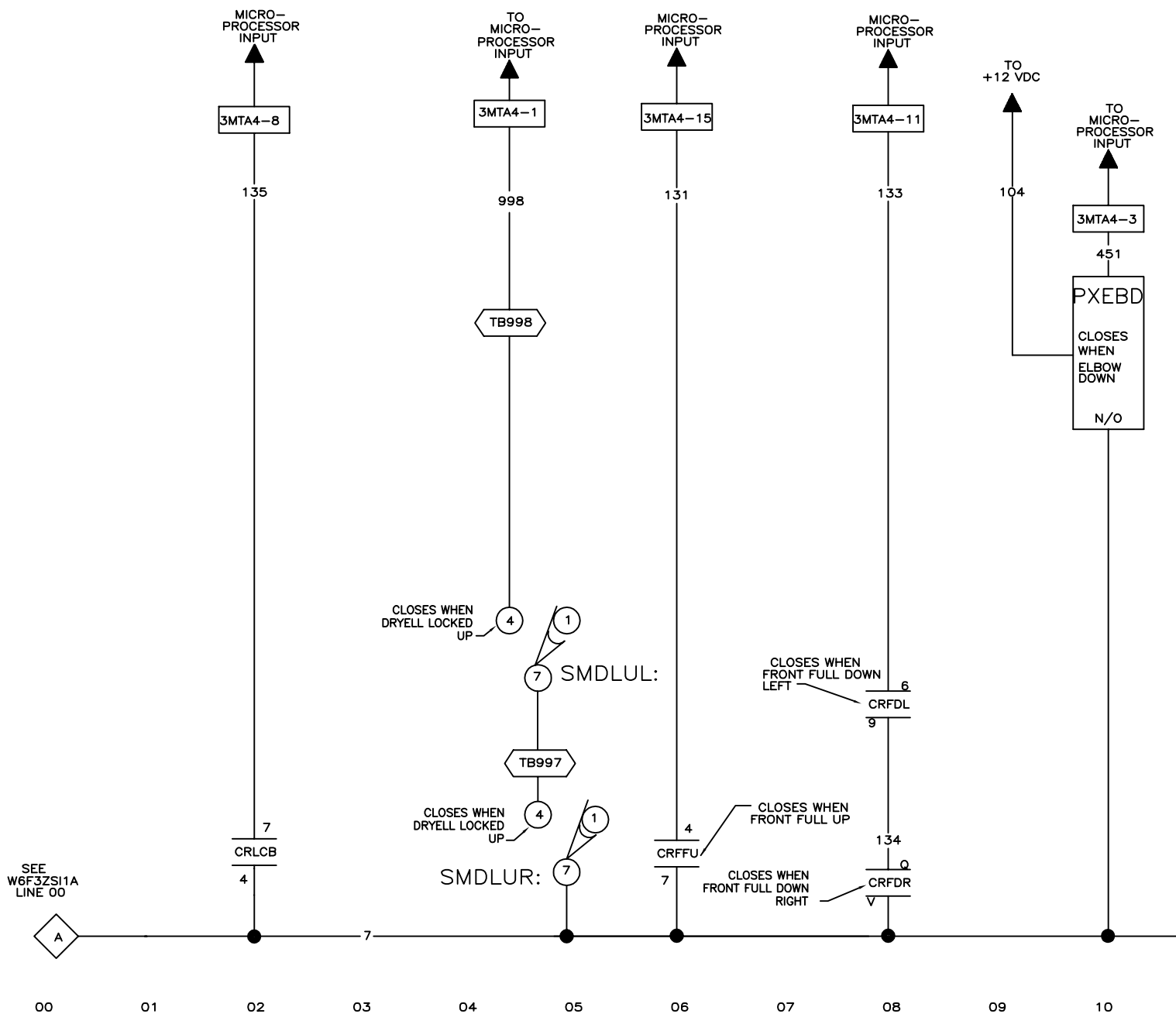
SCHEMATIC; HYDRAULIC DOOR

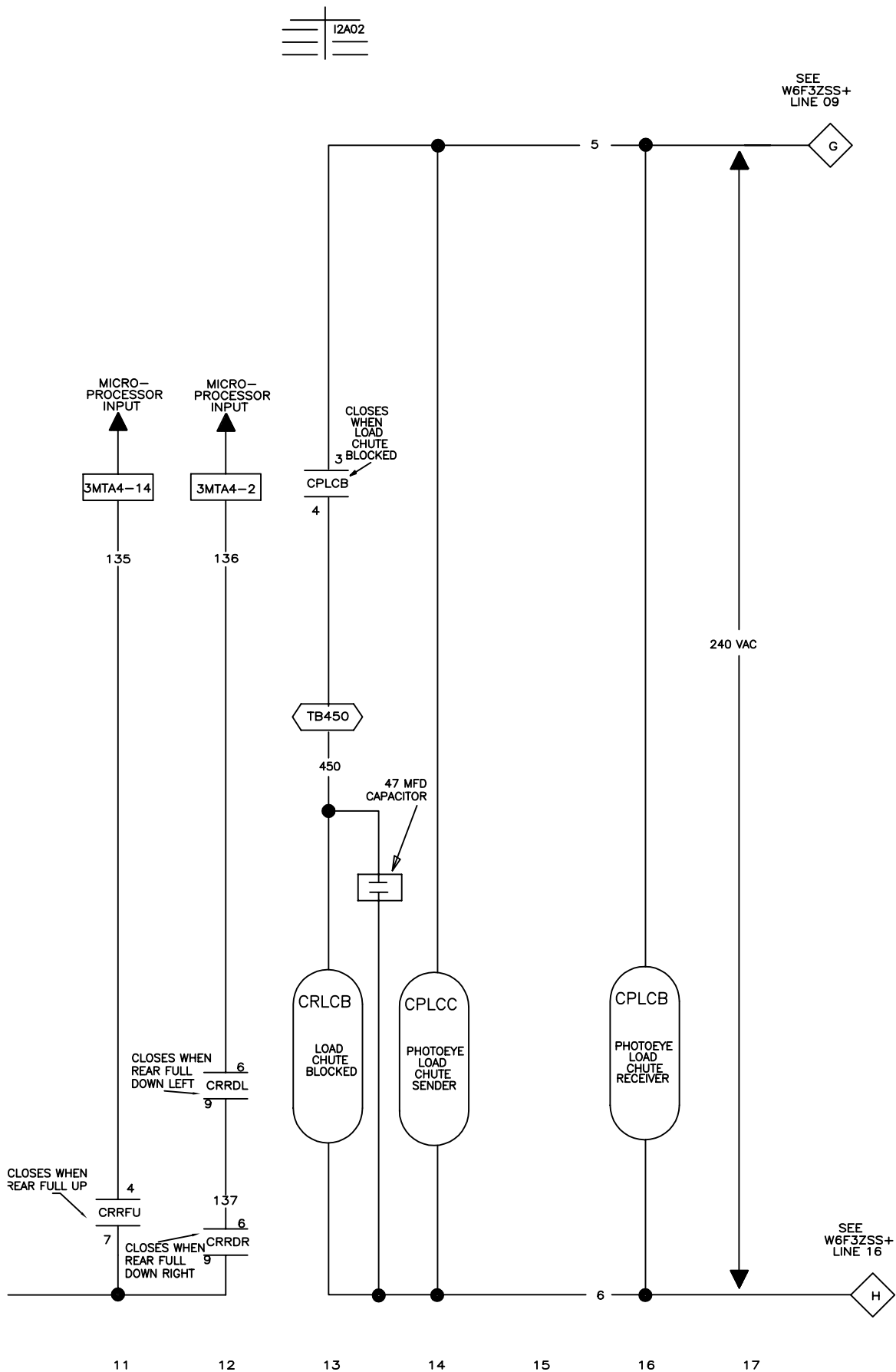
220V1P50HZ/240V1P60HZ
PELLERIN MILNOR CORPORATION



- W6F3ZS11A
MICRO 6 SYSTEMS
MARK V CONTROLS
186 PROCESSOR







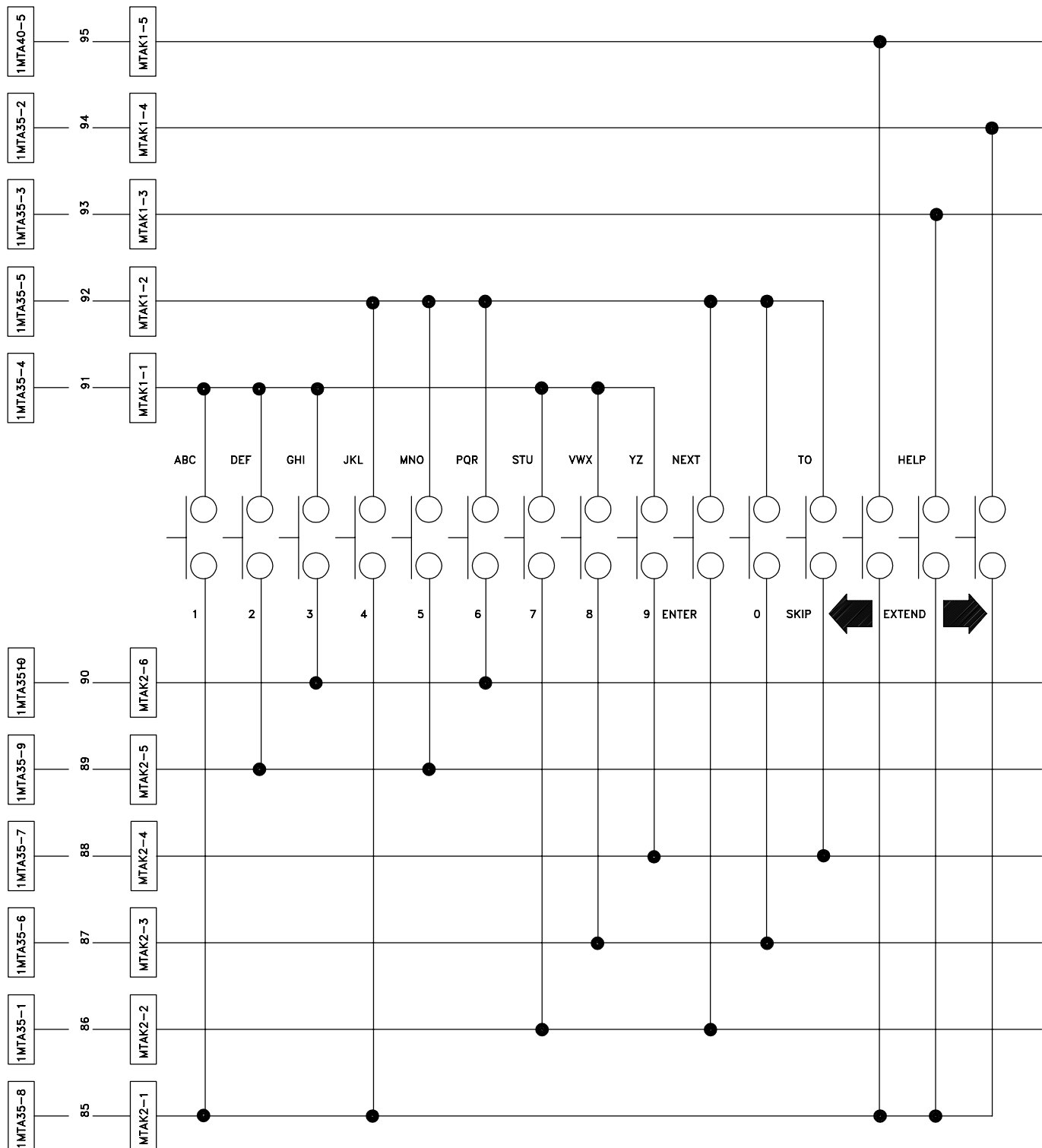
SEE
W6F3ZSS+
LINE 09

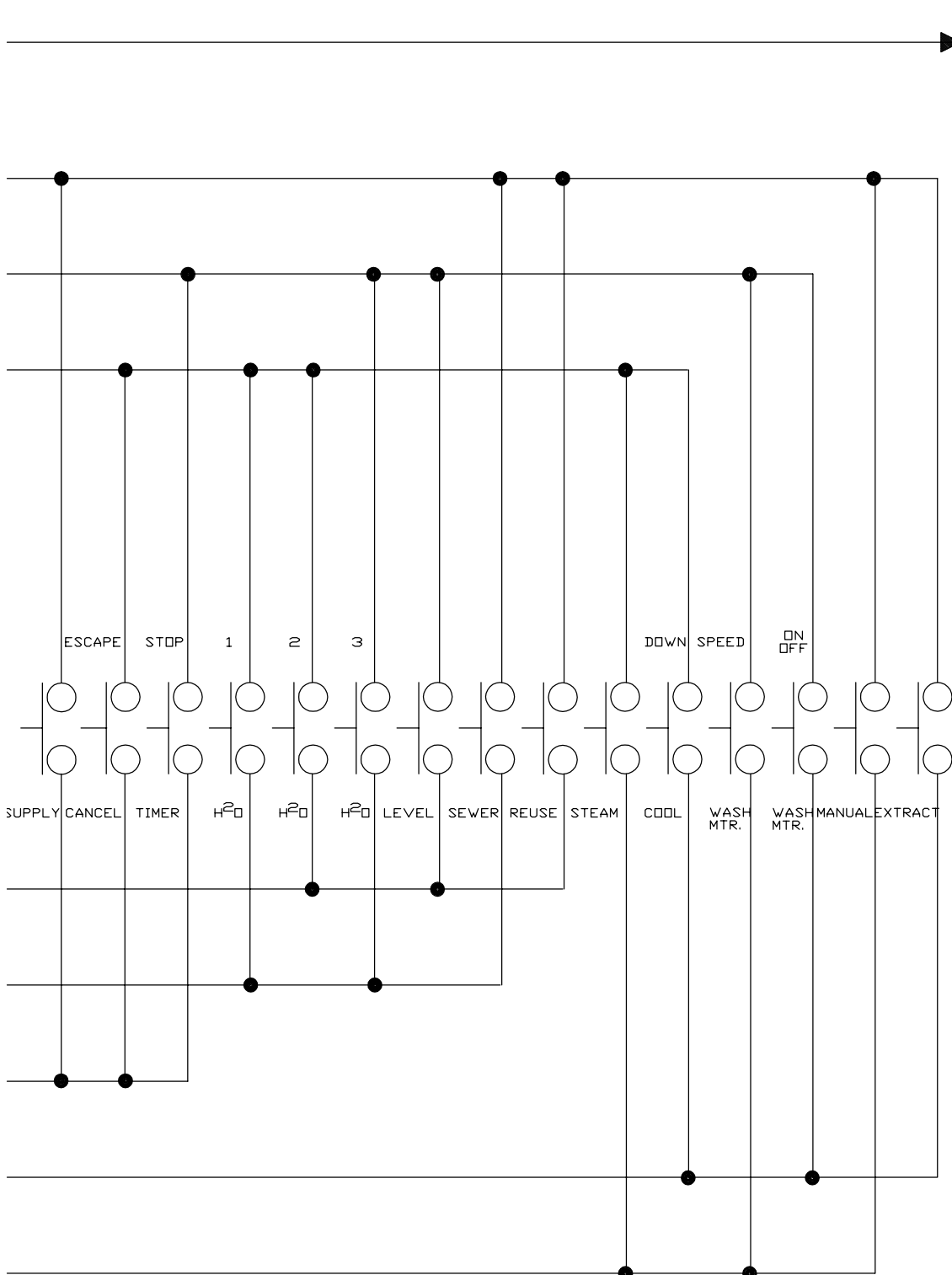
W6F3ZS12A
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W6F3ZS12A
MICRO 6 SYSTEMS
MARK V CONTROLS
SCHEMATIC:MICROPROCESSOR INPUTS
PELLERIN MILNOR CORPORATION

PELLERIN MILNOR CORPORATION

SEE
W6F3ZSS+
LINE 16





NOTES:

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

W6F3WSKP

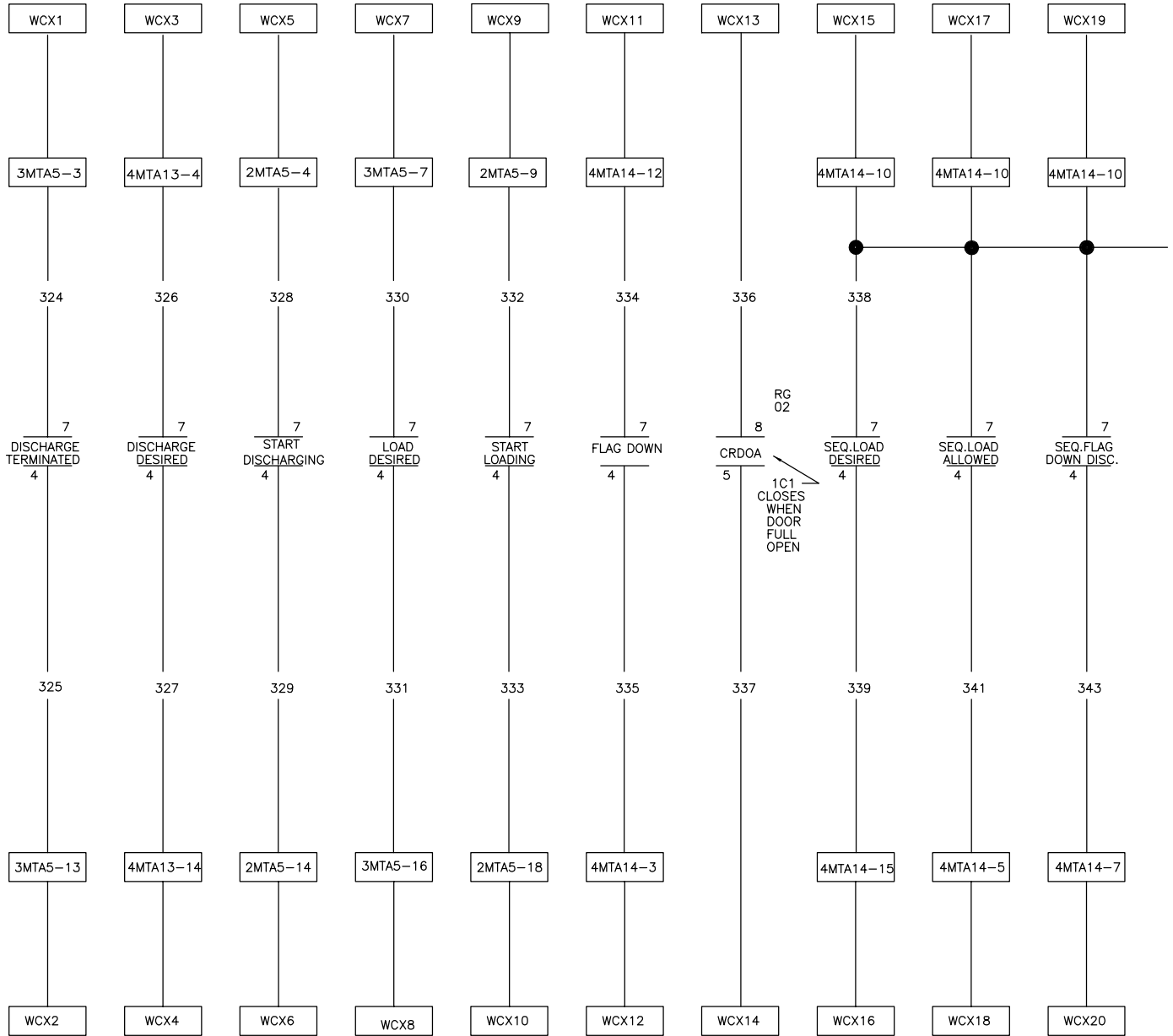
MICRO 6 SYSTEMS MARK V

SCHEMATIC: KEYPAD (SERIAL CONTROLS)

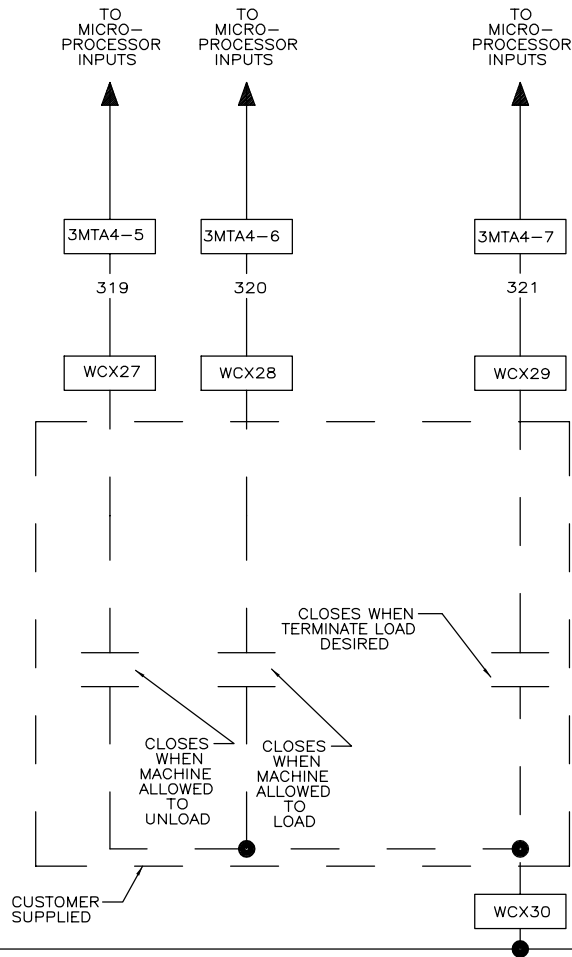
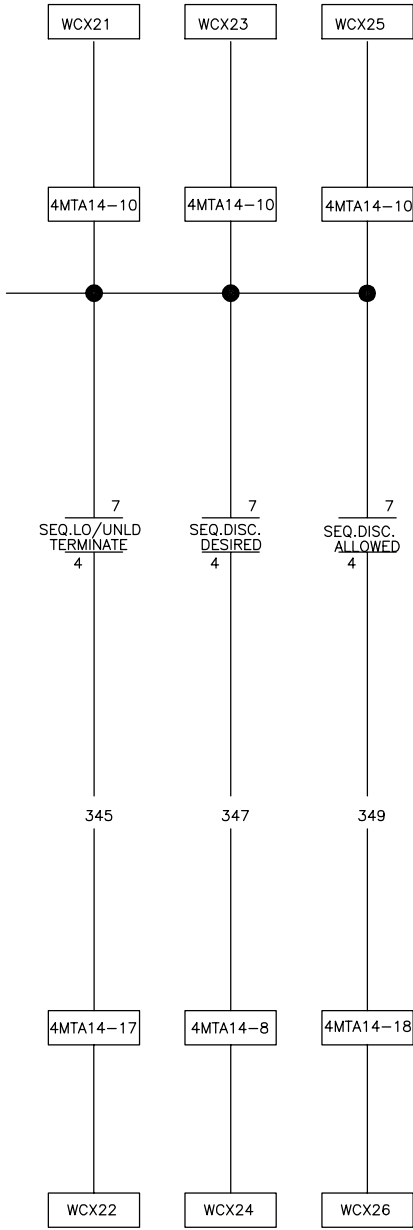
PELLERIN MILNOR CORPORATION

W6F3WSKP
2007482B

W6F3WSKP
2007482B



00 01 02 03 04 05 06 07 08 09 10



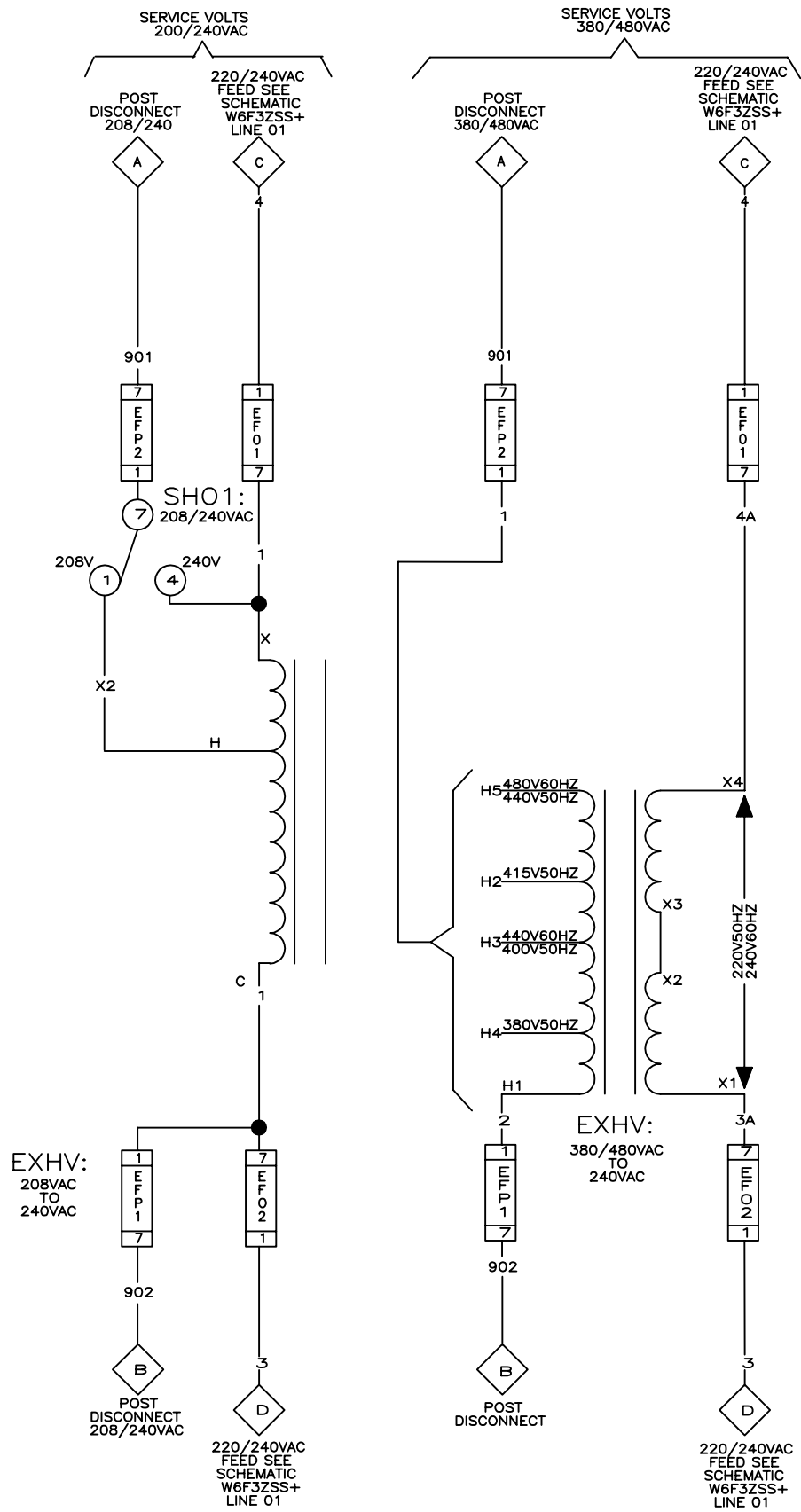
W6F3ZSLIO

MICRO 6 SYSTEMS

MARK VI WTB+ WITH DRYELL

SCHEMATIC: AUTOMATIC LOADING INPUTS/OUTPUTS

PELLERIN MILNOR CORPORATION



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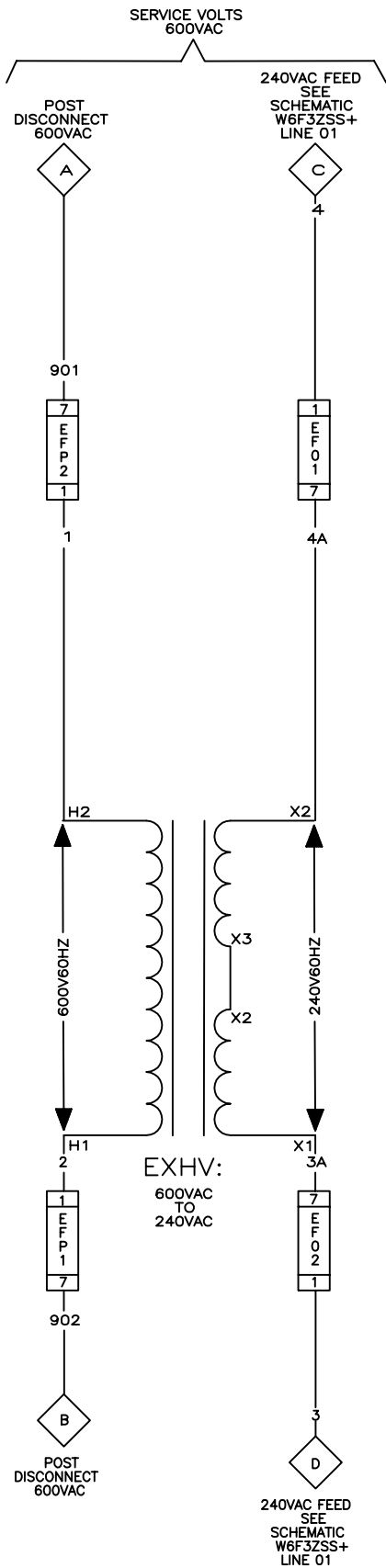
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W6F3ZSLV

MICRO 6 SYSTEMS MARK V

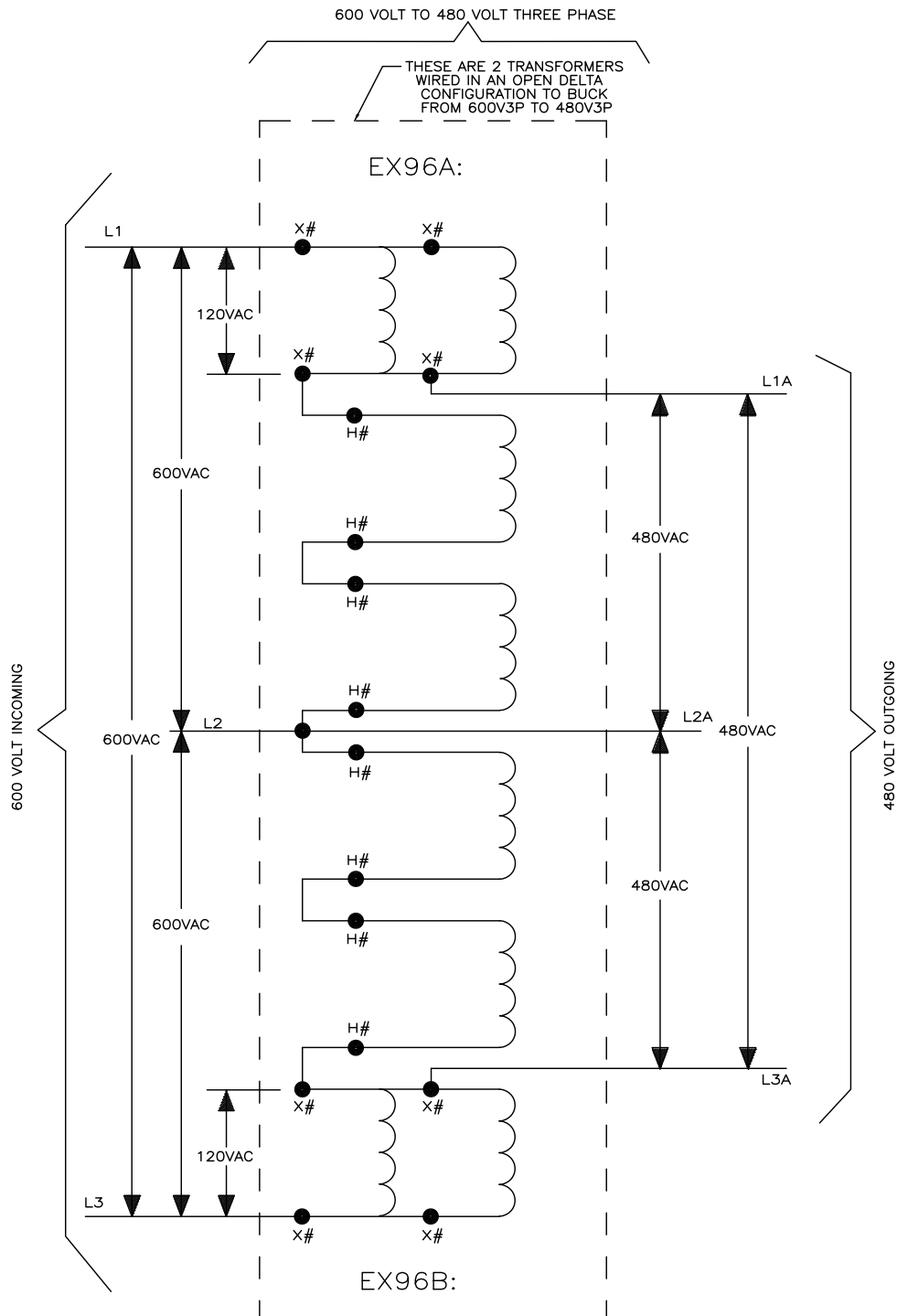
SCHEMATIC:CONTROL CIRCUIT TRANSFORMER

220V1P50HZ/240V1P60HZ

PELLERIN MILNOR CORPORATION

W6F3ZSLV
2009264B

W6F3ZSLV
2009264B

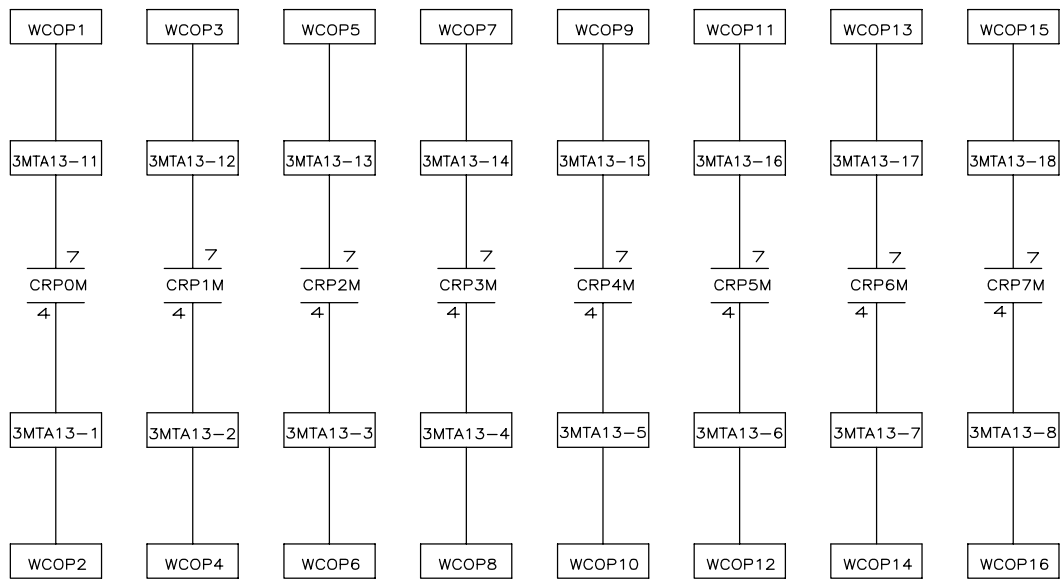


REFER TO TRANSFORMER WIRING DIAGRAM
FOR APPROPRIATE WIRE NUMBERS.

THE PRIMARY OF EACH TRANSFORMER
NOTED BY H# MUST BE WIRED FOR 480
VOLTS. THE SECONDARY OF EACH
TRANSFORMER NOTED BY X# MUST BE
WIRED FOR 120 VOLTS.

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

W6F3ZSMT6
MICRO 6 SYSTEMS
MARK V CONTROLS
SCHEMATIC: 600V MACHINES
600V TO 480 VOLT STEP DOWN
PELLERIN MILNOR CORPORATION



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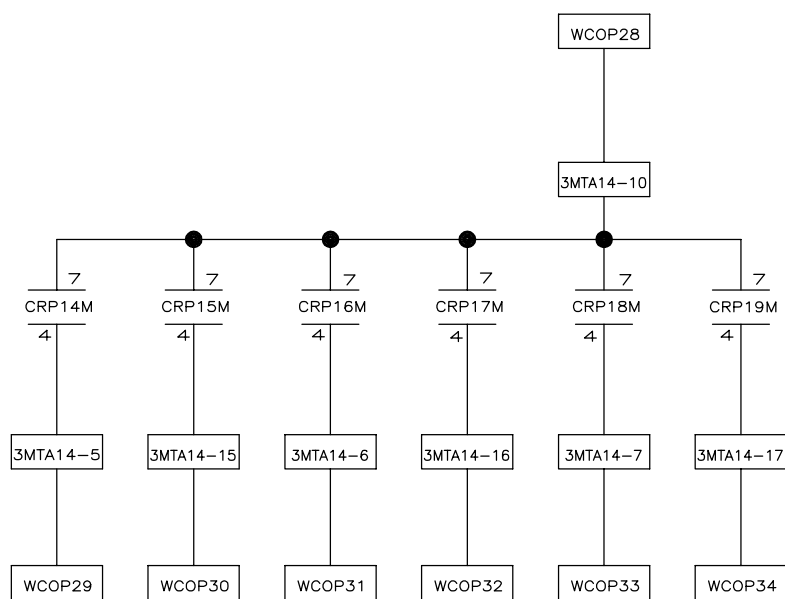
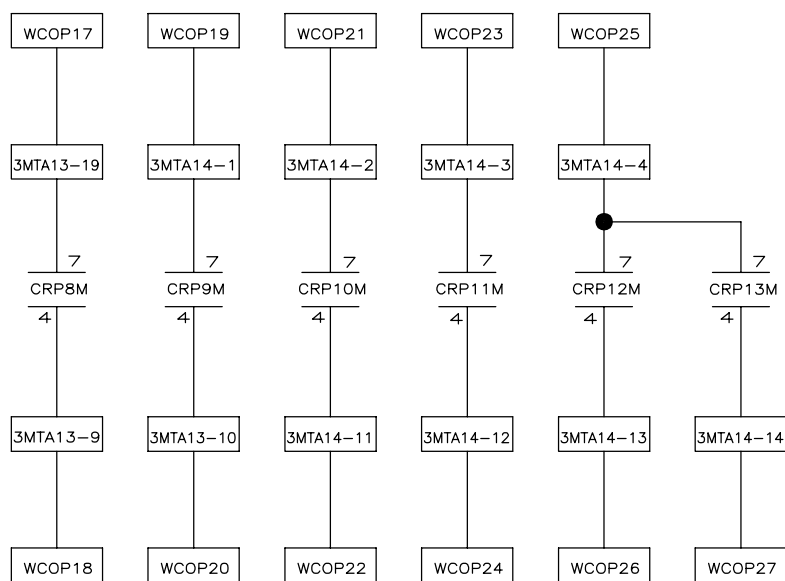
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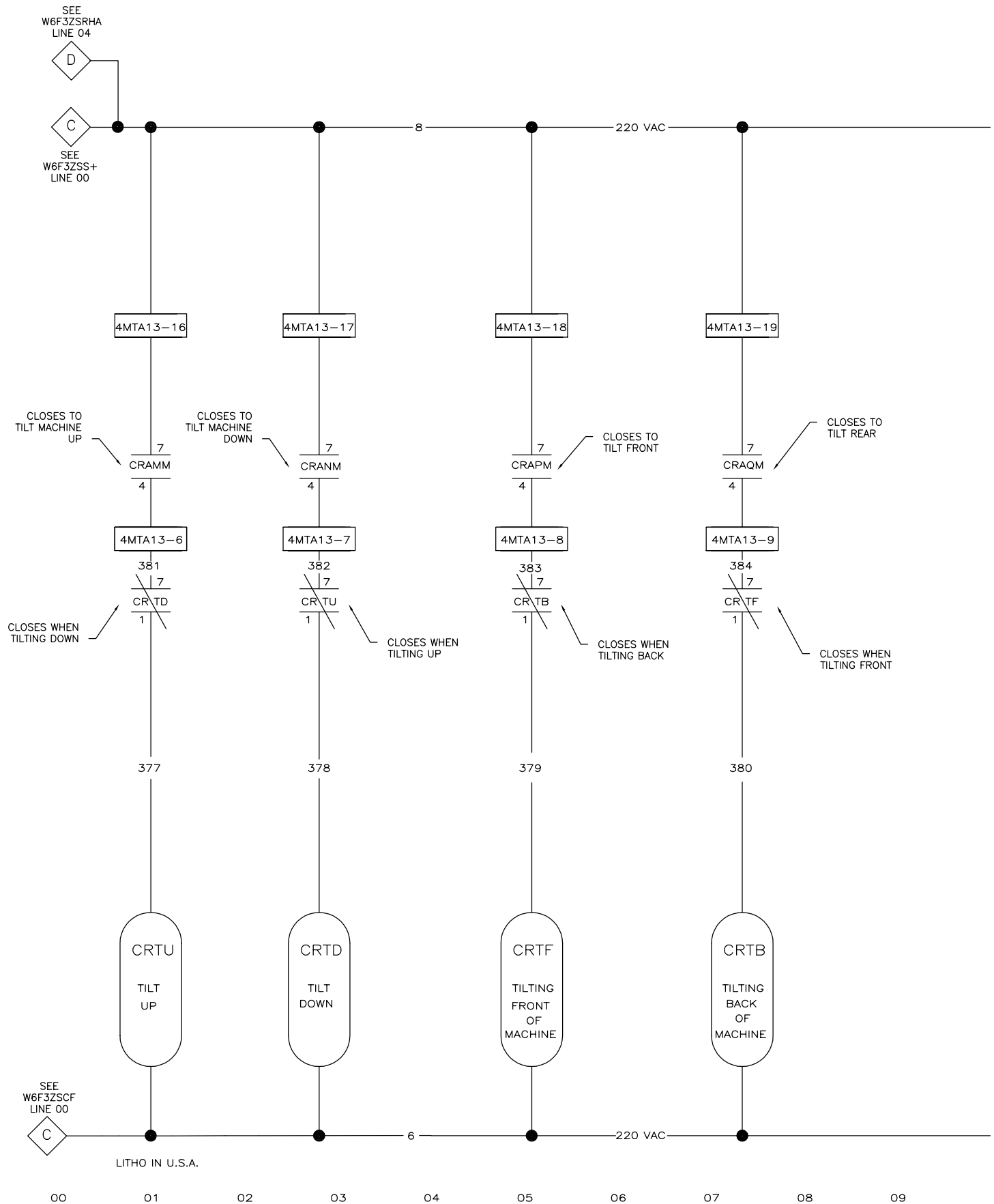


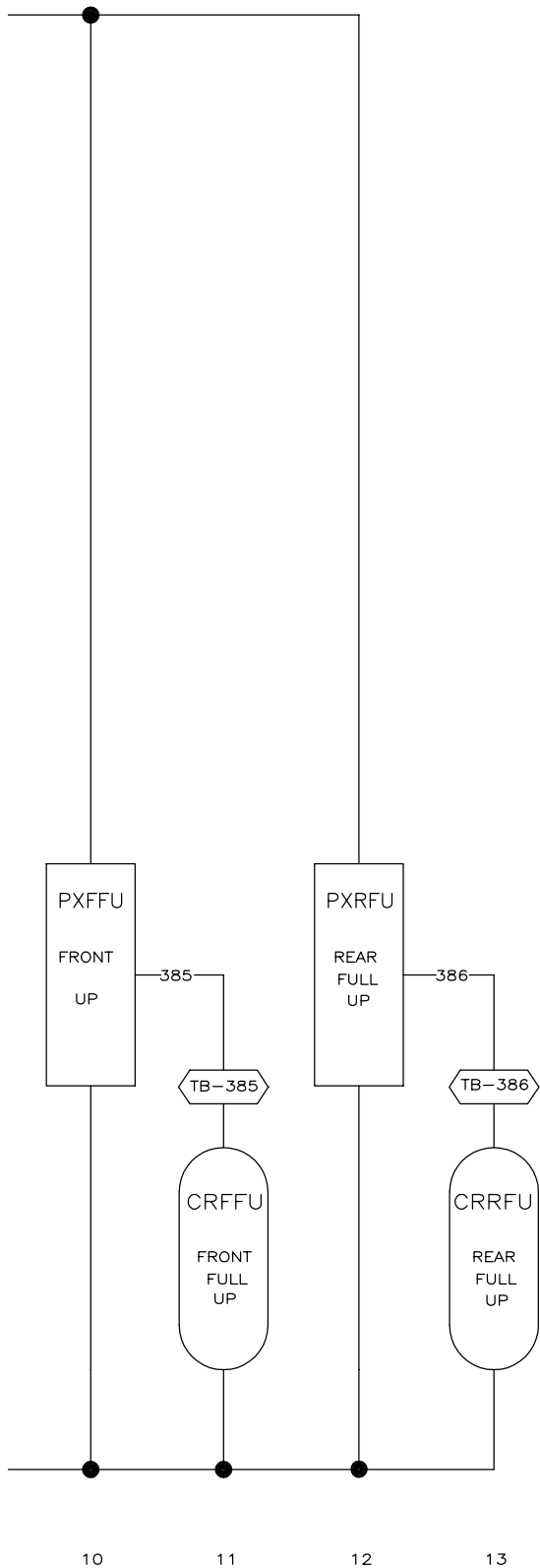
W6F3ZSOP

MICRO 6 SYSTEMS SERIAL CONTROLS

SCHEMATIC: 20 OPTIONAL PROGRAMABLE OUTPUTS

PELLERIN MILNOR CORPORATION



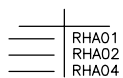
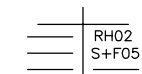


W6F3ZSRF

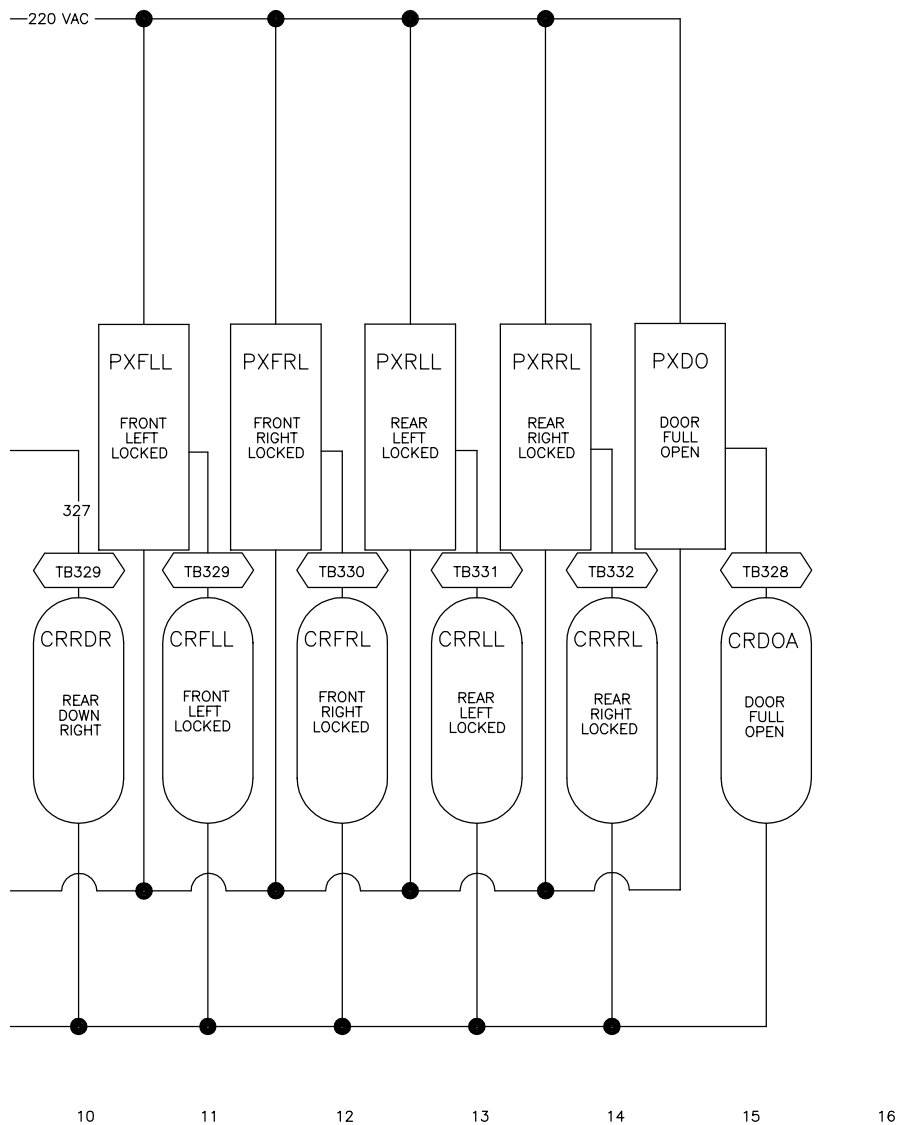
MICRO 6 SYSTEMS
MARK V CONTROLS
SCHEMATIC:TILTING UP/DOWN
220V1P50HZ/240V1P60HZ
PELLERIN MILNOR CORPORATION

W6F3ZSRF
2009264B

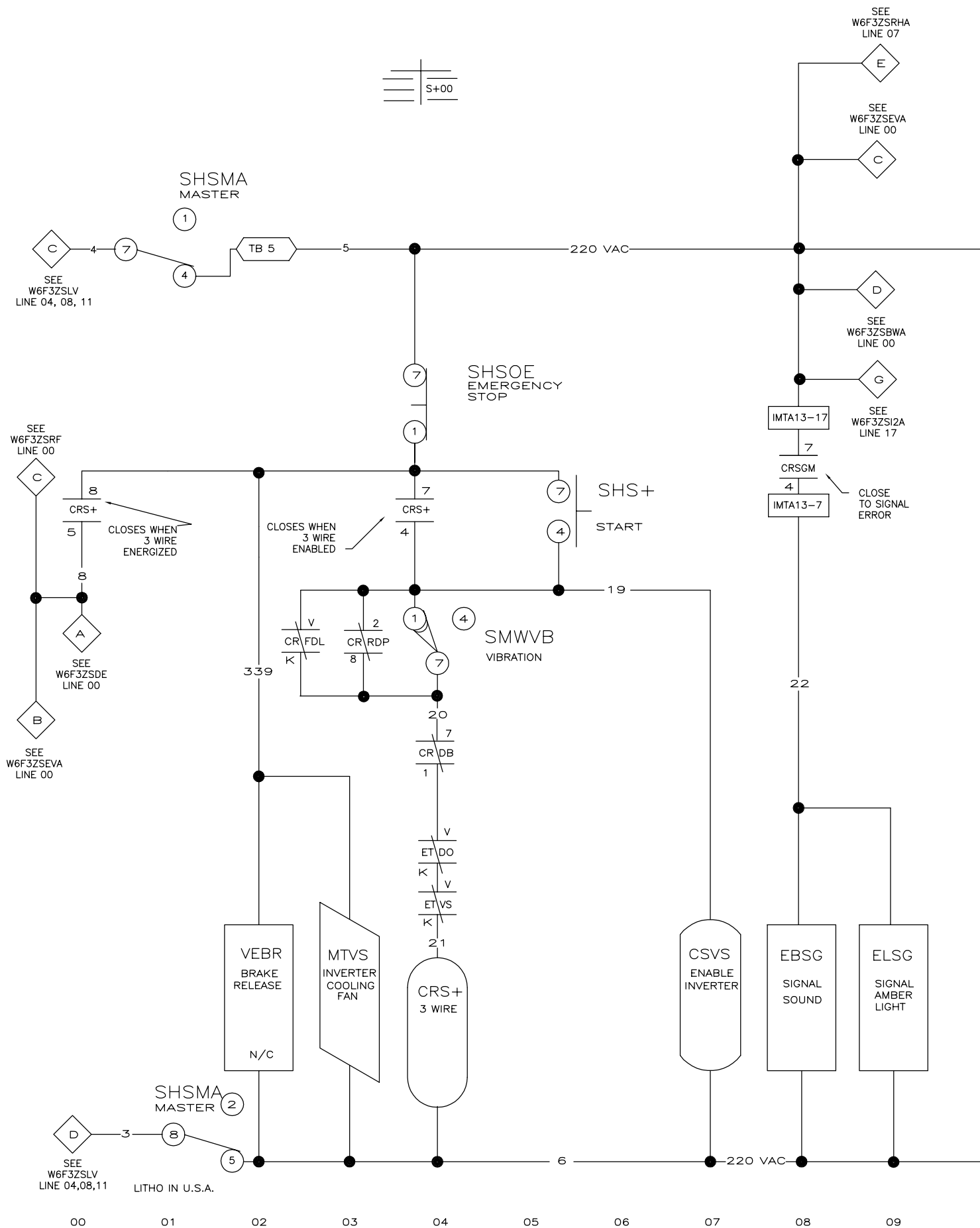
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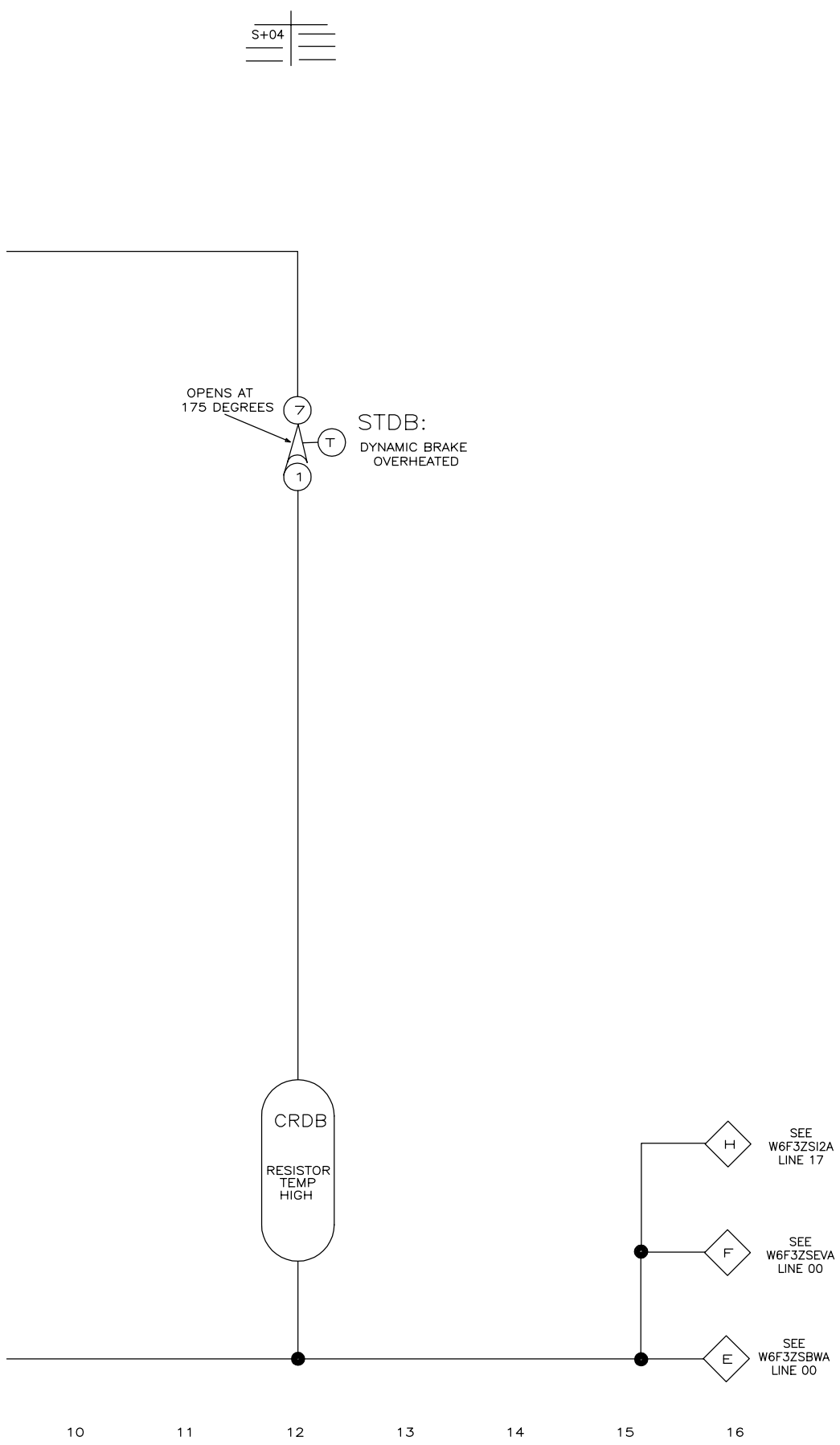


W6F3ZSRHA
2009264B



W6F3ZSRHA
MICRO 6 SYSTEMS
MARK V CONTROLS
SCHEMATIC; RAISE HOUSE
220V1P50HZ/240V1P60HZ
PELLERIN MILNOR CORPORATION





W6F3ZSS+

MICRO 6 SYSTEMS

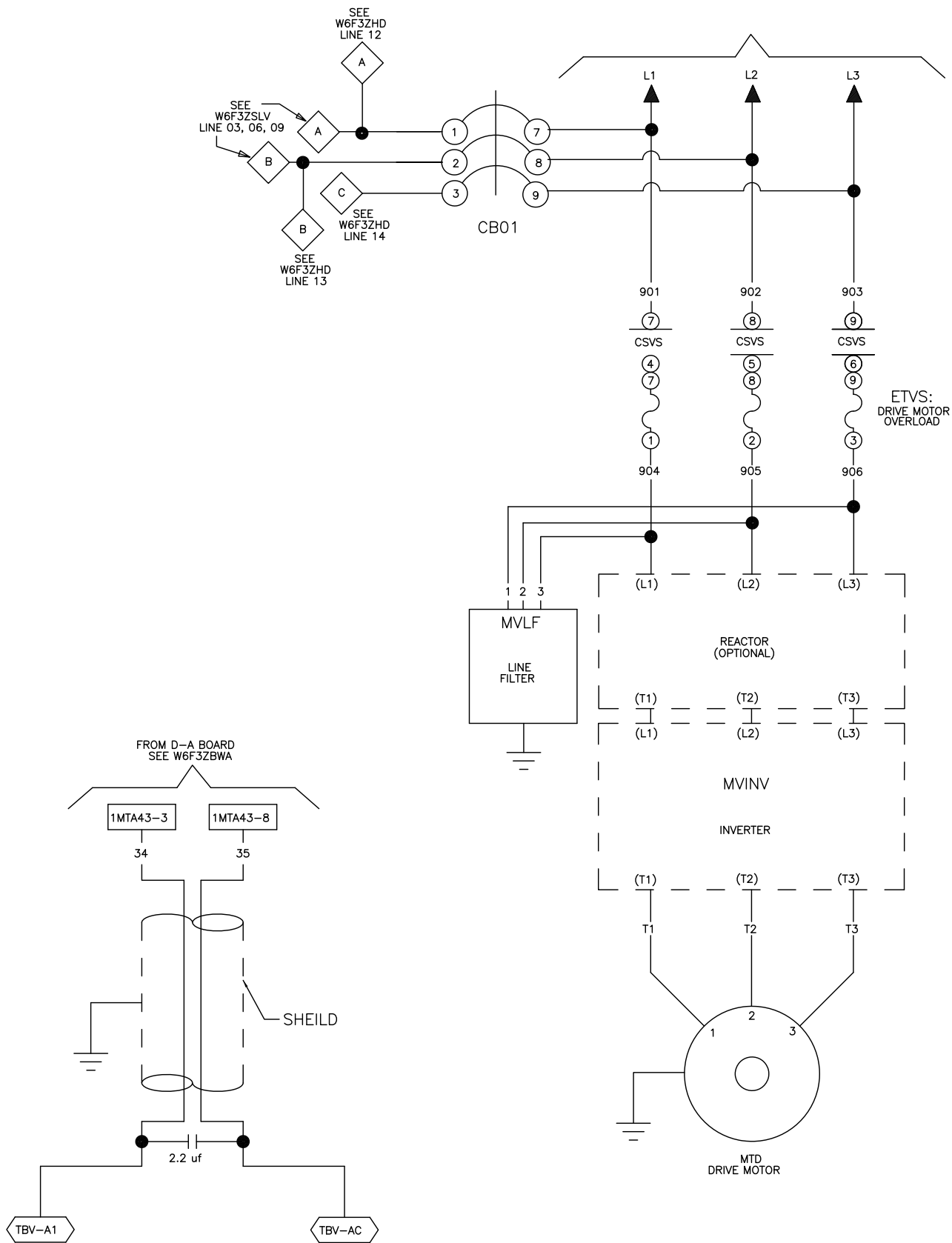
MARK V CONTROLS

SCHEMATIC:START

PELLERIN MILNOR CORPORATION

W6F3ZSS+
2009264B

W6F3ZSS+
2009264B



00 01 02 03 04 05 06 07 08 09

W6F3ZSVP

MICRO 6 SYSTEMS

SCHEMATIC: INVERTER WIRING

A1000/F7 INVERTER
220V1P50HZ/240V1P60HZ
PELLERIN MILNOR CORPORATION

