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Schematic/Electrical Parts

Divided Cylinder

Washer-Extractors

MarkV or VI Controls



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

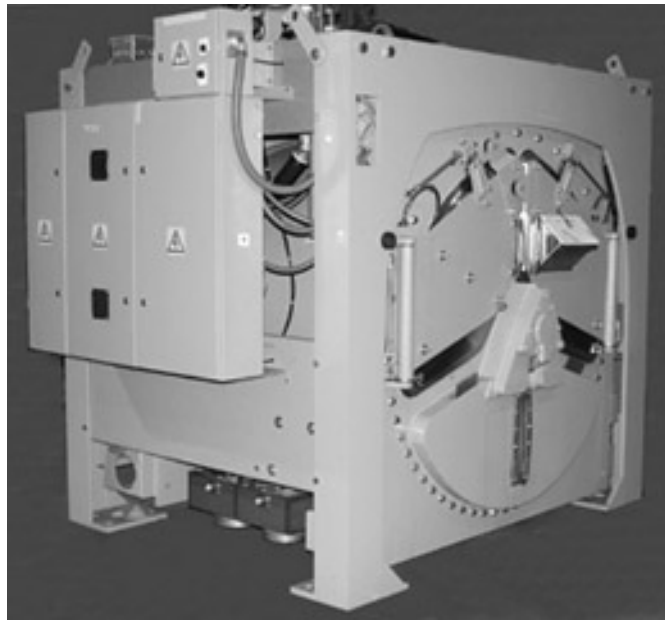


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COMPONENT PARTS LIST

<u>COMPONENT NUMBER</u>	<u>FUNCTION OF THIS COMPONENT</u>	<u>WHERE TO FIND THIS COMPONENT</u>	<u>MILNOR P/N</u>	<u>DESCRIPTION</u>	<u>LOCATION</u>
	>>CONTROL BOX LAYOUTS				
001	DETAIL-4244 HIGH VOLTAGE CONTROL BOX	W6W5DSTG1	B2T2005013	4244 MK5 DIV-CYL HIGH VOLT BOX	SEE FUNCTION
002	DETAIL-4244 LOW VOLTAGE CONTROL BOX	W6W5DSTG1	B2T2005012	4244 MK5 DIV-CYL LOW VOLT BOX	SEE FUNCTION
003	DETAIL-DIV-CYL 1MTR CONTROL BOARDS	W6W5DSTG2	B2T2005014	4244 INPUTS/OUTPUTS	SEE FUNCTION
004	DETAIL-186 PROCESSOR CONTROL BOX	W6W5DSTG2	B2TAG98040	186 PROCESSOR BOX	SEE FUNCTION
BA	>>PRINTED CIRCUIT BOARDS				
BAD-1	BOARD-ANALOG TO DIGITAL CONVERTER	W6W5DSBW	08BSADCT	BD:SERIAL A-D CONVERT->TEST	LOW VOLT BOX
BARG	BOARD-12->5 V REGULATED BEFORE 10-1-05	W6W5DSDF	08BSSVRT	BOARD 5V REGULATOR->TEST	SWITCH PANEL
BBB-1	BOARD-MEMORY BATTERY BACKUP	W6W5DSBW	08BSBB1T	BOARD: SER BATT BACKUP-TEST	LOW VOLT BOX
BDA-1	BOARD-HIGH RES DIGITAL TO ANALOG CONV.	W6W5DSBW	08BSDAHT	BD:HI-RES SERIAL D-A->TEST	LOW VOLT BOX
BDFP	DISPLAY-MICROPROCESSOR-COLOR FP	W6W5SSEC	08EFDF320A	DISPLAY#AV05114KIT#B057PM	SWITCH PANEL
BFFC	BOARD-COLOR FLAT PANEL CONTROLLER	W6W5SSEC	MESSAGE EW	INCLUDED IN KIT FOR BDFP ABOVE	SWITCH PANEL
BFPI	BOARD-FLAT PNL INTERFACE AFTER 10-1-05	W6W5DSDF	08BSAT3AT	BOARD-FLAT PNL INTERFACE ->TEST	SWITCH PANEL
BFPI	BOARD-FLAT PNL INTERFACE BEFORE 10-1-05	W6W5SSEC	MESSAGE EW	INCLUDED IN KIT FOR BDFP ABOVE	SWITCH PANEL
BIO-1	BOARD-8OUTPUT/16INPUT #1	W6W5DSBW	08BS16CT	BOARD:8OUT-16INPUT-AUTOSPOT	LOW VOLT BOX
BIO-A	BOARD-8OUTPUT/16INPUT #A (AUTOSPOT)	W6W5DSBW	08BS16CTA	BOARD:8OUT-16INPUT-AUTOSPOT	LOW VOLT BOX
BLB	BOARD-LEVEL RECEIVER/TRANSDUCER	W6W5DSBW	08BNLTT	LEVEL TRANSDUCER BD->TEST	LOW VOLT BOX
BO24-1	BOARD-24 OUTPUT #1	W6W5DSBW	08BSO24AT	BD:SERIAL 24 OUTPUT->TEST	LOW VOLT BOX
BO24-2	BOARD-24 OUTPUT #2	W6W5DSBW	08BSO24AT	BD:SERIAL 24 OUTPUT->TEST	LOW VOLT BOX
BO24-3	BOARD-24 OUTPUT #3	W6W5DSBW	08BSO24AT	BD:SERIAL 24 OUTPUT->TEST	LOW VOLT BOX
BPB	BOARD-MICROPROCESSOR	W6W5DSBW	08BSPE2T	SERIAL 186 PROC BD+FP->TEST	PROCESSOR BOX
BSP	BOARD-SPEED SENSING	W6W5DSVP	08BNDSRBT	BD:SAFETY ROTATION SG 1MR-TEST	LOW VOLT BOX
CD	>>RELAY-TIME DELAY				
CDS+N	DELAY-3-WIRE DISABLE	W6W5DSSP	09CF007537	TDR F7.5S 2PDT 11PIN 120V60C	LOW VOLT BOX
CR	>>RELAY-PILOT OR CONTROL				
CRAS	RELAY-ENABLE JOG OR AUTOSPOT	W6W5DSS+	09C024D37	4PDT "KH" 110/120V	LOW VOLT BOX
CRASS	RELAY-AUTOSPOT STOP	W6W5DSS+	09C024D37	4PDT "KH" 110/120V	LOW VOLT BOX
CR01	RELAY-CHEM INTERPERT #1	W6W5DSCP	09C024D37	4PDT "KH" 110/120V	INT RELAY BX
CR02	RELAY-CHEM INTERPERT #2	W6W5DSCP	09C024D37	4PDT "KH" 110/120V	INT RELAY BX
CR03	RELAY-CHEM INTERPERT #3	W6W5DSCP	09C024D37	4PDT "KH" 110/120V	INT RELAY BX
CR04	RELAY-CHEM INTERPERT #4	W6W5DSCP	09C024D37	4PDT "KH" 110/120V	INT RELAY BX
CR05	RELAY-CHEM INTERPERT #5	W6W5DSCP	09C024D37	4PDT "KH" 110/120V	INT RELAY BX
CR06	RELAY-CHEM INTERPERT #6	W6W5DSCP	09C024D37	4PDT "KH" 110/120V	INT RELAY BX

COMPONENT PARTS LIST

W6W5DSPL/2010533N

<u>COMPONENT NUMBER</u>	<u>FUNCTION OF THIS COMPONENT</u>	<u>WHERE TO FIND THIS COMPONENT</u>	<u>MILNOR P/N</u>	<u>DESCRIPTION</u>	<u>LOCATION</u>
CRC07	RELAY-CHEM INTERPERT #7	W6W5DSCP	09C024D37	4PDT "KH" 110/120V	INT RELAY BX
CRC08	RELAY-CHEM INTERPERT #8	W6W5DSCP	09C024D37	4PDT "KH" 110/120V	INT RELAY BX
CRC09	RELAY-CHEM INTERPERT #9	W6W5DSCP	09C024D37	4PDT "KH" 110/120V	INT RELAY BX
CRC10	RELAY-CHEM INTERPERT #10	W6W5DSCP	09C024D37	4PDT "KH" 110/120V	INT RELAY BX
CRC11	RELAY-CHEM INTERPERT #11	W6W5DSCP	09C024D37	4PDT "KH" 110/120V	INT RELAY BX
CRC12	RELAY-CHEM INTERPERT #12	W6W5DSCP	09C024D37	4PDT "KH" 110/120V	INT RELAY BX
CRC13	RELAY-CHEM INTERPERT #13	W6W5DSCP	09C024D37	4PDT "KH" 110/120V	INT RELAY BX
CRC14	RELAY-CHEM INTERPERT #14	W6W5DSCP	09C024D37	4PDT "KH" 110/120V	INT RELAY BX
CRC15	RELAY-CHEM INTERPERT #15	W6W5DSCP	09C024D37	4PDT "KH" 110/120V	INT RELAY BX
CRDL	RELAY-OPEN DOOR	W6W5DSS+	09C024D37	4PDT "KH" 110/120V	LOW VOLT BOX
CRPLA	RELAY-DOOR LATCH	W6W5DSSP	09C024D37	4PDT "KH" 110/120V	LOW VOLT BOX
CRS+	RELAY-START 3-WIRE	W6W5DSS+	09C024D37	4PDT "KH" 110/120V	LOW VOLT BOX
CS	>>CONTACTOR-MOTOR STARTER				
CSVS	CONTACTOR-VARIABLE SPEED	W6W5DSS+	MESSAGE EW	SEE CSVS-1 OR -2 FOR PART NUMBER	
CSVS	CONTACTOR-VARIABLE SPEED 4244	W6W5SS+	09M08G337	37A 3P MCS CONT NR 120V5/6	HIGH VOLT BX
CSVS	CONTACTOR-VARIABLE SPEED 6044	W6W5SS+	09M08N337	72A 3P MCS CONT NR 120V5/6	HIGH VOLT BX
EB	>>BUZZER OR AUDIBLE SIGNAL				
EBSG	BUZZER-SIGNAL AUDIBLE	W6W5DSS+	09H015	BUZZER 115V W/6-32 CRT+6" LEADS	SWITCH PANEL
EL	>>LIGHT-PILOT OR INDICATOR				
ELPS	LIGHT-POCKET SPOTTED	W6W5DSAS	09J060A37	LAMP 1/2" AMB 125V IDI 1050QC3	CYL SPOTTED PLT
ELPS	LIGHT-POCKET SPOTTED	W6W5DSASB	09J060A37	LAMP 1/2" AMB 125V IDI 1050QC3	CYL SPOTTED PLT
ELSG	LIGHT -SIGNAL	W6W5DSS+	09J060WH37	LAMP 1/2" WH 120 TAB IDI1050QC4	SWITCH PANEL
ELWVS	LIGHT-SPRAY DOWN	W6W5DSS+	09J060A37	LAMP 1/2" AMB 125V IDI 1050QC3	SWITCH PANEL
ES	>>POWER SUPPLY-ELECTRONIC				
ESPS	POWER SUPPLY-120V TO +12,-12,+5V	W6W5DSBW	08PSS3401T	40 WATT POWER SUPPLY TESTED	LOW VOLT BOX
EX	>>TRANSFORMERS				
EX37	TRANSFORMER-INCOMING VOLT.120VAC	W6W5DSPS	MESSAGE EW	SEE EX37-1, OR -2 FOR VOLTAGE	
EX37-1	TRANSFORMER-208/240>120VAC	W6W5SSPS	09UA025A37	XFMR 200-240PRI/120SEC 250V5/6	HIGH VOLT BX
EX37-2	TRANSFORMER-380/480>120VAC	W6W5SSPS	09UA025AAB	XFMR 380-480PRI/120-240SEC250V	HIGH VOLT BX
EX96A	TRANSFORMER-600V-480V 52-72"DIA	W6W5DSMT6	09US050A96	XFMR 1PH 5KVA 240/280 X 120/240	SIDE OF MACHINE
EX96B	TRANSFORMER-600V-480V 52-72"DIA	W6W5DSMT6	09US050A96	XFMR 1PH 5KVA 240/280 X 120/240	SIDE OF MACHINE
MS	MOTOR SAVER	W6W5DSVP	09X370	VOLT.MONT-MTR SAVER 190-480VAC	HIGH VOLT BOX
MS	MOTOR SAVER	W6W5DSVPA	09X370	VOLT.MONT-MTR SAVER 190-480VAC	HIGH VOLT BOX

COMPONENT PARTS LIST

W6W5DSPL/2010533N

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MT	>> MOTORS				
MTD	MOTOR-DRIVE	W6W5DSVP	MESSAGE EW	SEE MTD-1 OR -2	
MTD-1	MOTOR-DRIVE 4244WP2	W6W5DSVP	39G852AA TD	25HP6P220/380/440 50HZ ODP INV	TOP OF MACHINE
MTD-2	MOTOR-DRIVE 6044WP2 240V	W6W5DSVP	39G8A0AAT	50HP 6P 230/460/60	TOP OF MACHINE
MV	>> MOTOR POWER INVERTERS				
MVDBR	RESISTOR-DYNAMIC BRAKE	W6W5DSVP	MESSAGE EW	SEE MVDBR-1 OR -2	
MVDBR-1	RESISTOR-DYNAMIC BRAKE 4244WP2	W6W5DSVP	09MV020RES	RESISTOR 20 OHM 300WATT	HIGH VOLT BOX
MVDBR-2	RESISTOR-DYNAMIC BRAKE 6044WP2	W6W5DSVP	09MV011RET	RESISTOR 11 OHM 1000 WATT	HIGH VOLT BOX
MVINV	INVERTER-SINGLE MOTOR DRIVE	W6W5DSVP	MESSAGE SO	SEE MVINV-1 OR -2	
MVINV-1	INVERTER-4244WP2 HIGH VOLTAGE	W6W5DSVP	09MWA03996	INVERTER 39AMPS 480V F7	HIGH VOLT BOX
MVINV-2	INVERTER- 6044WP2 LOW VOLTAGE	W6W5DSVP	09MWA14574	F7 INVERTER 145 AMPS	HIGH VOLT BOX
MVLF	FILTER-INVERTER LINE	W6W5DSVP	09MVFILTR1	RFI NOISE INPUT FILTER	INVERTER BOX
MVRCT	REACTOR-INVERTER	W6W5DSVP	09MX300A96	REACTOR 30HP 460V 45A	HIGH VOLT BOX
PX	>> PROXIMITY SWITCH				
PX1	PROX SW-POCKET 1 SPOTTED	W6W5DSAS	09RPS07RDS	7MM SENSING RECTANGULAR SHLD	LOW VOLT BOX
PX1	PROX SW-POCKET 1 SPOTTED	W6W5DSASB	09RPS07RDS	7MM SENSING RECTANGULAR SHLD	LOW VOLT BOX
PX2	PROX SW-POCKET 1 & 2 SPOTTED	W6W5DSAS	09RPS07RDS	7MM SENSING RECTANGULAR SHLD	LOW VOLT BOX
PX2	PROX SW-POCKET 1 & 2 SPOTTED	W6W5DSASB	09RPS07RDS	7MM SENSING RECTANGULAR SHLD	LOW VOLT BOX
PX4	PROX SW-PCKT 2 SPTD,(PKT 3 SPTD FOR WP3	W6W5DSAS	09RPS07RDS	7MM SENSING RECTANGULAR SHLD	LOW VOLT BOX
PX4	PROX SW-PCKT 2 SPTD,(PKT 3 SPTD FOR WP3	W6W5DSASB	09RPS07RDS	7MM SENSING RECTANGULAR SHLD	LOW VOLT BOX
PXSP	PROX SWITCH-SPEED	W6W5DSVP	09RPS07RDS	7MM SENSING RECTANGULAR SHLD	MACHINE REAR
SH	>> SWITCH-HAND OPERATED				
SHAS	SWITCH-AUTOSPOT POCKET SELECT	W6W5DSVP	09N041R	ROTSW 2POLE 8POSIT 5A125V ULCSA	SWITCH PANEL
SHDO	SWITCH-DOOR OPEN	W6W5DSS+	09N405PB11	SWASS PBBK1NO/1NC	SWITCH PANEL
SHMD	SWITCH-MILDATA LOCAL/REMOTE	W6W5DS11	09N405M210	SWASS M2W 1NO	PROCESSOR BOX
SHS+	SWITCH-START 3-WIRE	W6W5DSS+	09N405PG10	SWASS PBGN 1NO	SWITCH PANEL
SHSG	SWITCH-SIGNAL CANCEL	W6W5DS11	09N405PY10	SWASS PB YELLOW 1NO	SWITCH PANEL
SHSMA	SWITCH-MASTER	W6W5DSSP	09N405M210	SWASS M2W 1NO	SWITCH PANEL
SHSOE	SWITCH-EMERGENCY STOP	W6W5DSS+	09N505	SW ASSY EMER STOP	SWITCH PANEL
SHSOM	SWITCH-STOP	W6W5DSS+	09N405PR01	SWASS PBRD 1NC	SWITCH PANEL
SHWCF	SWITCH-CHEM #1 FLUSH	W6W5DSCF	09N405S320	SWASS S3W 2NO	5 COMP. SUPPLY
SK	>> SWITCH-KEYLOCK				
SKPR	SWITCH-RUN/PROGRAM (KEY OP)	W6W5DS11	09N127C	KEYSW SPST 7A120VAC SCREW TERM	SWITCH PANEL

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SM	>>SWITCH-MECHANICAL OPERATED				
SMD2	SWITCH-SECONDARY DOOR -CLEAN SIDE	W6W5DSS+	09RM01212S	CAPSW 12FT 180DEG ROLLER SILVER	DOOR
SMERB	SWITCH-EXCURSION	W6W5DSS+	09R0008A	MICSW SPDT PAINTED BZE6-RN 01	SIDE OF MACHINE
SMPL1	SWITCH-1ST DOOR LATCHED LEFT	W6W5DSSP	09R012	MICSW SPDT PAINTED BZE6-RN 01	DOOR ASSEMBY
SMPL2	SWITCH-2ND DOOR LATCHED RIGHT	W6W5DSSP	09R012	MICSW SPDT PAINTED BZE6-RN 01	DOOR ASSEMBY
SMWVB	SWITCH-MACHINE VIBRATION	W6W5DSS+	09R020	SWITCH NC VIBR #WZ-2RW84429-P52	LOW VOLT BOX
SP	>>SWITCH-PRESSURE OPERATED				
SPBR	PRESSURE SW-BRAKE	W6W5DS11	09N082A	PRESSW NASON CLOSE @ 62 LB.	AIR VALVE BOX
ST	>>SWITCH-TEMPERATURE				
STDB	THERMOSTAT-DYNAMIC BRAKING RESISTOR	W6W5DSS+	30RA175T	THERMOSTAT OPENS AT 175F	BRAKING RESIST
TP1	PROBE-TEMPERATURE	W6W5DSBW	30R0043PB	TEMPERATURE PROBE ASSY=BRASS	BOTTOM OF CYL.
VE	>>VALVE-ELECTRIC OPERATED				
VEB2R	VALVE-2ND BRAKE	W6W5DSSP	96R302A37	1/8" AIR PILOT 3WANO 120V50/60C	AIR VALVE BX
VEC01	VALVE-CHEMICAL #1 FLUSH	W6W5DSCF	96TDC2AA37	1/2" N/C 2WAY 120V50/60C VALVE	SUPPLY INJEC
VEC02	VALVE-CHEMICAL #2 FLUSH	W6W5DSCF	96TDC2AA37	1/2" N/C 2WAY 120V50/60C VALVE	SUPPLY INJEC
VEC03	VALVE-CHEMICAL #3 FLUSH 4244	W6W5DSCF	96TCC2AA37	3/8" N/C 2WAY 120V50/60C VALVE	SUPPLY INJEC
VEC03	VALVE-CHEMICAL #3 FLUSH 6044	W6W5DSCF	96TDC2AA37	1/2" N/C 2WAY 120V50/60C VALVE	SUPPLY INJEC
VEC04	VALVE-CHEMICAL #4 FLUSH 4244	W6W5DSCF	96TCC2AA37	3/8" N/C 2WAY 120V50/60C VALVE	SUPPLY INJEC
VEC04	VALVE-CHEMICAL #4 FLUSH 6044	W6W5DSCF	96TDC2AA37	1/2" N/C 2WAY 120V50/60C VALVE	SUPPLY INJEC
VEC05	VALVE-CHEMICAL #5 FLUSH 4244	W6W5DSCF	96TCC2AA37	3/8" N/C 2WAY 120V50/60C VALVE	SUPPLY INJEC
VEC05	VALVE-CHEMICAL #5 FLUSH 6044	W6W5DSCF	96TDC2AA37	1/2" N/C 2WAY 120V50/60C VALVE	SUPPLY INJEC
VEC07	VALVE-CHEMICAL #7 FLUSH	W6W5DSCX	96R301B37	1/8" AIRPILOT 3W NC 120V50/60	SUPPLY VLVST
VEC08	VALVE-CHEMICAL #8 FLUSH	W6W5DSCX	96R301B37	1/8" AIRPILOT 3W NC 120V50/60	SUPPLY VLVST
VEC09	VALVE-CHEMICAL #9 FLUSH	W6W5DSCX	96R301B37	1/8" AIRPILOT 3W NC 120V50/60	SUPPLY VLVST
VEC10	VALVE-CHEMICAL #10 FLUSH	W6W5DSCX	96R301B37	1/8" AIRPILOT 3W NC 120V50/60	SUPPLY VLVST
VEC11	VALVE-CHEMICAL #11 FLUSH	W6W5DSCX	96R301B37	1/8" AIRPILOT 3W NC 120V50/60	SUPPLY VLVST
VEC12	VALVE-CHEMICAL #12 FLUSH	W6W5DSCX	96R301B37	1/8" AIRPILOT 3W NC 120V50/60	SUPPLY VLVST
VEC13	VALVE-CHEMICAL #13 FLUSH	W6W5DSCX	96R301B37	1/8" AIRPILOT 3W NC 120V50/60	SUPPLY VLVST
VEC14	VALVE-CHEMICAL #14 FLUSH	W6W5DSCX	96R301B37	1/8" AIRPILOT 3W NC 120V50/60	SUPPLY VLVST
VEC15	VALVE-CHEMICAL #15 FLUSH	W6W5DSCX	96R301B37	1/8" AIRPILOT 3W NC 120V50/60	SUPPLY VLVST
VECFM	VALVE-FLUSH MANIFOLD	W6W5DSCX	96R301B37	1/8" AIRPILOT 3W NC 120V50/60	SUPPLY VLVST
VEDRR	VALVE-DRAIN TO REUSE	W6W5DSEV	96R302A37	1/8" AIR PILOT 3WANO 120V50/60C	AIR VALVE BOX
VEDRS	VALVE-DRAIN TO SEWER	W6W5DSEV	96R301A37	1/8" PILOT 3W-NC 110/50 120/60	AIR VALVE BOX

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VEPL	VALVE-DOOR LATCH SOIL SIDE	W6W5DSSP	96R301A37	1/8" PILOT 3W-NC 110/50 120/60	AIR VALVE BX
VEPO	VALVE-DOOR SEAL	W6W5DSS+	96R302A37	1/8"AIR PILOT 3WANO 120V50/60C	AIR VALVE BOX
VESC	VALVE-SPRAY	W6W5DSCF	96R301B37	1/8"AIRPILOT 3W NC 120V50/60	AIR VALVE BX
VESTM	VALVE-STEAM	W6W5DSEV	96R301A37	1/8" PILOT 3W-NC 110/50 120/60	AIR VALVE BOX
VETCW	VALVE-COOLDOWN	W6W5DSEV	96P151A37	1+1/4" VAL 110V HAYS 2110-60211S	AIR VALVE BOX
VEWBR	VALVE-BRAKE	W6W5DSEV	96R301A37	1/8" PILOT 3W-NC 110/50 120/60	AIR VALVE BOX
VEWPD	VALVE-PUSH DOWN 42" DIA	W6W5DSSP	96R301A37	1/8" PILOT 3W-NC 110/50 120/60	AIR VALVE BX
VEWS	VALVE-SPRAY DOWN	W6W5DSS+	96R301A37	1/8" PILOT 3W-NC 110/50 120/60	AIR VALVE BX
VEWSS	VALVE-SEAL SUCKER	W6W5DSSP	96R301A37	1/8" PILOT 3W-NC 110/50 120/60	AIR VALVE BX
VEWVC	VALVE-COLD WATER	W6W5DSEV	96R301A37	1/8" PILOT 3W-NC 110/50 120/60	AIR VALVE BOX
VEWVH	VALVE-HOT WATER	W6W5DSEV	96R301A37	1/8" PILOT 3W-NC 110/50 120/60	AIR VALVE BOX
VEWVX	VALVE-EXTRA WATER	W6W5DSEV	96R301A37	1/8" PILOT 3W-NC 110/50 120/60	AIR VALVE BOX
WFM	METER-FLOW	W6W5DSBW	30F515	FLOW SENSOR SIGNET P51530-P0	WATER INLET

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, FOB our factory. 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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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.

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 —

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.

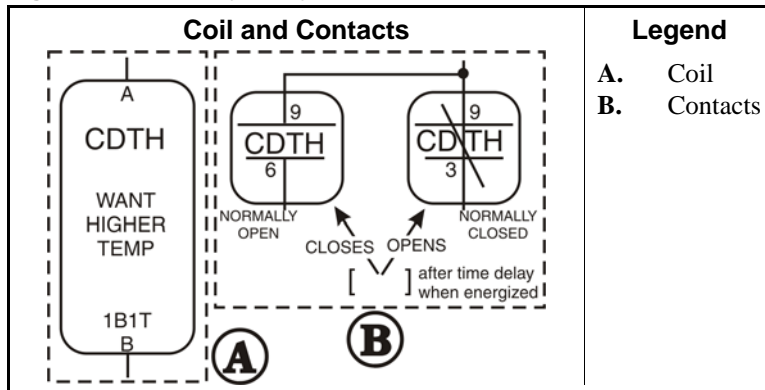
CB=Circuit Breaker (Figure 1)—Automatic switch that opens an electric circuit in abnormal current conditions (e.g., an overload).

Figure 1: Circuit Breaker (CB)



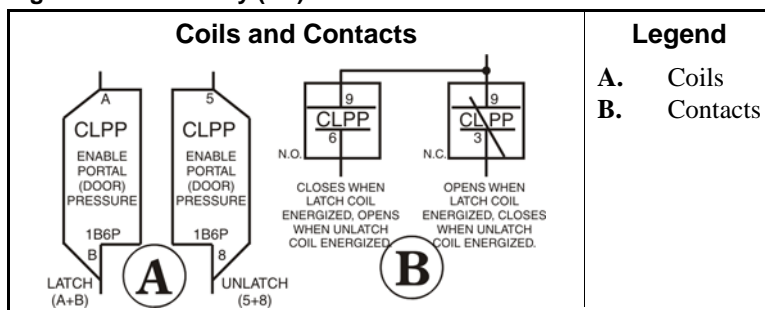
CD=Control, Time Delay Relay (Figure 2)—A relay whose contacts switch only after a fixed or adjustable delay, once voltage has been applied to its coil. The contacts switch back to normal (de-energized state) immediately when the voltage is removed.

Figure 2: Time Delay Relay (CD)



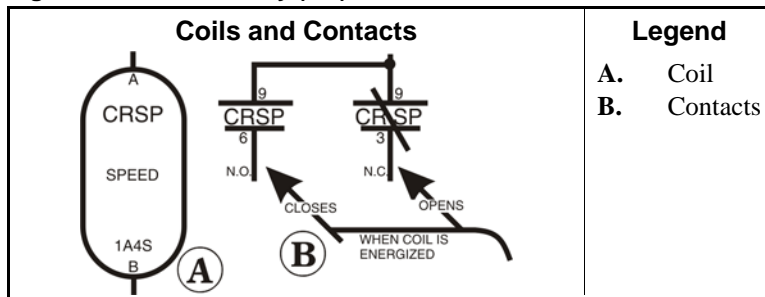
CL=Control, Latch Relay (Figure 3)—A relay which latches in an energized or set position when operated by one coil (the latch/set coil). The relay stays latched even though coil voltage is removed. The relay releases or unlatches when voltage is applied to a second coil (the unlatch/reset coil).

Figure 3: Latch Relay (CL)



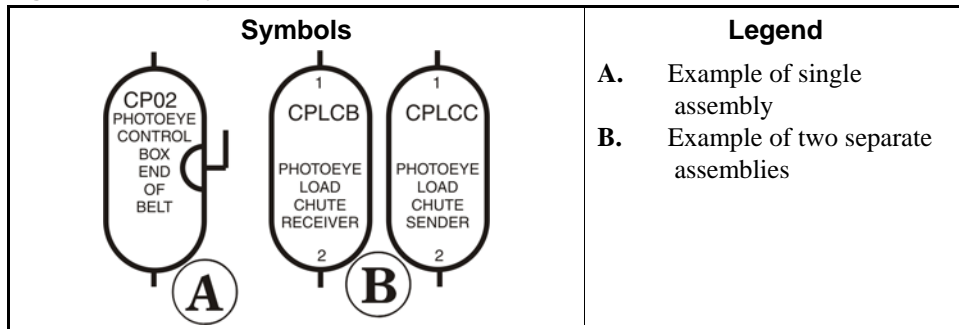
CR=Control, Relay (Figure 4)—A relay whose contacts switch immediately when voltage is applied to its coil and revert to normal when the voltage is removed.

Figure 4: Standard Relay (CR)



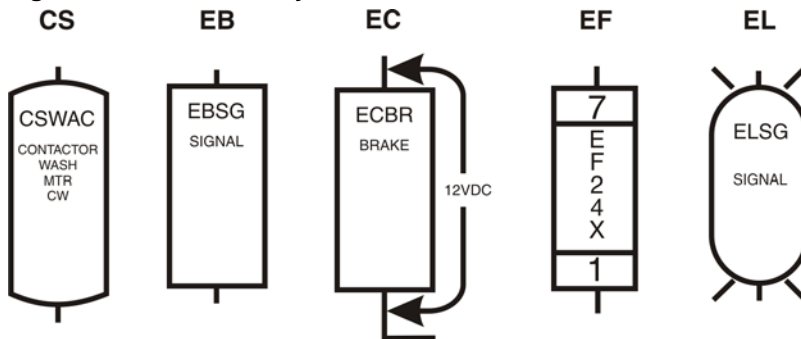
CP=Control, Photo-Eye (Figure 5)—Photo-eyes sense the presence of an object without direct physical contact. Photo-eyes consist of a transmitter, receiver, and output module. These components may be housed in one assembly with the transmitter bouncing light off of a reflector to the receiver, or these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

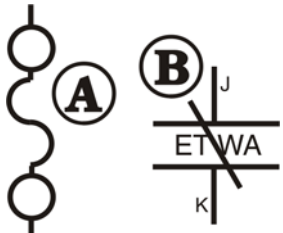
EL=Electric Light (Figure 6)—Indicator lights may be either incandescent or fluorescent.

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
	<p>A. Heater (one per phase) B. Overload relay; contacts open if overload condition exists</p>

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.

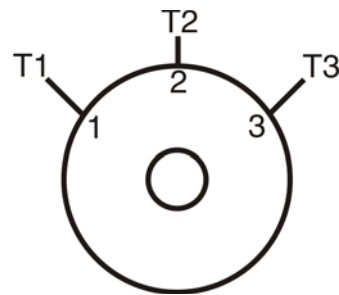
MN=Electronic Monitor (CRT)—A cathode ray tube used for visual presentation of data.

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

Figure 8: Transformer (EX)



Figure 9: Electric Motor (MR)

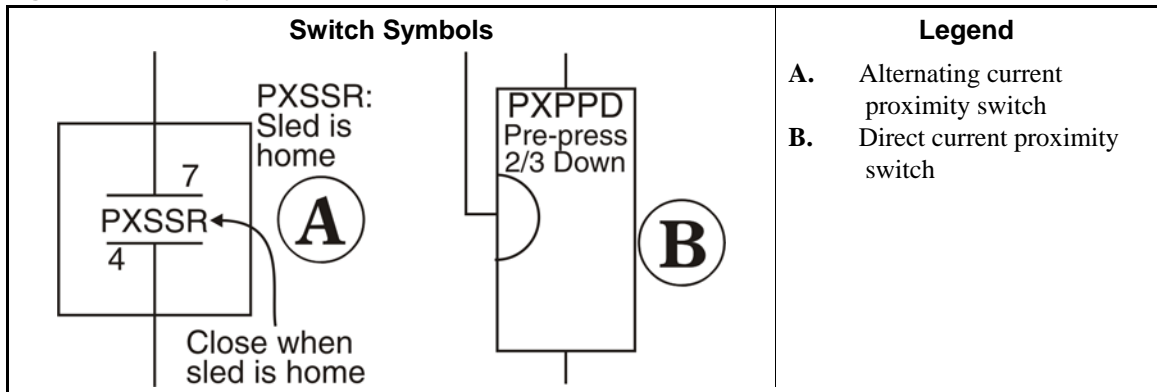


MV=Motor (Variable Speed) Inverter—To vary the speed of an AC motor, the volts to frequency ratio must be kept constant. The motor will overheat if this ratio is not maintained. The motor variable speed inverter converts three phase AC to DC. The inverter then uses this DC voltage to generate AC at the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

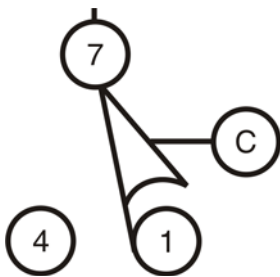
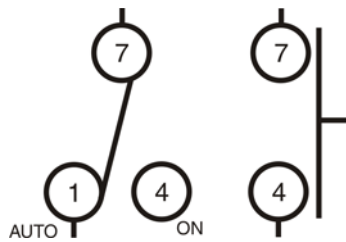


Figure 12: Hand Operated Switch (SH)



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)

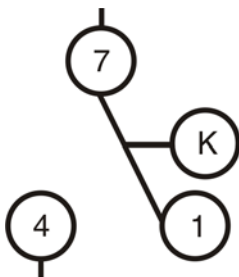
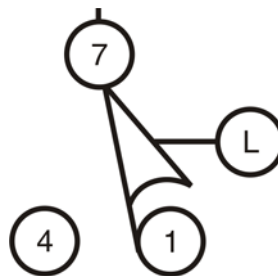


Figure 14: Level Switch (SL)



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)

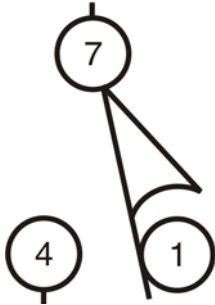
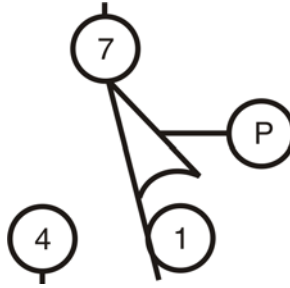


Figure 16: Pressure Switch (SP)



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)

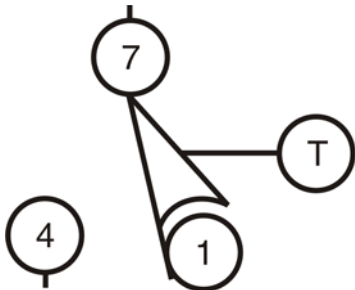
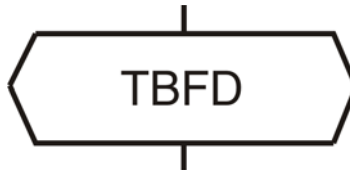


Figure 18: Terminal Board (TB)



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)

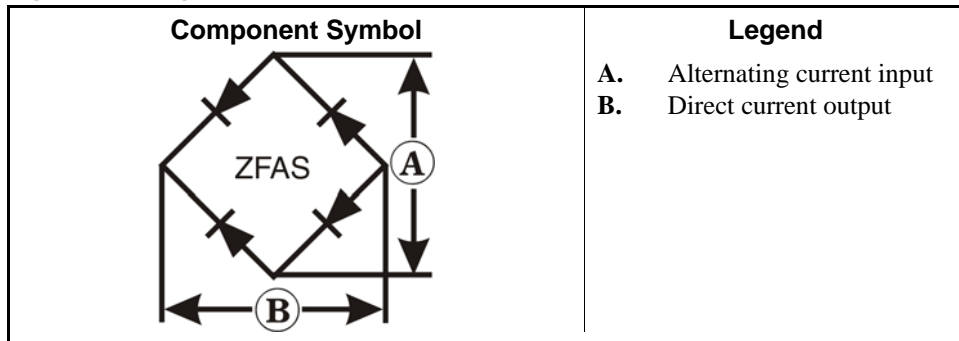
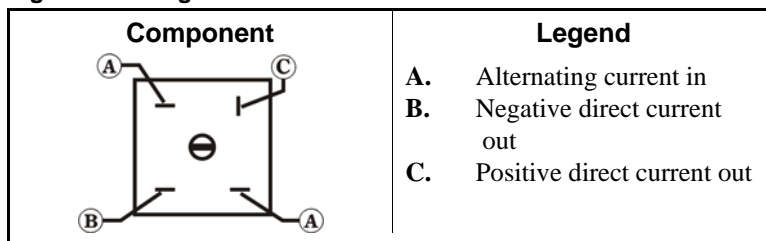


Figure 21: Bridge Rectifier



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.

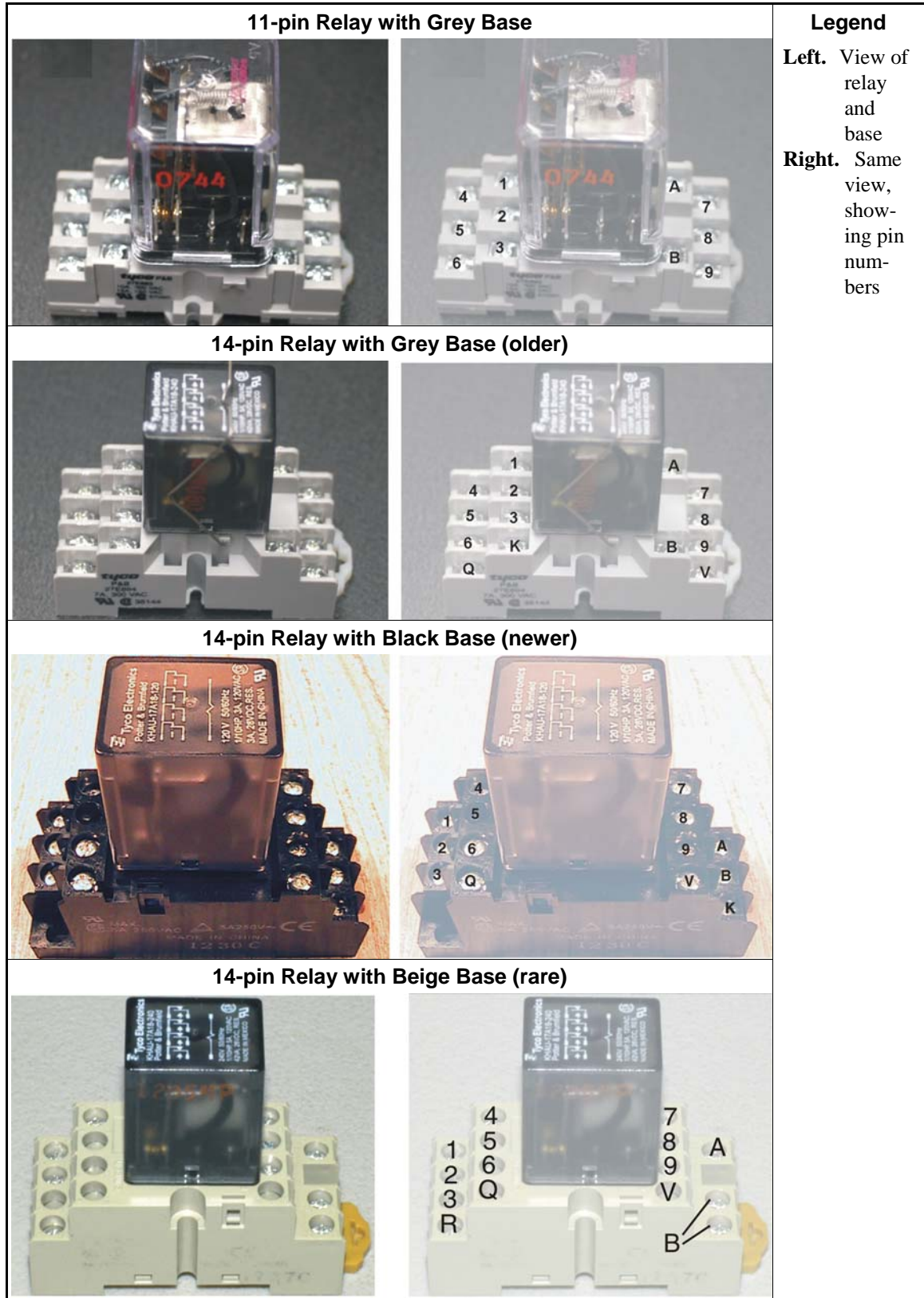
2. Component Terminal Numbering



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

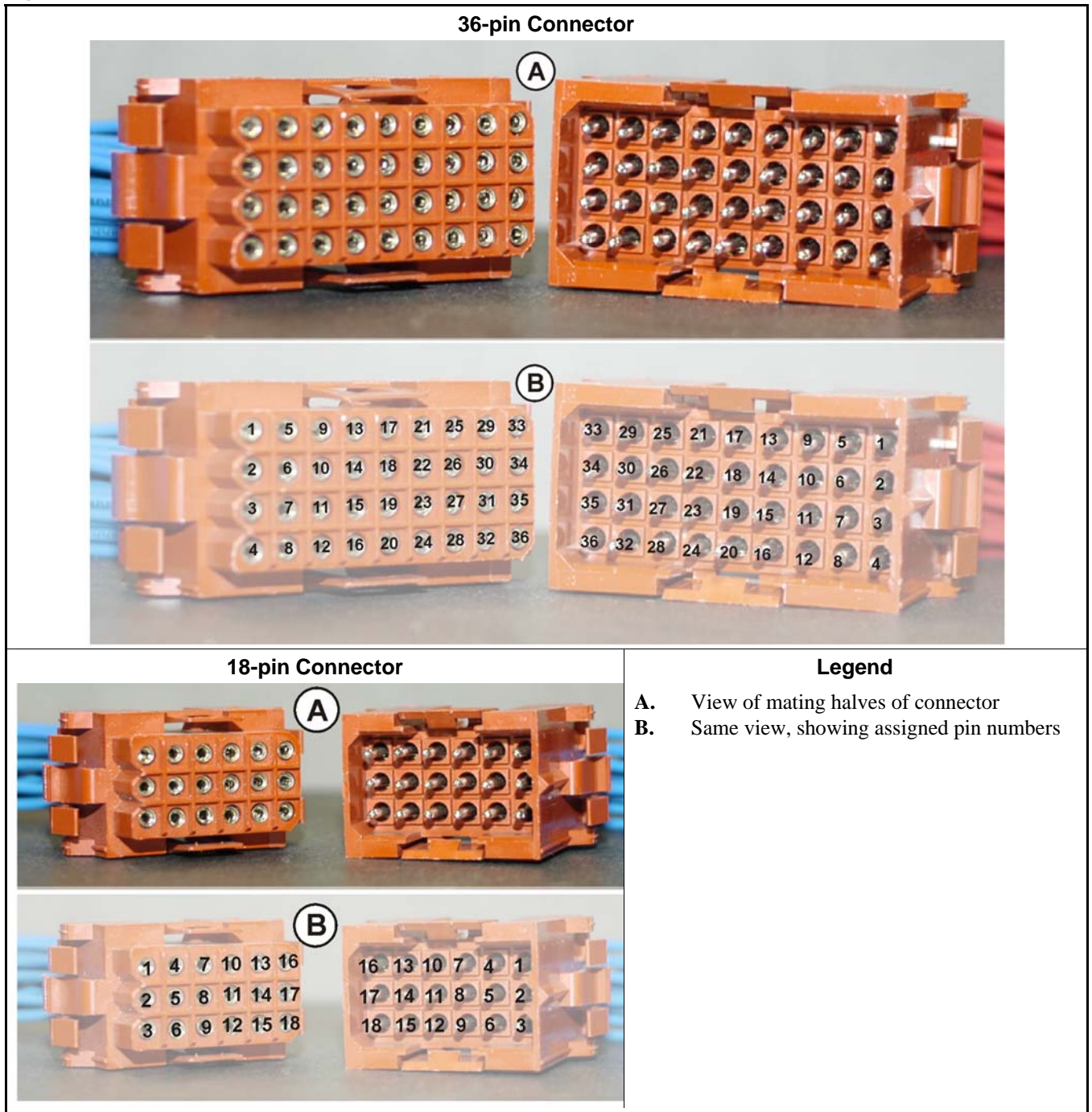


Figure 24: Molex Connector Pin Locations

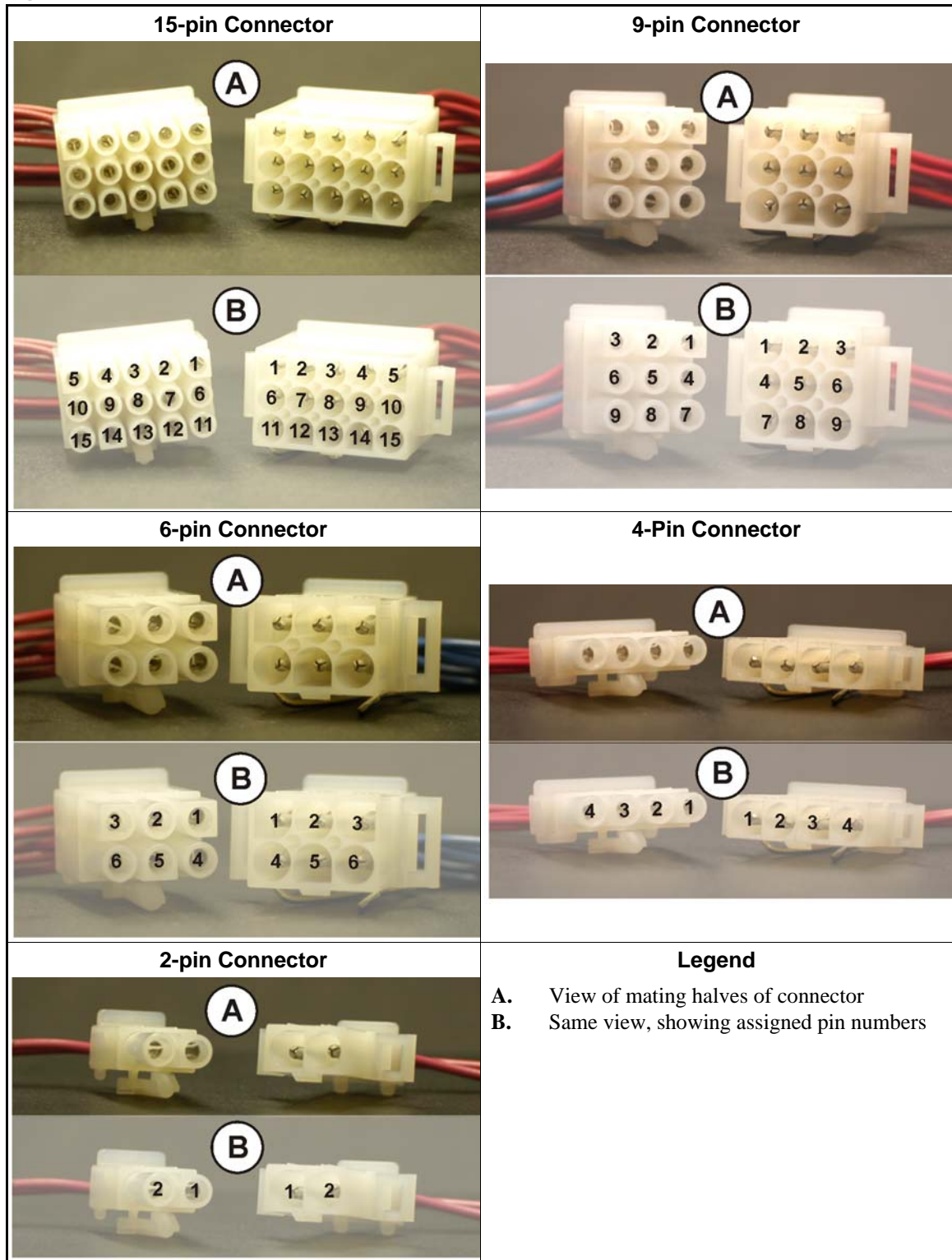


Figure 25: Pressure Switch

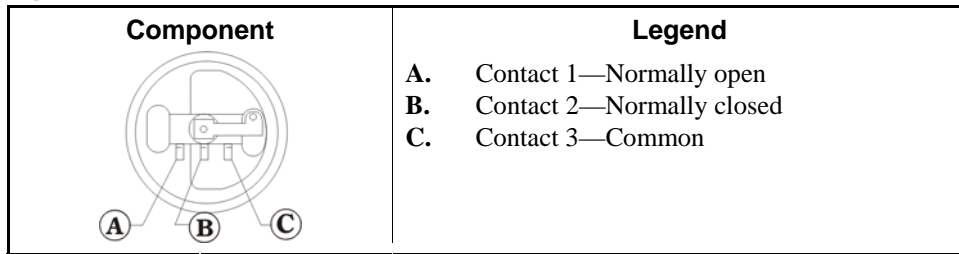


Figure 26: Toggle Switch

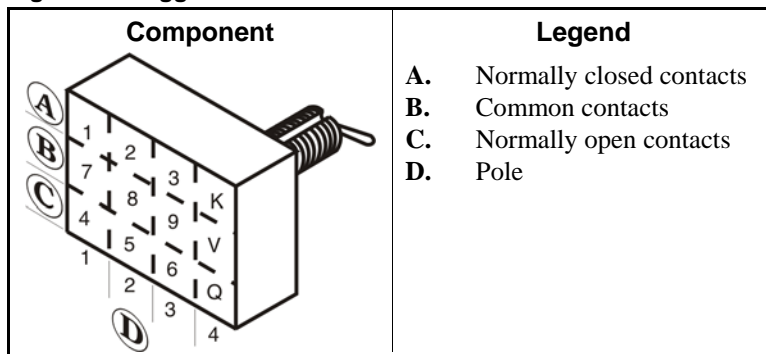
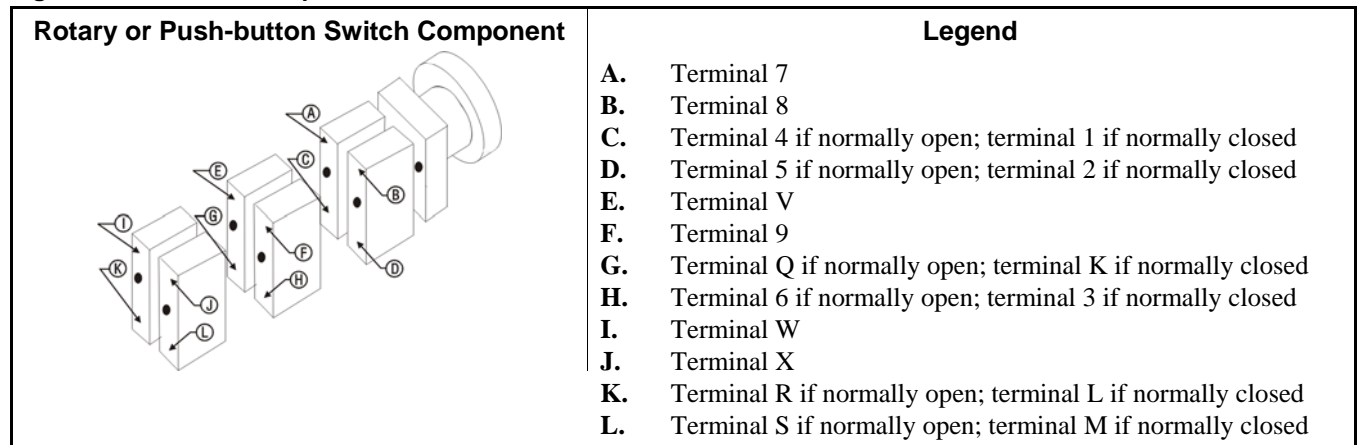


Figure 27: Switch with Replaceable Contact Blocks



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.

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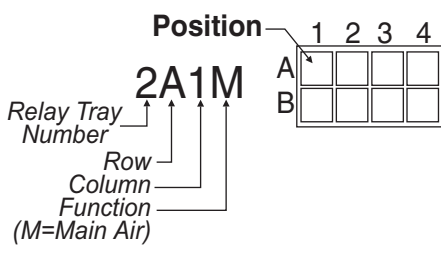
4 This indicates on which page (W6DRYGS+) and line number (08) the relay coil can be found for this set of contacts

5 This indicates on which schematic page and line number the relay contacts of this coil (on Line 08) are located (i.e., W6DRYGS+, Lines 9 and 11).

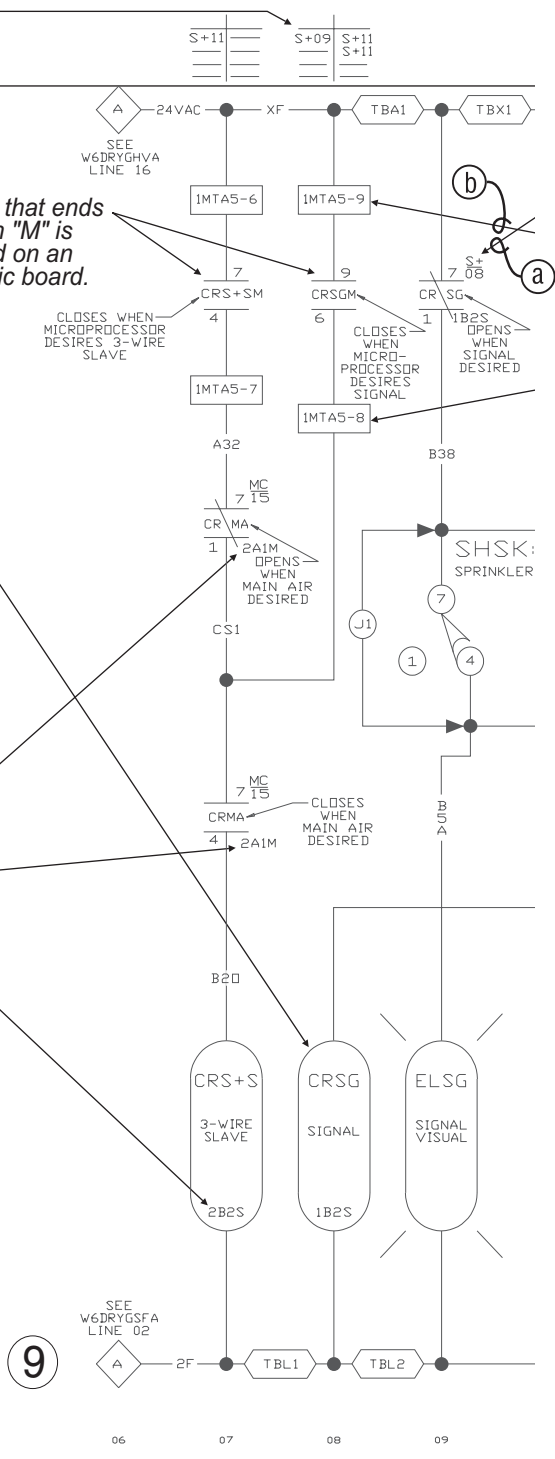
	Normally closed contacts	Normally open contacts	
7-1 contact	S+09	S+11	7-4 contact
8-2 contact	—	S+11	8-5 contact
9-3 contact	—	—	9-6 contact
V-Q contact	—	—	V-K contact
Contact not used	—	—	

Drawing and line where contact is located

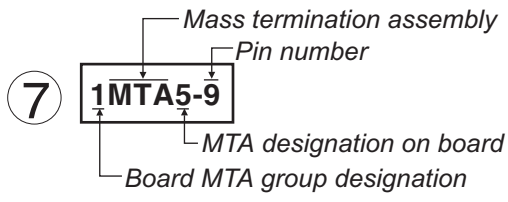
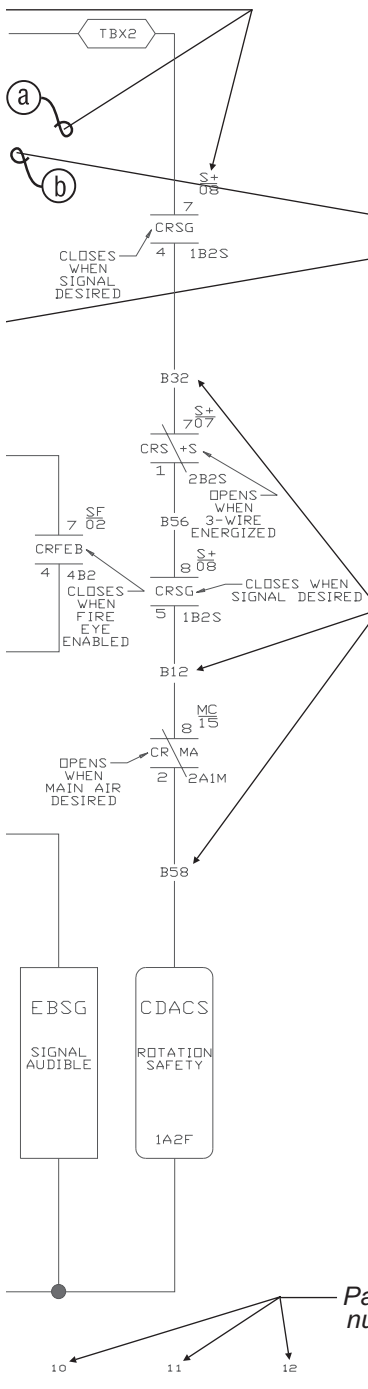
6 This is the physical location of the relay on the machine. Row and column numbers are shown on the appropriate tag for each relay tray.



Any relay that ends with an "M" is located on an electronic board.

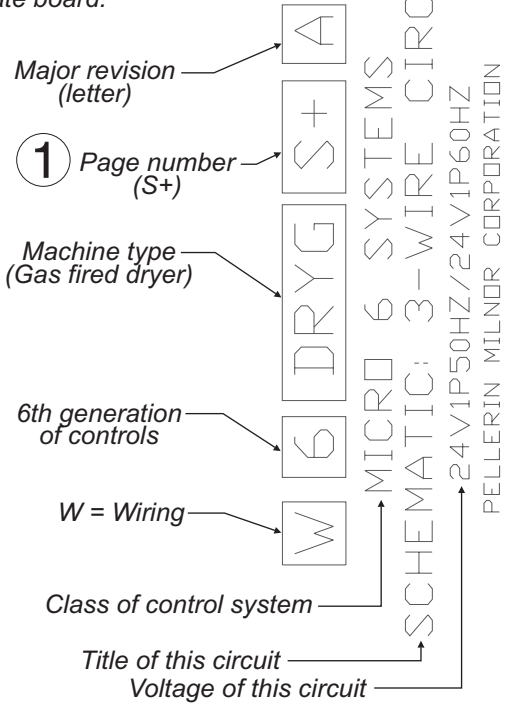


9



An MTA is a connection on an electronic circuit board. The notes and the tag page locate the appropriate board.

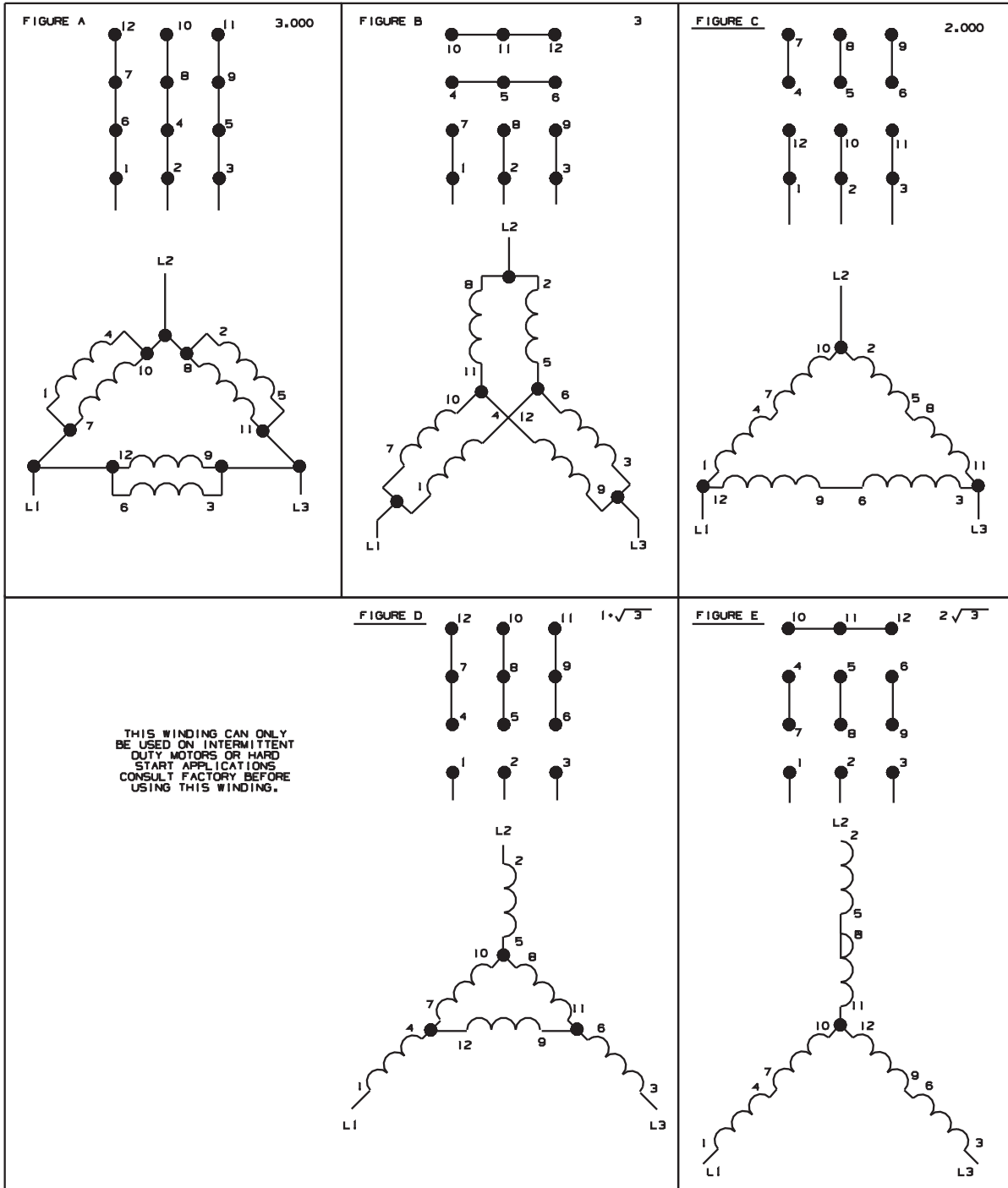
8 Wire identification marking. This designation is stamped on the wire every 6 inches and is used with the signal routing table.



- 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.

Page line numbers **3**

FIGURE	ELECTRICAL VALUES	SUFFIXES									
		B		H		M		T		U	
		50HZ	60HZ	50HZ	60HZ	50HZ	60HZ	50HZ	60HZ	50HZ	60HZ
A	1,000	20B	230			200	220	220	240	200-220	20B-240
B	$\sqrt{3}$					20B	346	380	380	346-380	380
C	2,000	416	460	220	240	400	440	440	480	400-440	440-480
D	$1 \cdot \sqrt{3}$										600
E	$2 \sqrt{3}$			380							



06 07 08 09 10 11 12 13 14 15 16 17

BMP850029

MOTOR CONNECTION DIAGRAMS

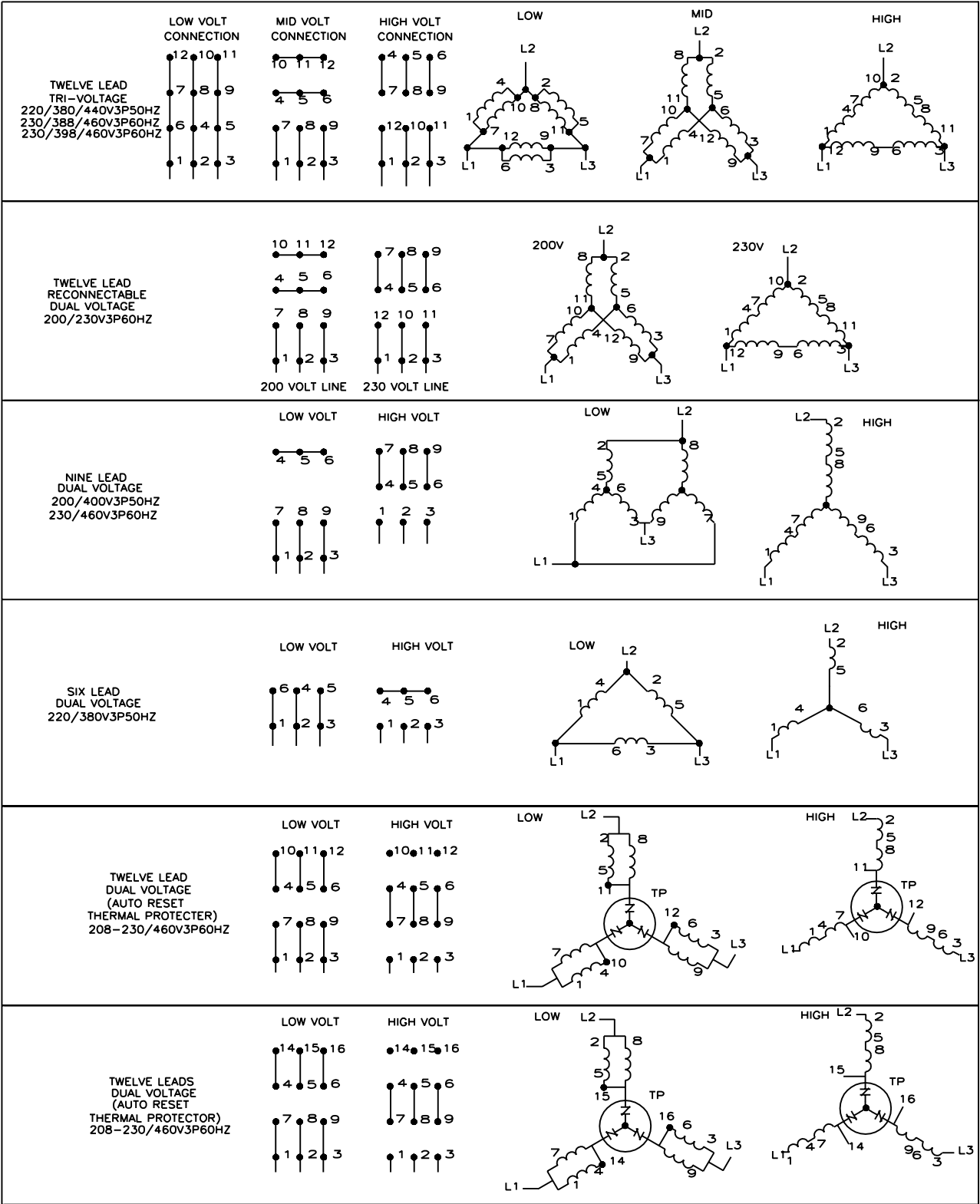
THREE PHASE SINGLE SPEED MOTORS WITH MULTIPLE VOLTAGE RATINGS
(ONLY FOR MOTOR SUFFIXES LISTED)

PELLERIN MILNOR CORPORATION

BMP850029
99362B

BMP850029
99362B

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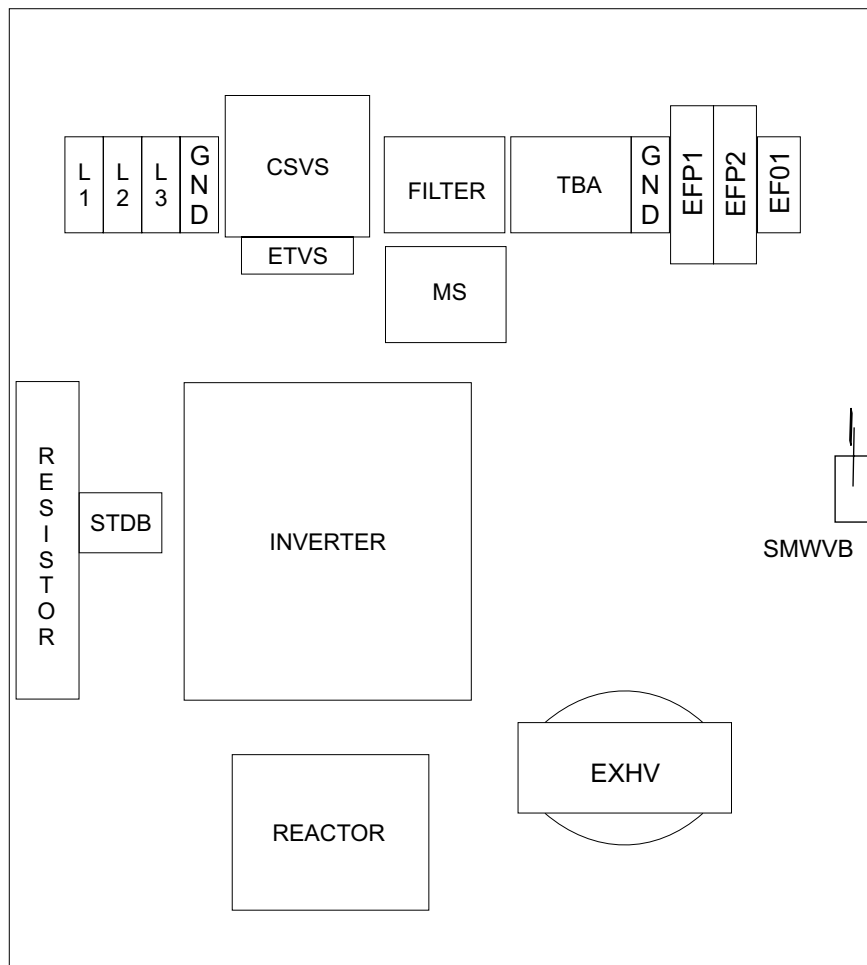


W80008

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

W80008
2001253A

W80008
2001253A



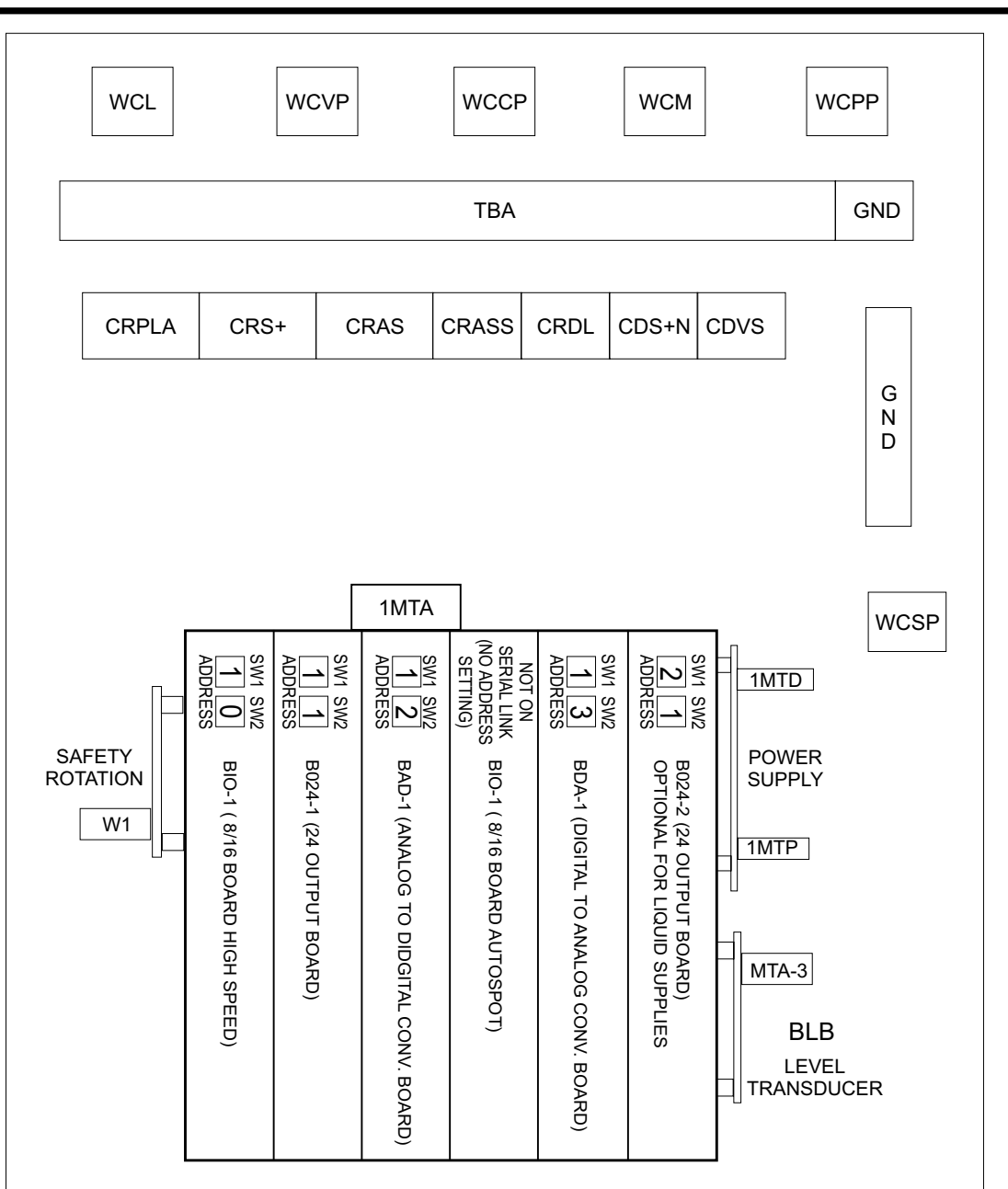
MICRO 6 SYSTEMS
4244 SINGLE MOTOR WP2/SP2
HIGH VOLTAGE CONTROL BOX
 PELLERIN MILNOR CORPORATION

B2T2005003
 2008345G

W6W5DSTG1

42044 SINGLE MOTOR HYDRO CONTROL BOX DETAILS

PELLERIN MILNOR CORPORATION



MICRO 6 SYSTEMS
4244 SINGLE MOTOR HYDRO
LOW VOLTAGE CONTROL BOX
 PELLERIN MILNOR CORPORATION

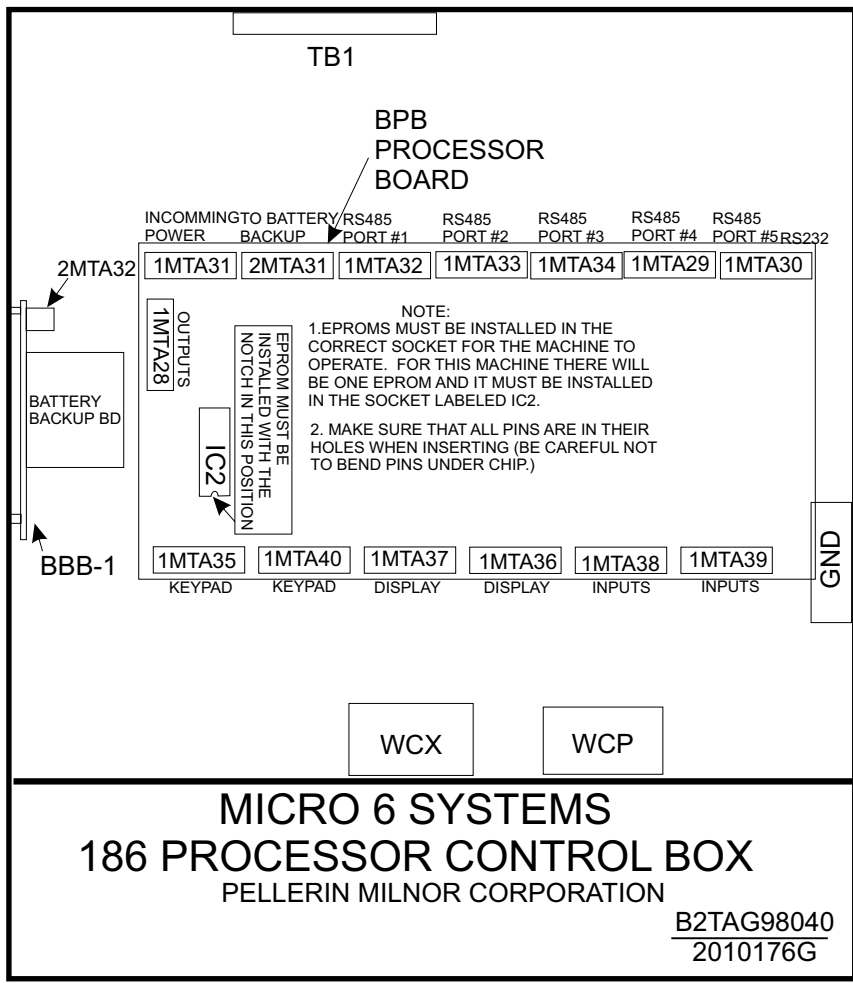
B2T2005012
2006353G

B024-1	B024-2 (OPTIONAL) (STANDARD ON 7244 MODELS)	B024-3 (OPTIONAL)	BIO-1 (HIGH SPEED)	B/O-A AUTOSPOT ON 1MTR MODELS ONLY
OUTPUTS	OUTPUTS	OUTPUTS	INPUTS	INPUTS
0 TANK TO MACHINE1	0 CHEM 14	0 PROGRAM. OUT #00	0 TANK IS FULL	0 NOT USED
1 ALT. EXT ACCEL/DECEL	1 CHEM 9	1 PROGRAM OUT #01	1 DOOR CLOSED	1 SOIL SIDE PCKT 3 SPOTTED
2 DOOR UNLOCK	2 CHEM 13	2 PROGRAM OUT #02	2 INVERTER TRIPPED	2 SOIL SIDE PCKT 2 SPOTTED
3 CW WASH	3 FLUSH	3 PROGRAM OUT #03	3 AUTOSPOT DESIRED	3 SOIL SIDE PCKT 1 SPOTTED
4 CCW WASH	4 CHEM 15	4 PROGRAM OUT #04	4 NOT USED	4 SPOT CLEAN POCKET 2
5 STEAM VALVE	5 CHEM 11	5 PROGRAM OUT #05	5 NOT USED	5 SPOT CLEAN POCKET 1
6 SIGNAL	6 CHEM SAVE	6 PROGRAM OUT #06	6 CHEM SAVE/TIMERSTOP	6 SPOT SOILED POCKET 2
7 THREE WIRE RELAY	7 DRAIN SAVER	7 PROGRAM OUT #07	7 BASKET TURNING	7 SPOT SOILED POCKET 1
8 BRAKE RELEASE	8 CHEM 10	8 PROGRAM OUT #08	8 AMP SAVER	8 SPOT SOILED POCKET 3
9 WATER VALVE #1	9 AMP SAVER	9 PROGRAM OUT #09	9 NOT USED	9 OK TO SPOT
10 WATER VALVE #2	10 CHEM 6	10 PROGRAM OUT #10	10 NOT USED	10 SPOT CLEAN POCKET 3
11 WATER VALVE #3	11 CHEM 7	11 PROGRAM OUT #11	11 BRAKE IS OFF	11 NOT USED
12 SEWER DRAIN	12 CHEM 8	12 PROGRAM OUT #12	12 NOT USED	12 NOT USED
13 REUSE DRAIN	13 CHEM 12	13 PROGRAM OUT #13	13 NOT USED	13 NOT USED
14 MACHINE TO MACHINE	14 AUTOMATIC RECIRC.	14 PROGRAM OUT #14	14 NOT USED	13 CLEAN POCKET 3 SPOTTED
15 MACHINE TO TANK	15 DRAIN MOTOR	15 PROGRAM OUT #15	15 NOT USED	14 CLEAN POCKET 2 SPOTTED
16 PUSH DOWN	16 E1 MOTOR	16 PROGRAM OUT #16	OUTPUTS	15 CLEAN POCKET 1 SPOTTED
17 TRANSFER CONTROL 1	17 E2 MOTOR	17 PROGRAM OUT #17	0 RECIRC. PUMP	OUTPUTS
18 XFER CTRL NOT 1	18 NOT USED	18 PROGRAM OUT #18	1 COOLDOWN	0 BRAKE
19 TRANSFER CONTROL 2	19 NOT USED	19 PROGRAM OUT #19	2 FLUSH	1 I AM SPOTTING
20 XFER CTRL NOT 2	20 NOT USED	20 NOT USED	3 CHEM 4	2 NOT USED
21 CLEAN BUZZER	21 NOT USED	21 NOT USED	4 CHEM 1	3 DC BRAKE
22 CLUTCH	22 NOT USED	22 NOT USED	5 CHEM 3	4 I AM SPOTTING
23 SPRAY DOWN	23 NOT USED	23 NOT USED	6 CHEM 2	5 START SPOTTING
			7 CHEM 5	6 SOIL SPOTTED
				7 CLEAN SPOTTED

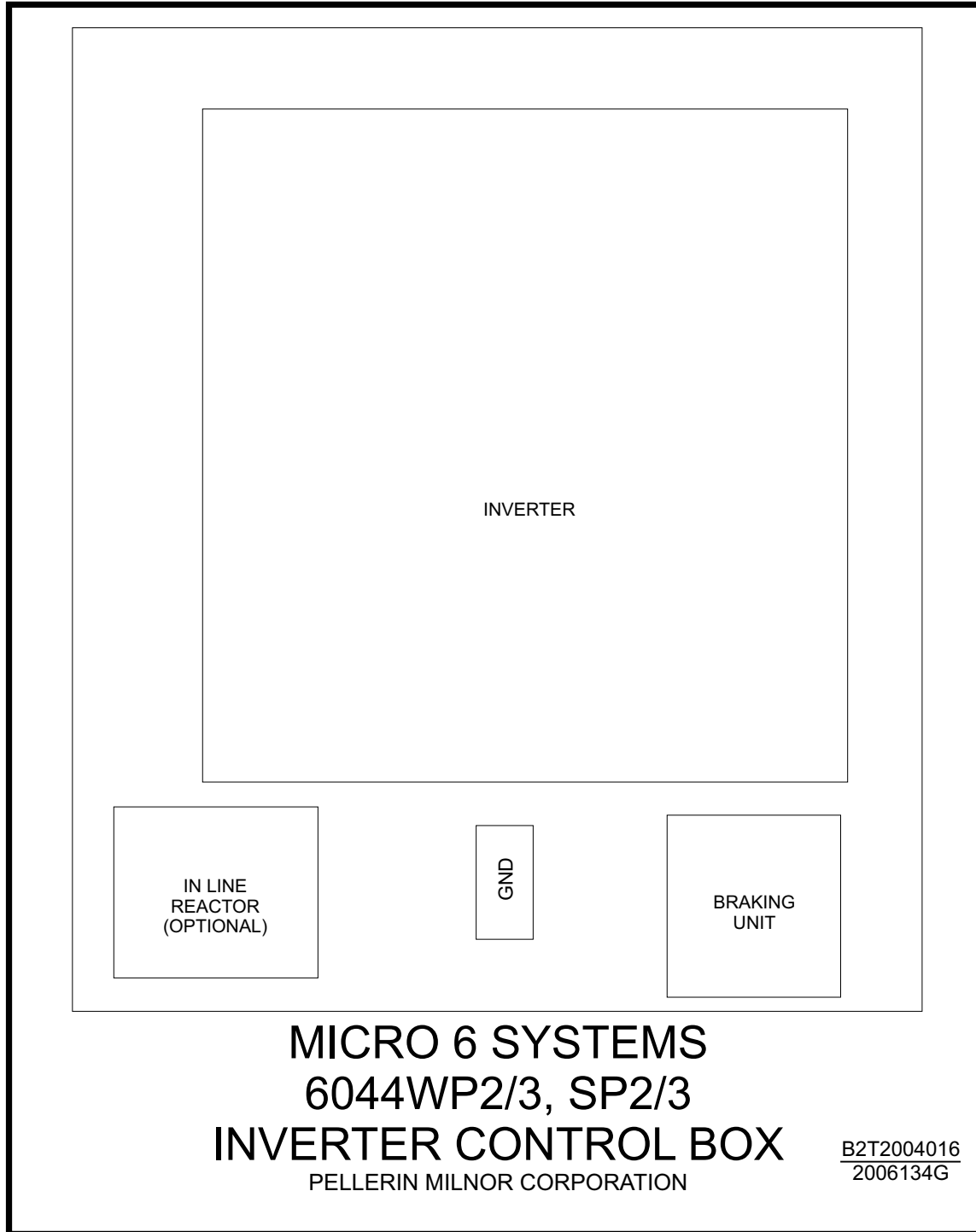
NOT ALL INPUTS/OUTPUTS
USED FOR ALL MODELS

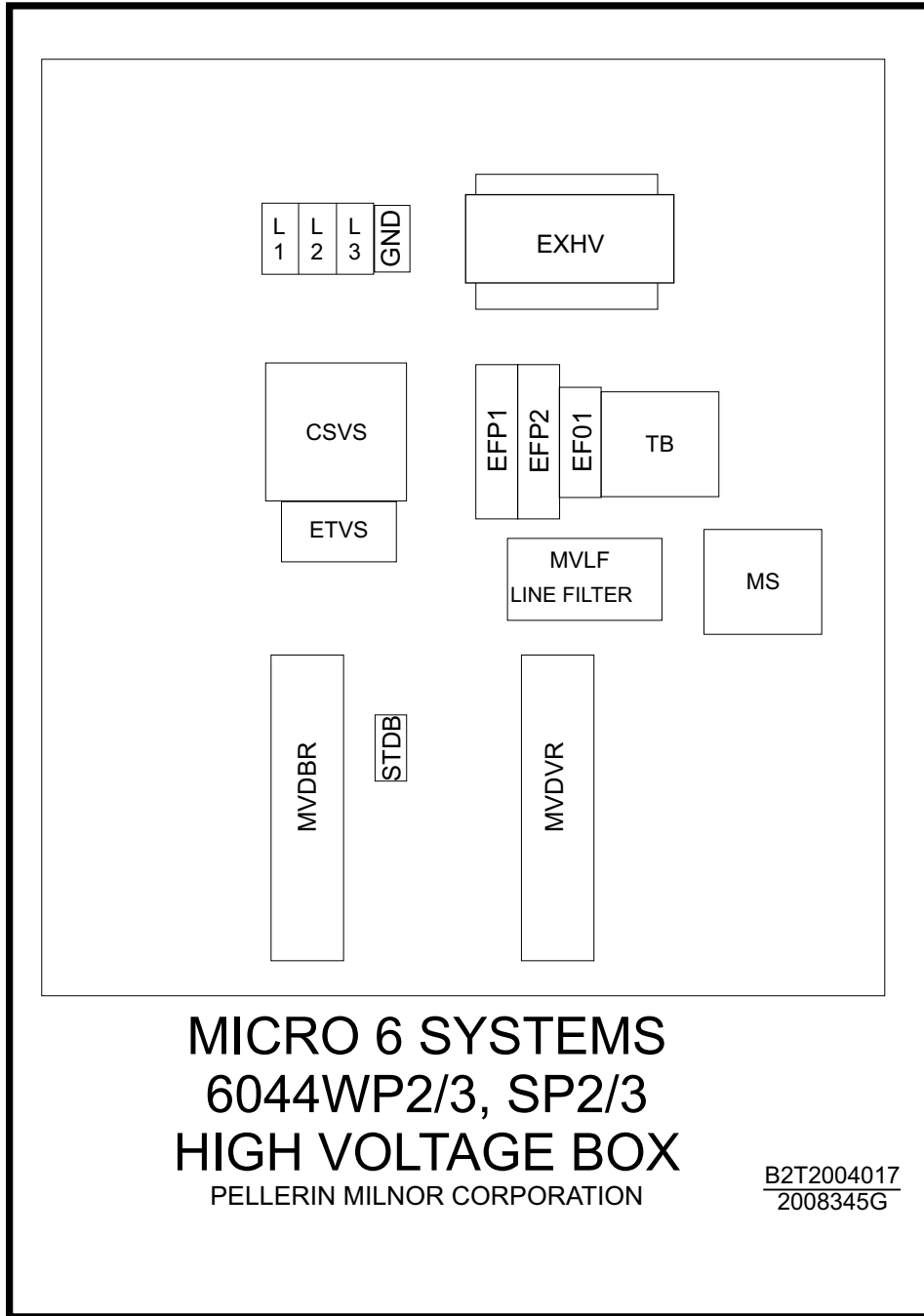
**MICRO 6 SYSTEMS MARK V or VI CONTROLS
MODELS WP2/3, SP2/3
CONTROL BOARDS INPUTS/OUTPUTS
PELLERIN MILNOR CORPORATION**

B2T2005014
2011043G



W6W5DSTG2
42 & 60" WP2, WP3 SINGLE MOTOR CONTROL BOX DETAILS
PELLERIN MILNOR CORPORATION

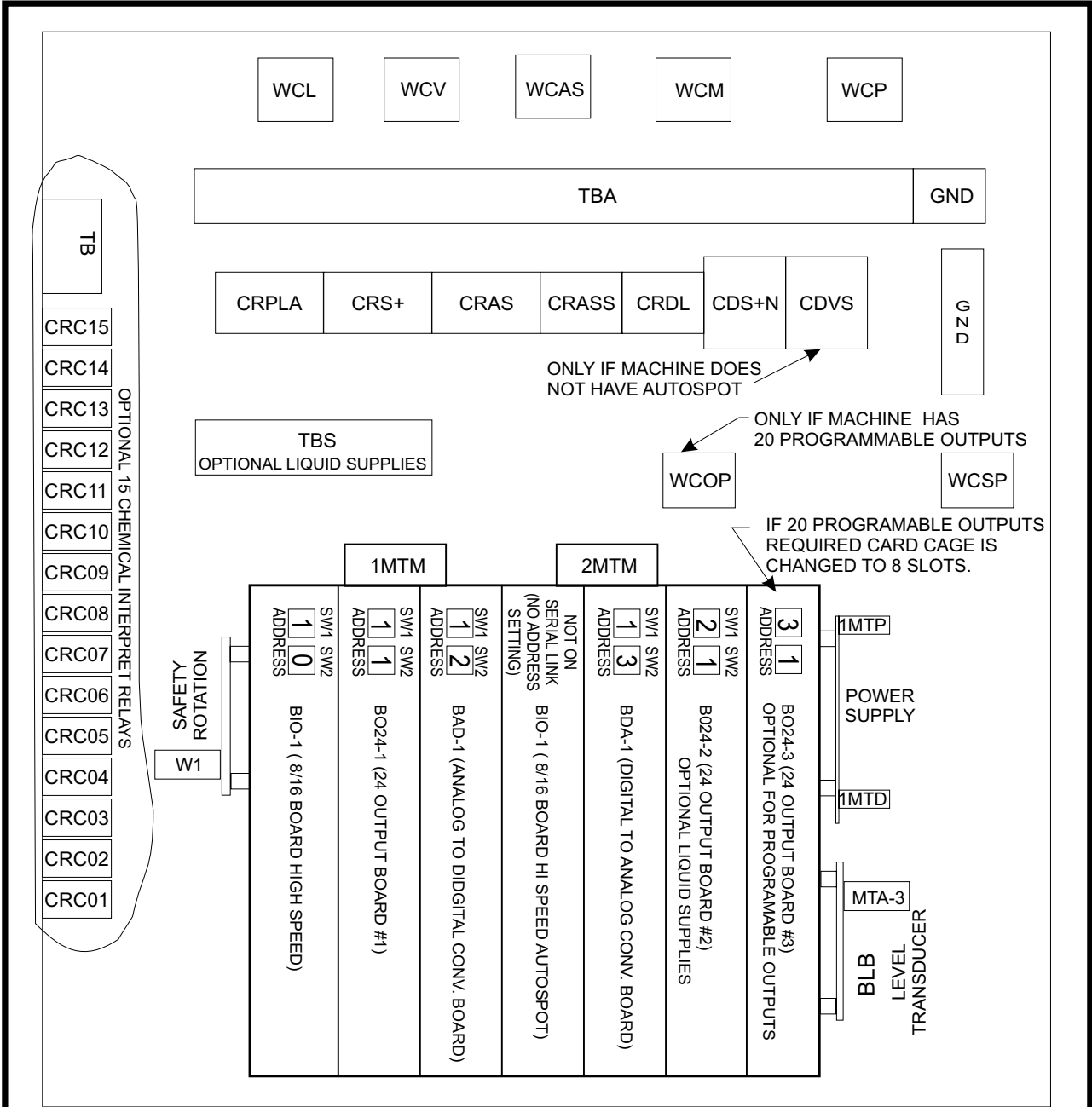




W6W5DSTG3

60044 SINGLE MOTOR HYDRO CONTROL BOX DETAILS

PELLERIN MILNOR CORPORATION



MICRO 6 SYSTEMS
6044WP2/3 SINGLE MOTOR
LOW VOLTAGE CONTROL BOX

PELLERIN MILNOR CORPORATION

B2T2006004
 2008214G

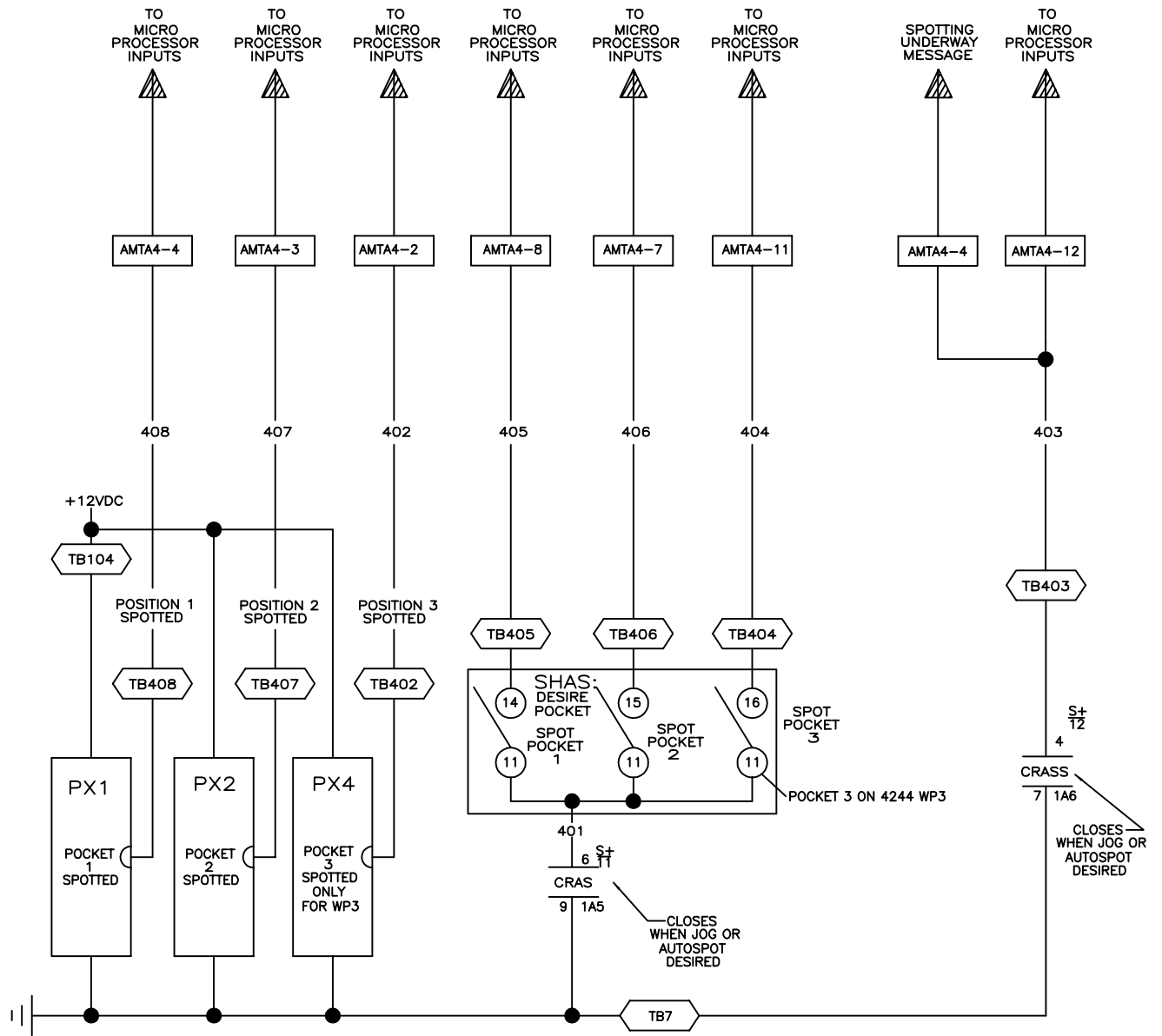
W6W5DSTG4

60044 SINGLE MOTOR HYDRO CONTROL BOX DETAILS

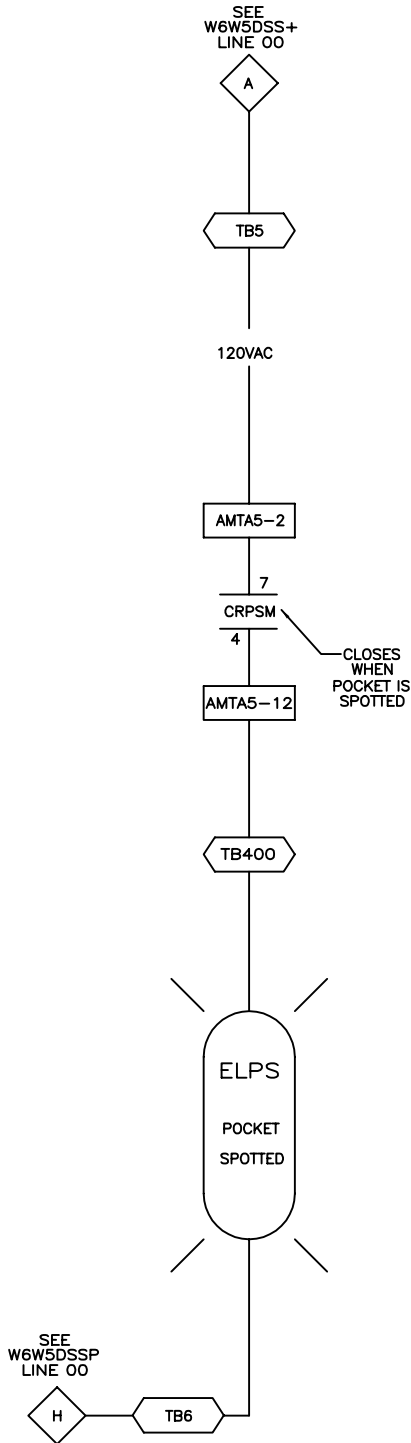
PELLERIN MILNOR CORPORATION

W6W5DSTG4
2012303B

W6W5DSTG4
2012303B



00 01 02 03 04 05 06 07 08 09

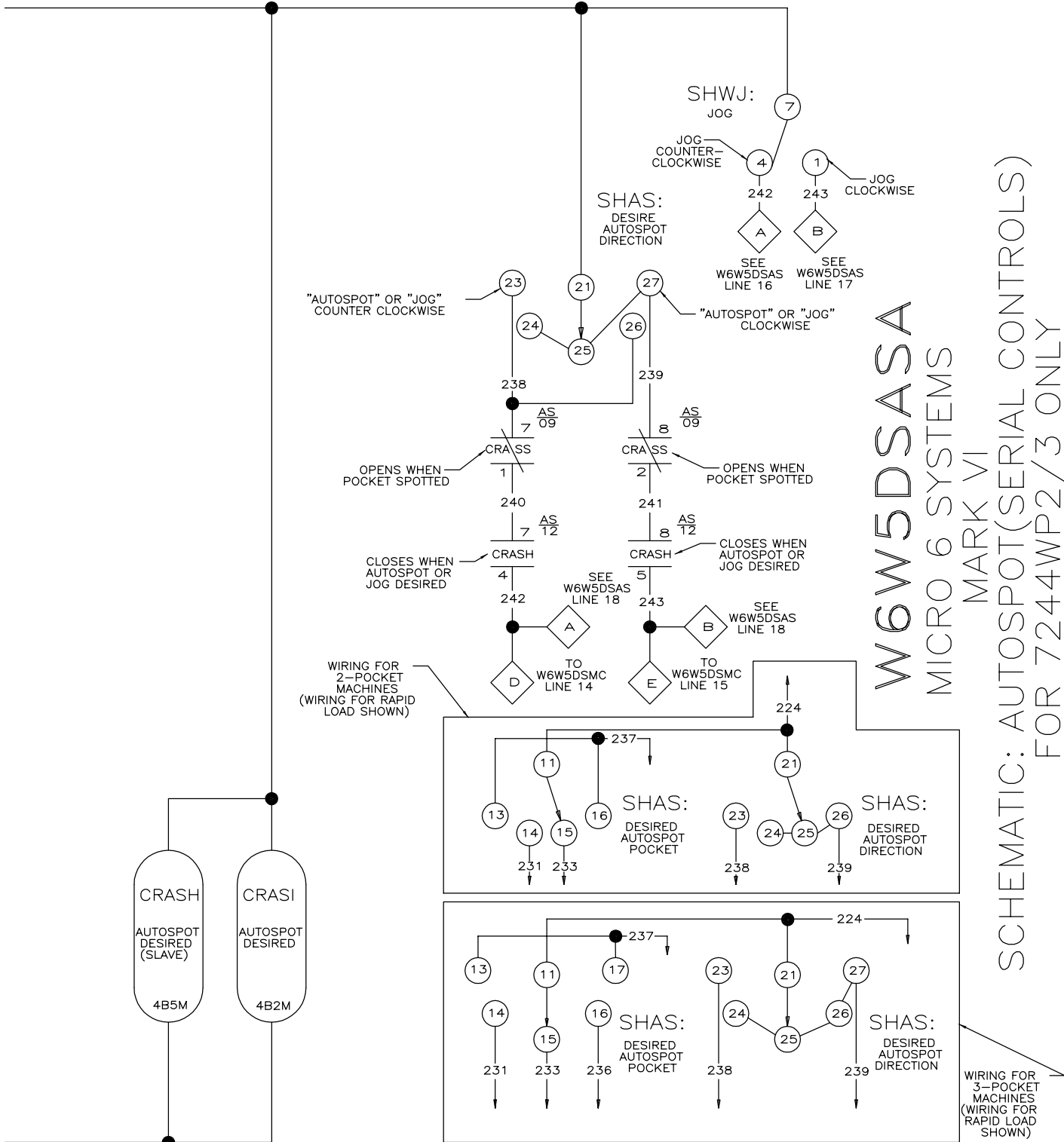
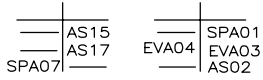


W6W5DSAS
MICRO 6 SYSTEMS
MARK VI
SCHEMATIC: AUTOSPOT(SERIAL CONTROLS)
AUTOSPOT CONTROLS 4244 WP2/3
110V1P50HZ/120V1P60HZ
PELLERIN MILNOR CORPORATION

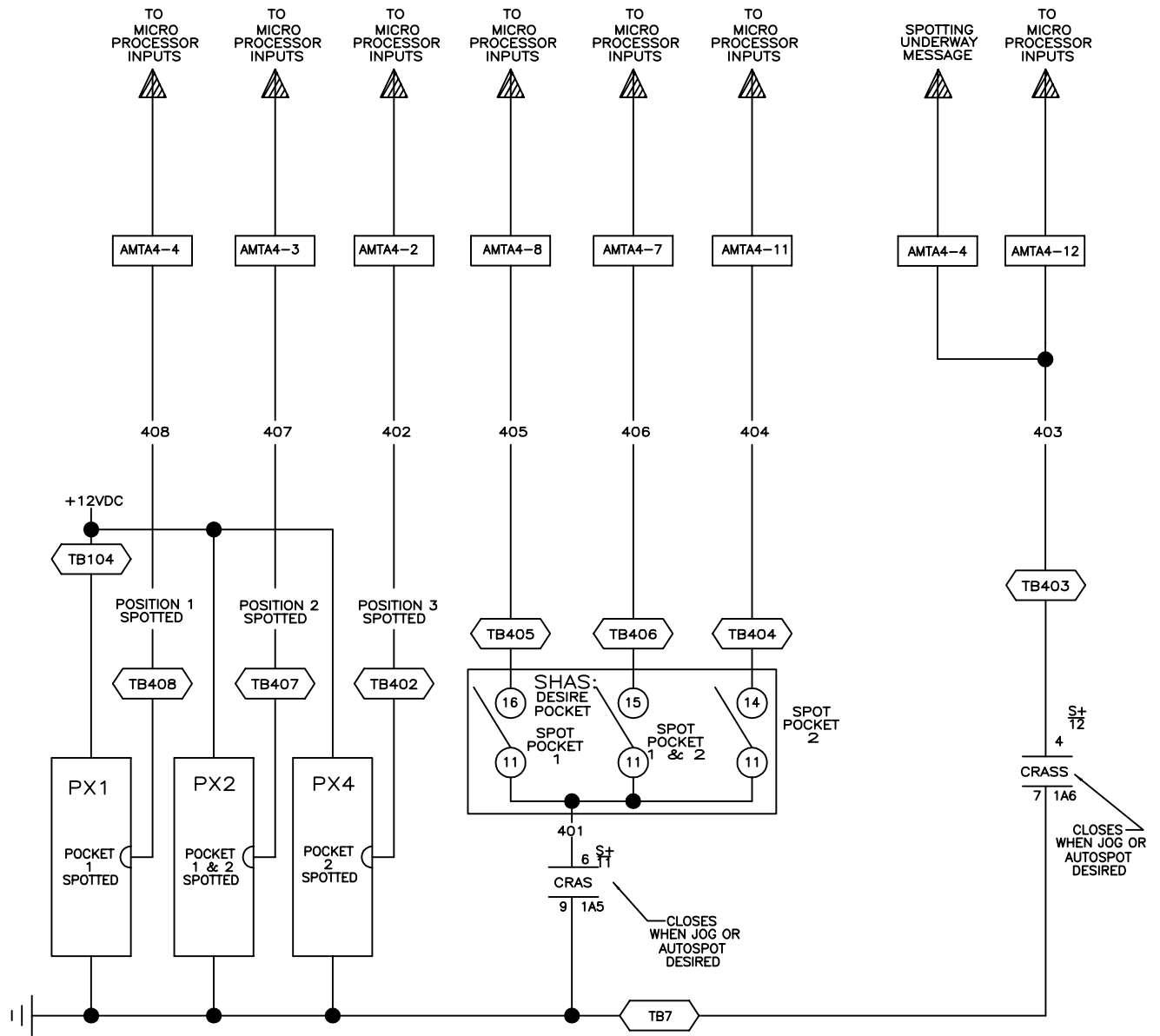
10 11 12 13 14 15 16 17

NOTES:

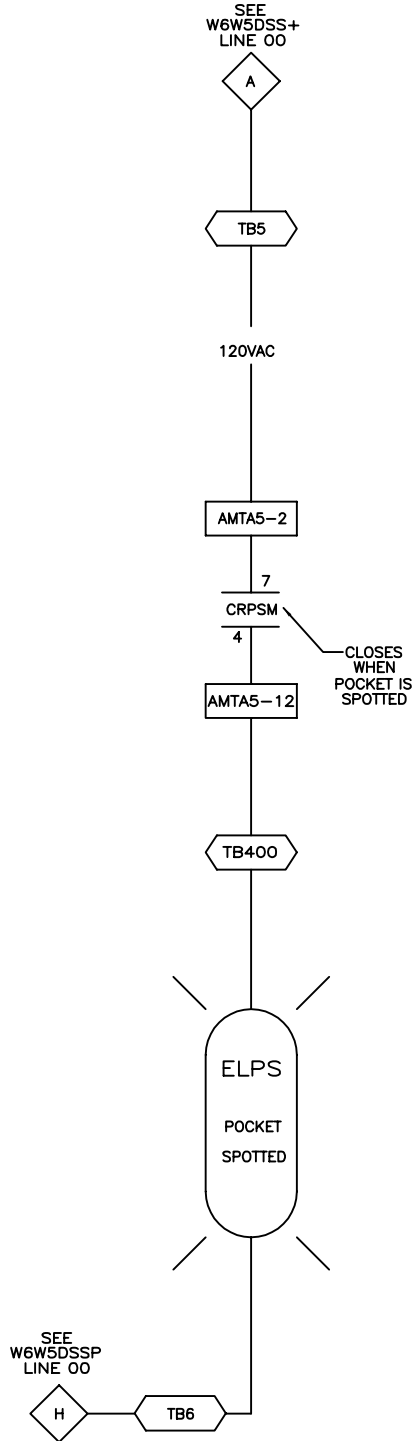
1. REMOVE (J1) FOR MACHINES WITHOUT DOOR CLOSED OPTION ALL RELAYS ON THIS SCHEMATIC ARE LOCATED IN THE AUTOSPOT CONTROL BOX.



11 12 13 14 15 16 17 18 19

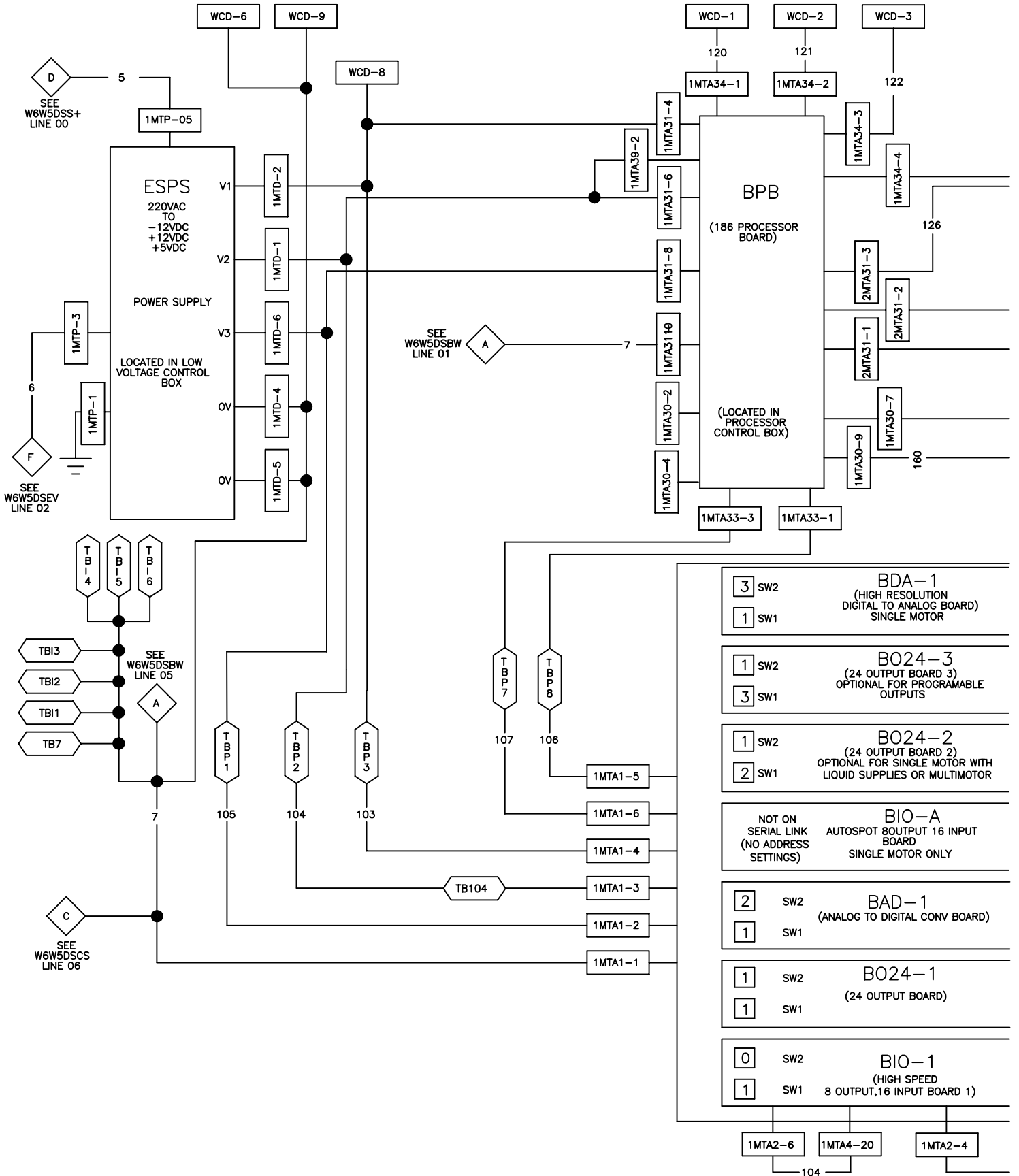


00 01 02 03 04 05 06 07 08 09

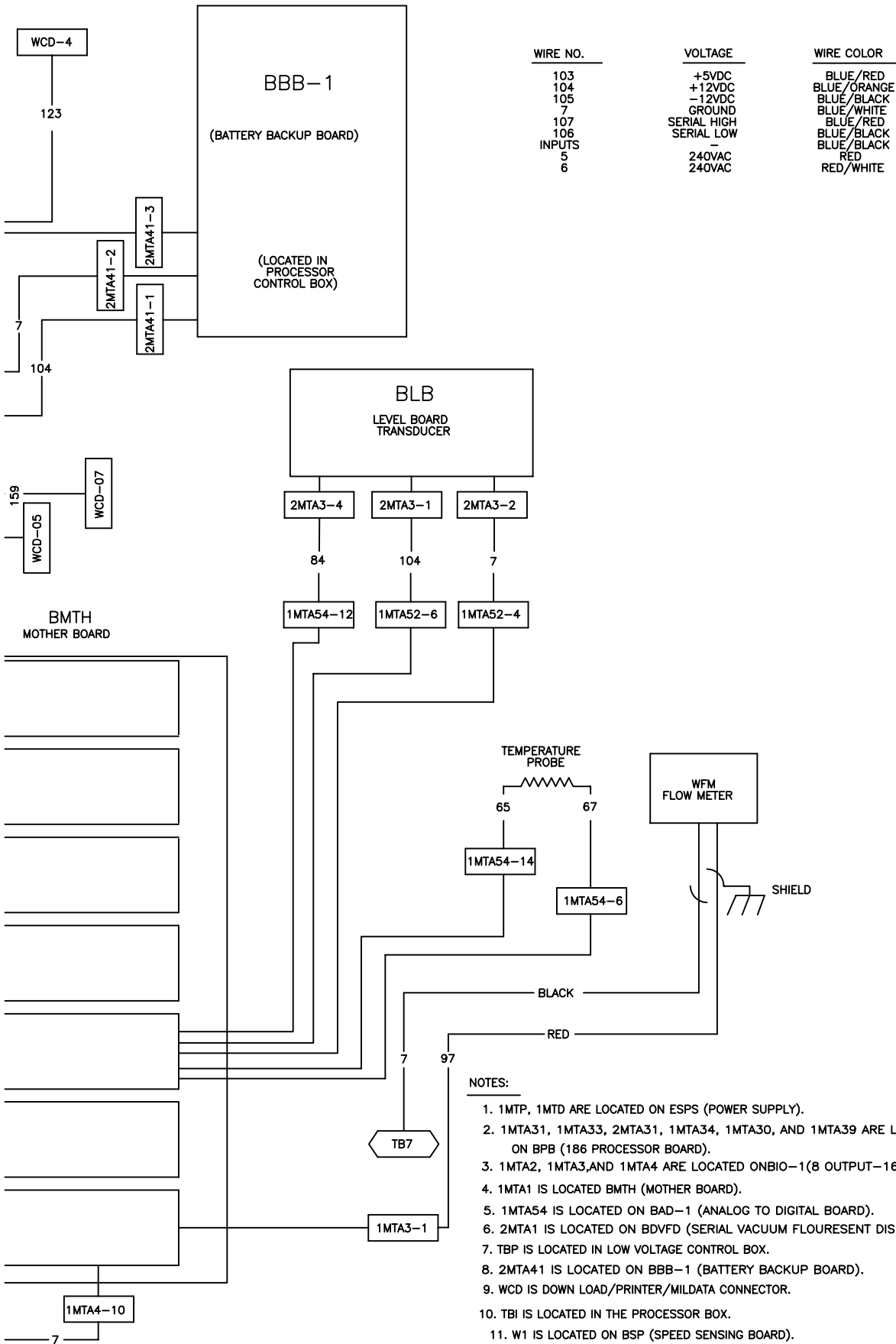


W6W5DSASB
MICRO 6 SYSTEMS
MARK VI
SCHEMATIC: AUTOSPOT(SERIAL CONTROLS)
AUTOSPOT SENSORS 6044 WP2/3
110V1P50HZ/120V1P60HZ
PELLERIN MILNOR CORPORATION

10 11 12 13 14 15 16 17

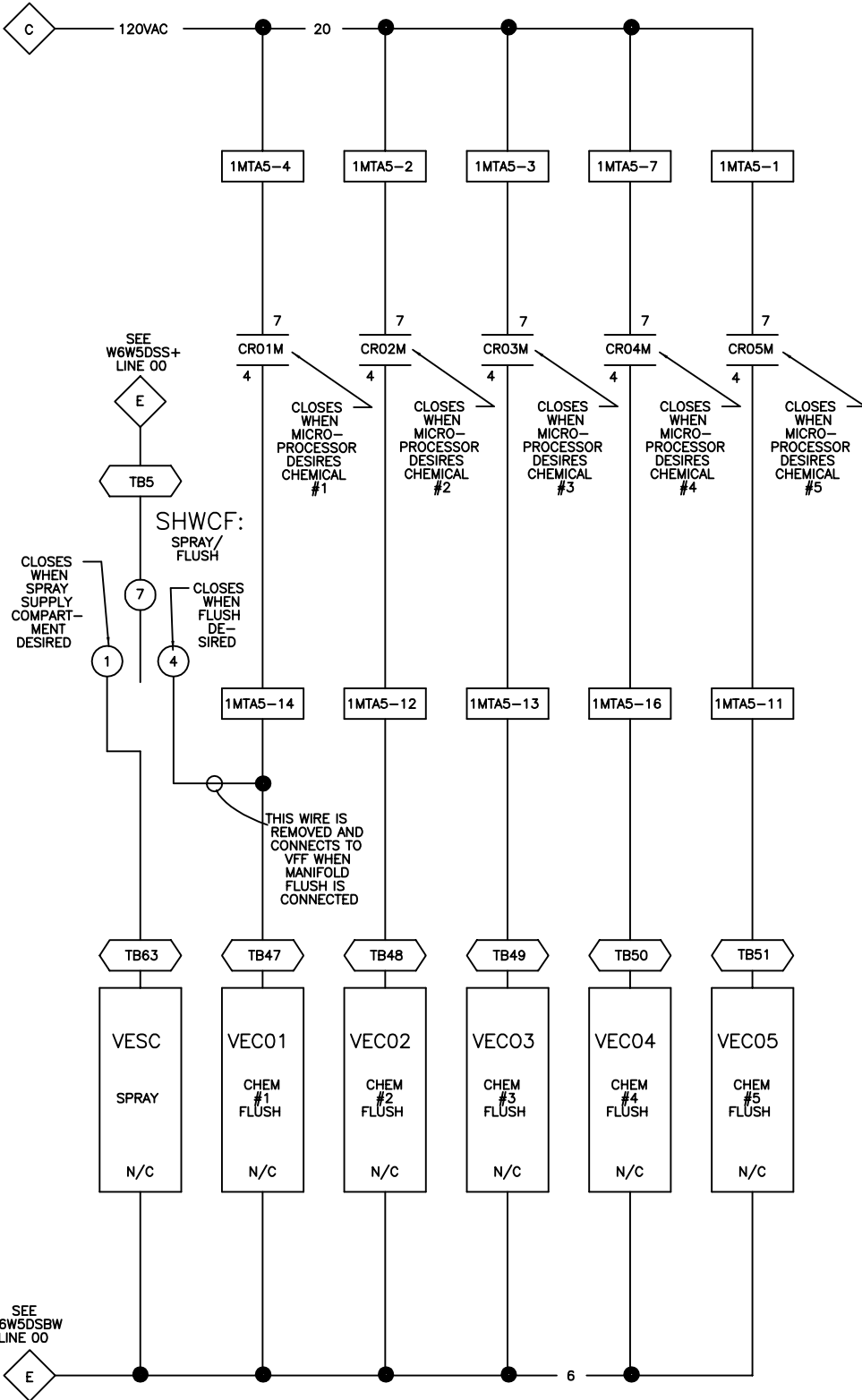


00 01 02 03 04 05 06 07 08 09 10



W6W5DSBW
 MICRO 6 SYSTEMS SERIAL CONTROLS
 MARK V
 SCHEMATIC: BOARD TO BOARD WIRING
 (SERIAL CONTROLS)
 PELLERIN MILNOR CORPORATION

SEE
W6W5DSCP
LINE 00



00

01

02

03

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05

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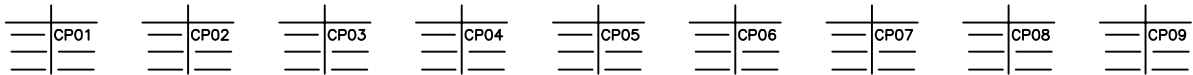
07

08

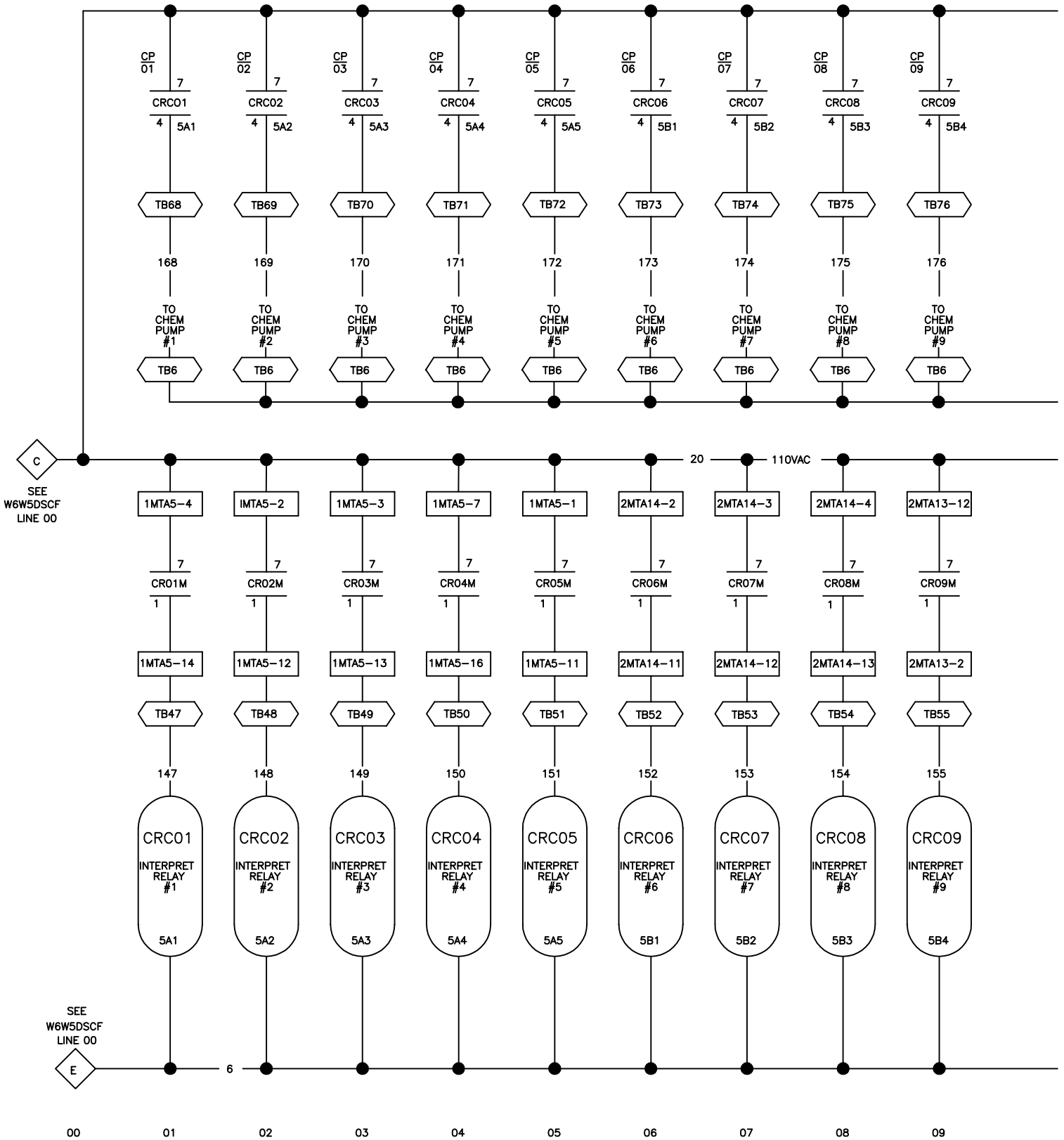
W6W5DSCF
MICRO 6 SYSTEMS
MARK V
SCHEMATIC: FLUSHING SUPPLIES
(SERIAL CONTROLS)
110V1P50HZ/120V1P60HZ
PELLERIN MILNOR CORPORATION

~~W6W5DSCF
2005404B~~

W6W5DSCF
2005404B



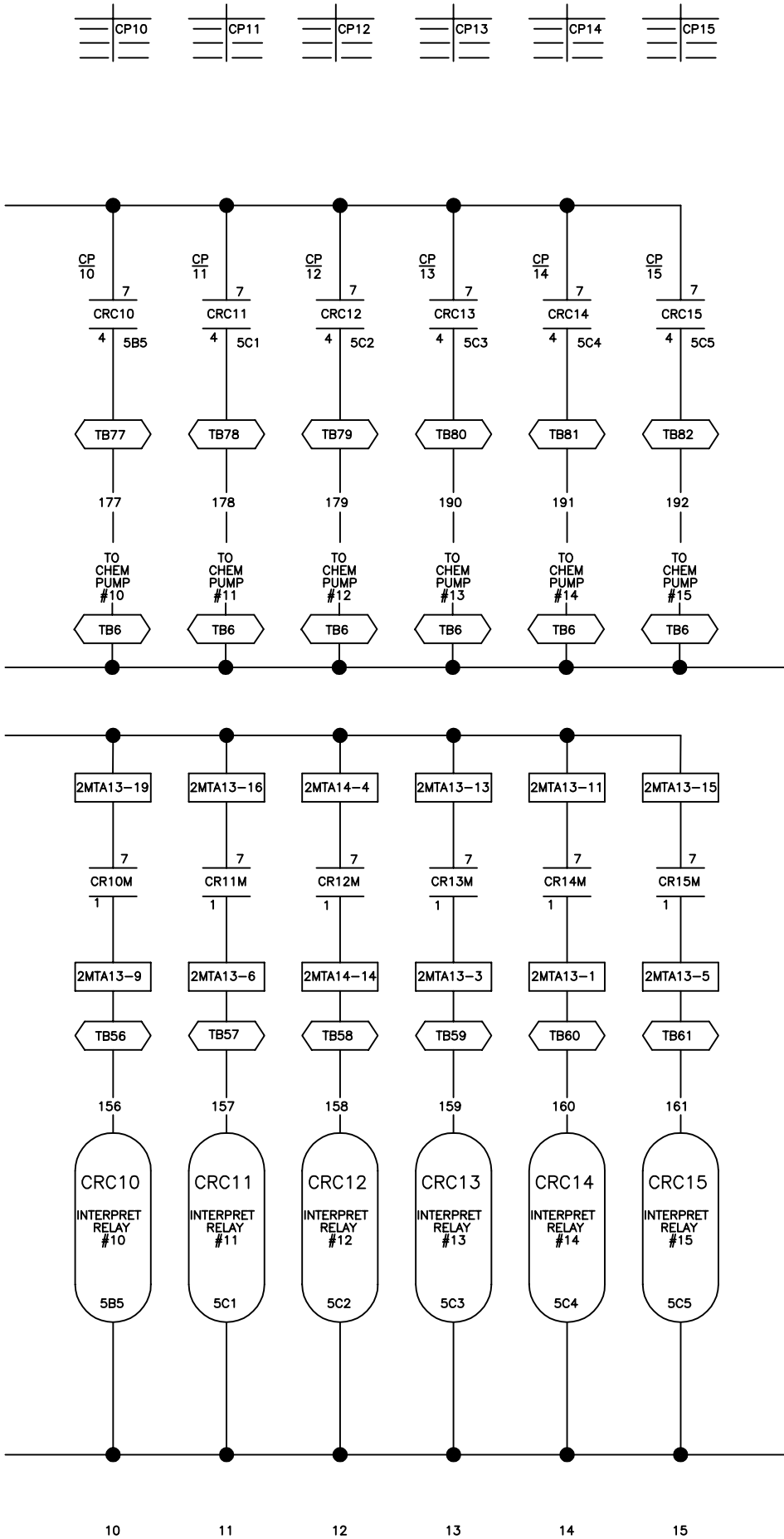
IF CUSTOMER IS SUPPLYING VOLTAGE FOR CHEMICAL PUMPS THEM TB21 & TB6 FEEDING THE INTERPRET RELAY CONTACTS MUST BE DISCONNECTED FROM THE INTERNAL 110/120VAC SUPPLY.



SEE W6W5DSCF LINE 00

SEE W6W5DSCF LINE 00

W6W5DSCP
2005404B



W6W5DSCP
 MICRO 6 SYSTEMS SERIAL CONTROLS
 SCHEMATIC: LIQUID SUPPLY-INTERPRET RELAYS
 110V1P50HZ/120V1P60HZ

PELLERIN MILNOR CORPORATION

10 11 12 13 14 15 16 17

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.

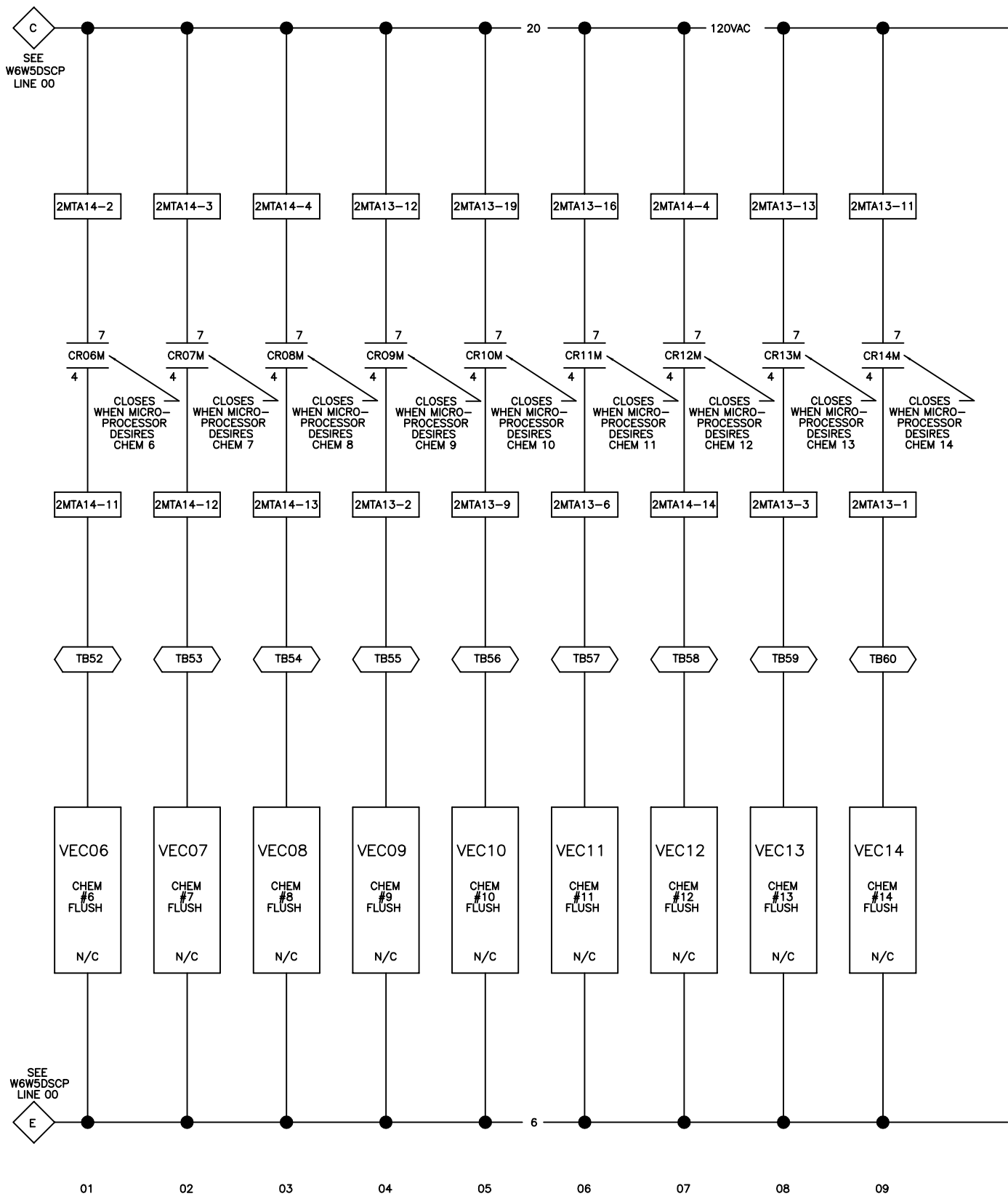
W6W5DSCS
MICRO 6 SYSTEMS
MARK V

SCHEMATIC: CHEMICAL SAVE (OPTIONAL)

PELLERIN MILNOR CORPORATION

W6W5DSCS
2008142B

W6W5DSCS
2008142B



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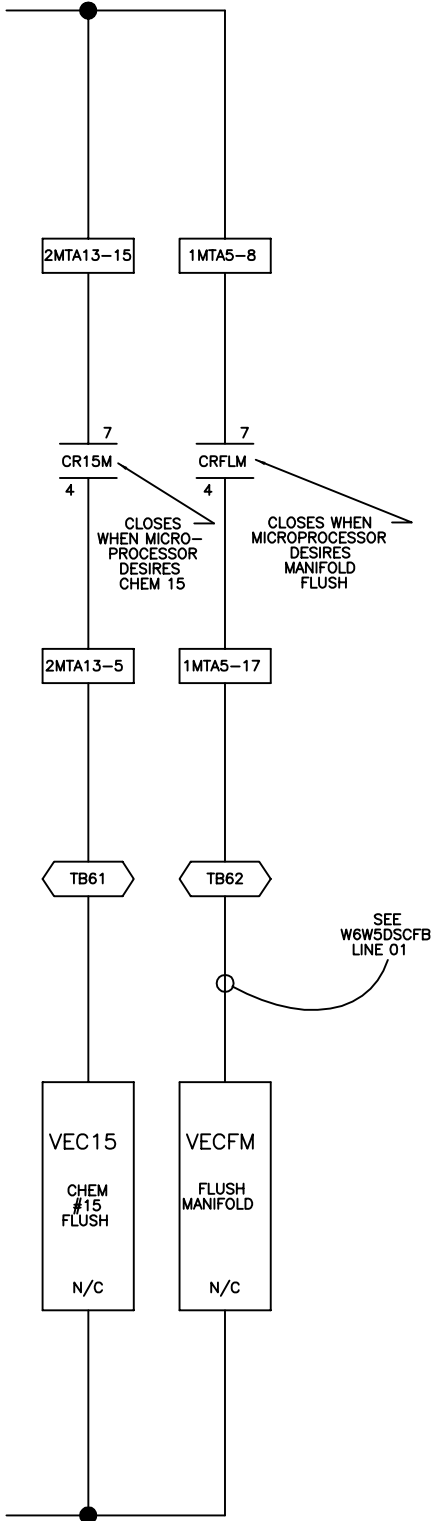
05

06

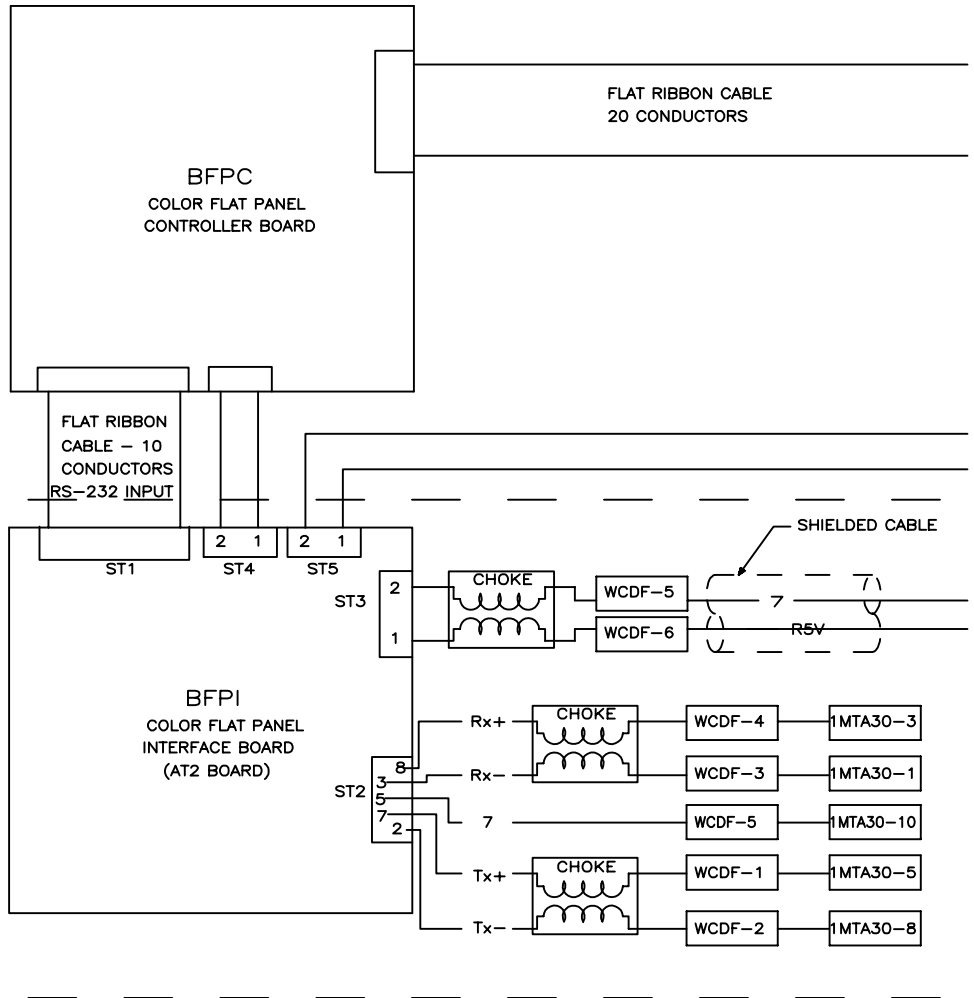
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08

09

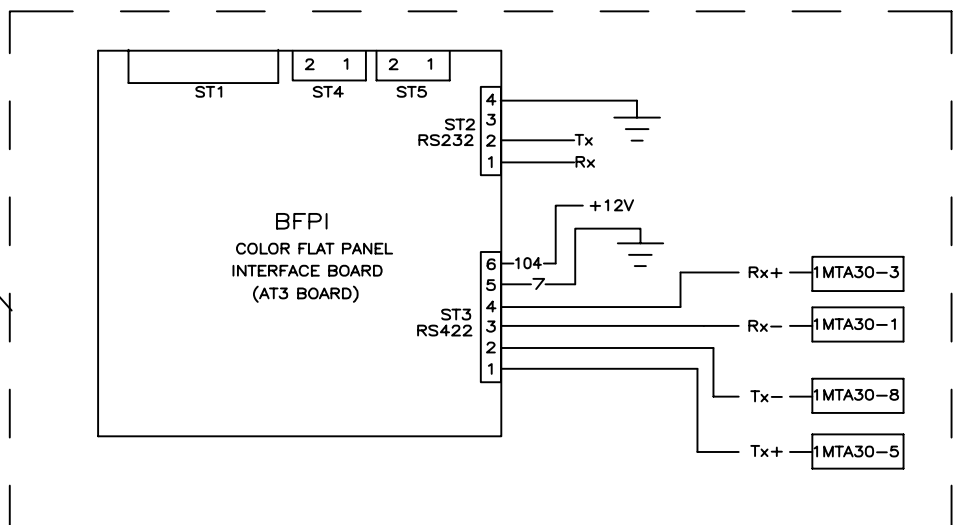


W6W5DSCX
MICRO 6 SYSTEMS
SERIAL CONTROLS
MARK V
SCHEMATIC: CENTRAL LIQUID SUPPLY FLUSH
6 THRU 15
PELLERIN MILNOR CORPORATION



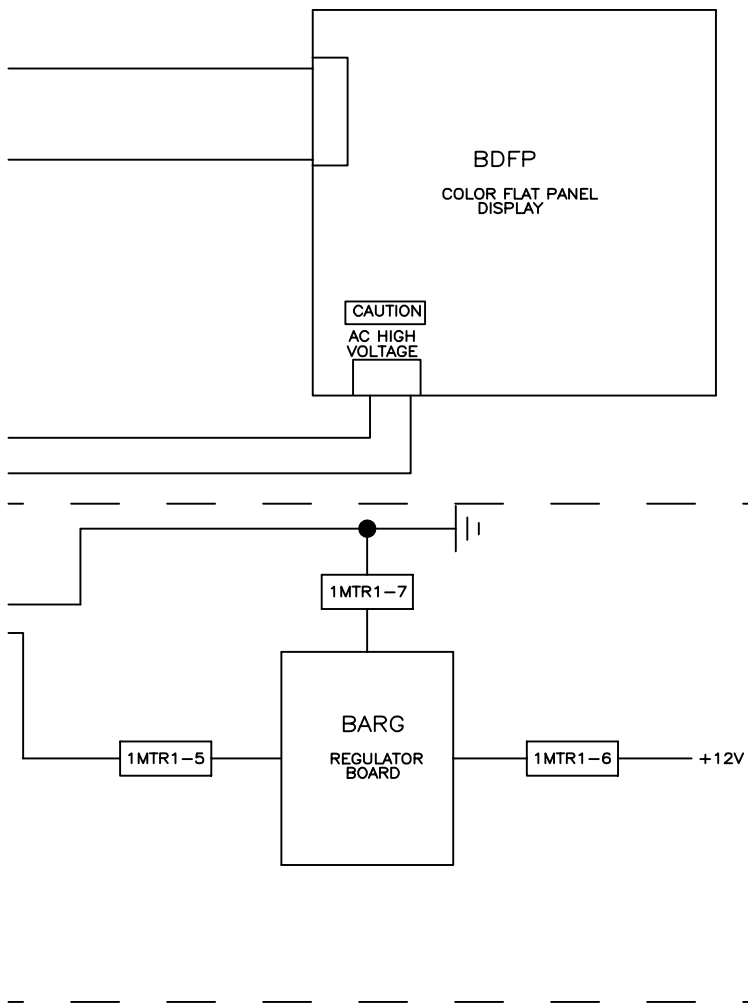
AT2 INTERFACE BOARD
FOR MACHINES MANUFACTURED
BEFORE 10-1-2005

NOTE: CONNECTOR WCDF
IS LOCATED NEXT TO INTERFACE
BOARD BFPI



AT3 INTERFACE BOARD
FOR MACHINES MANUFACTURED
AFTER 10-1-2005

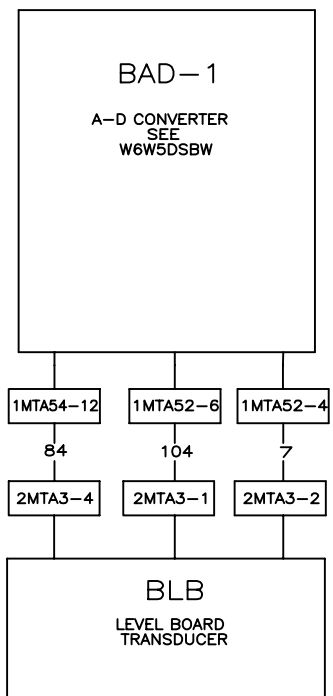
WHEN REPLACING
OLD (AT2) BOARD WITH
NEW (AT3) BOARD CONNECTOR
WCDF CAN BE PLUGGED DIRECTLY
INTO ST3 WITH THE EXCEPTION
OF PIN 6 THAT MUST BE REROUTED
TO +12V (WIRE 104)



NOTES

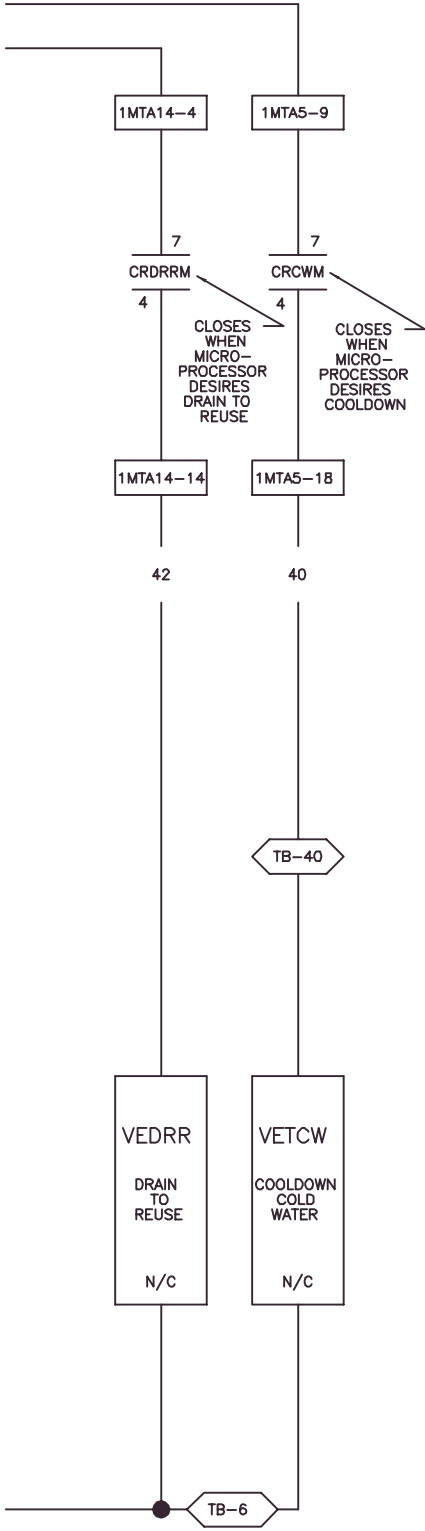
1. 1MTA30 IS LOCATED ON BPB (PROCESSOR BOARD).
2. ST1 THROUGH ST5 IS LOCATED ON BFPI COLOR FLAT PANEL INTERFACE BOARD.

W6W5DSDF
 MICRO 6 SYSTEMS
 MARK V
 SCHEMATIC: COLOR FLAT PANEL DISPLAY
 PELLERIN MILNOR CORPORATION



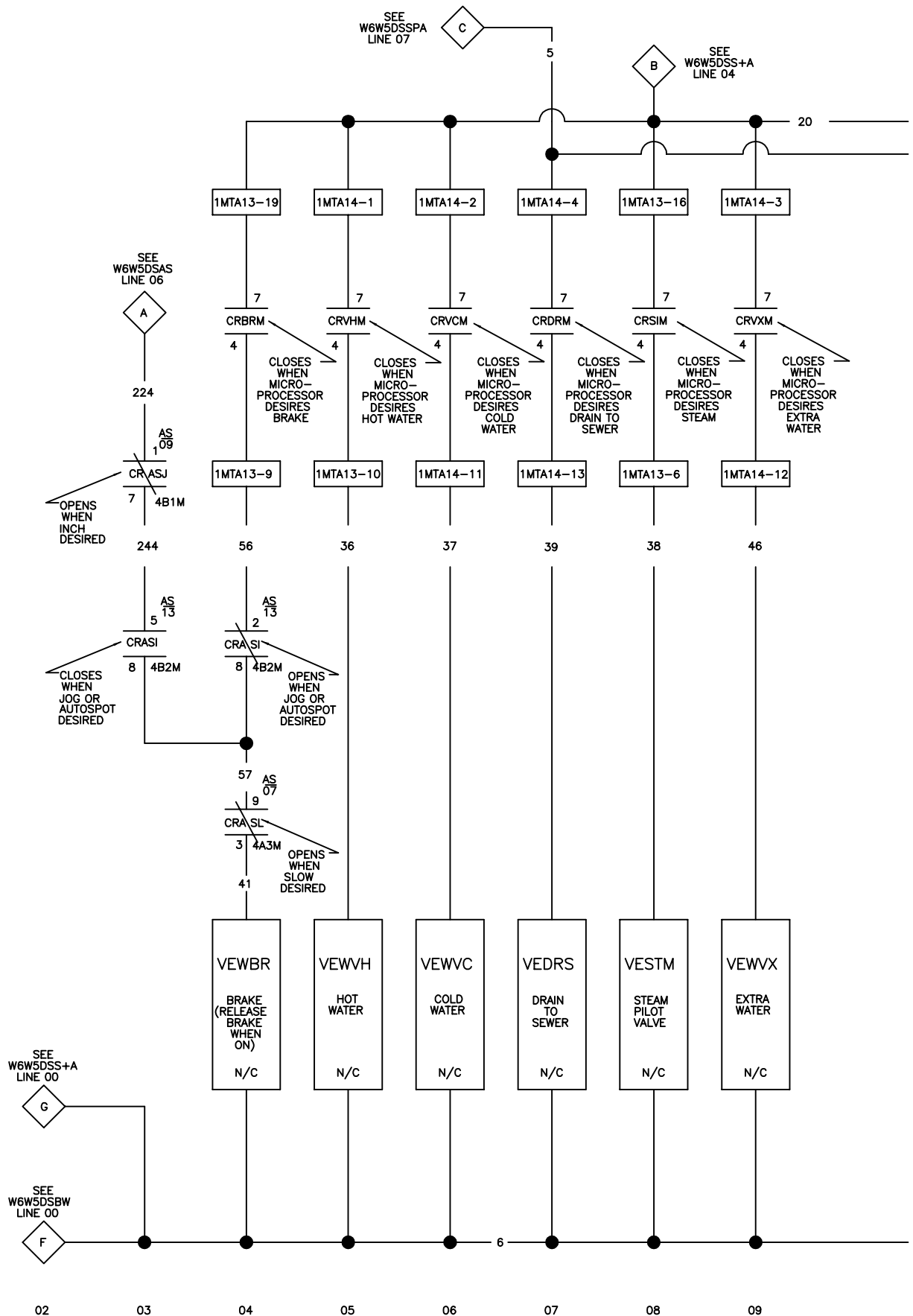
W6W5DSEC
MICRO 6 SYSTEMS
SERIAL CONTROLS
MARK VI

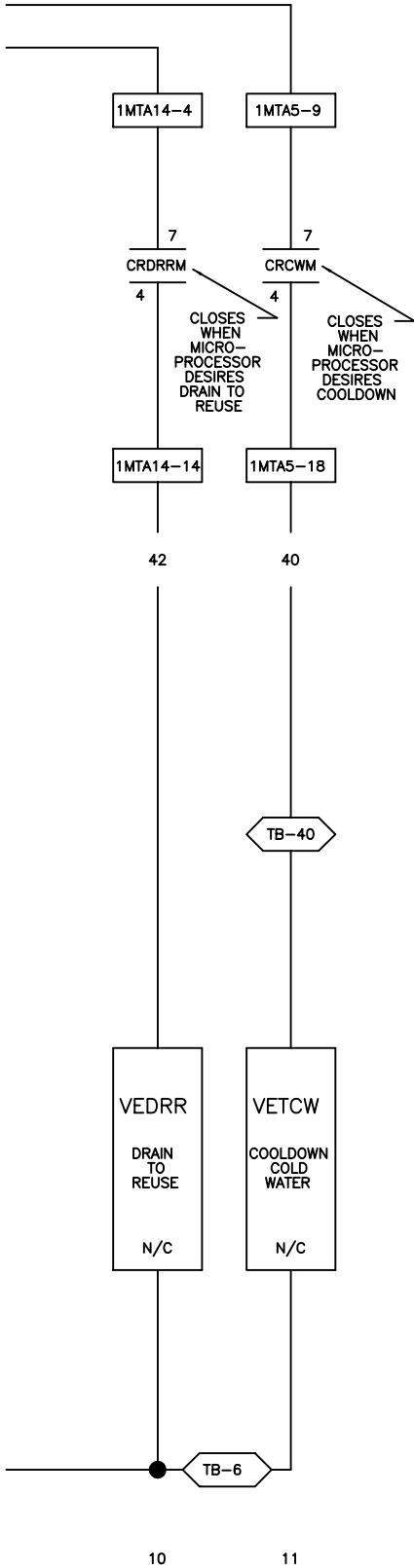
SCHEMATIC: ELECTRONIC RPM/LEVEL
PELLERIN MILNOR CORPORATION



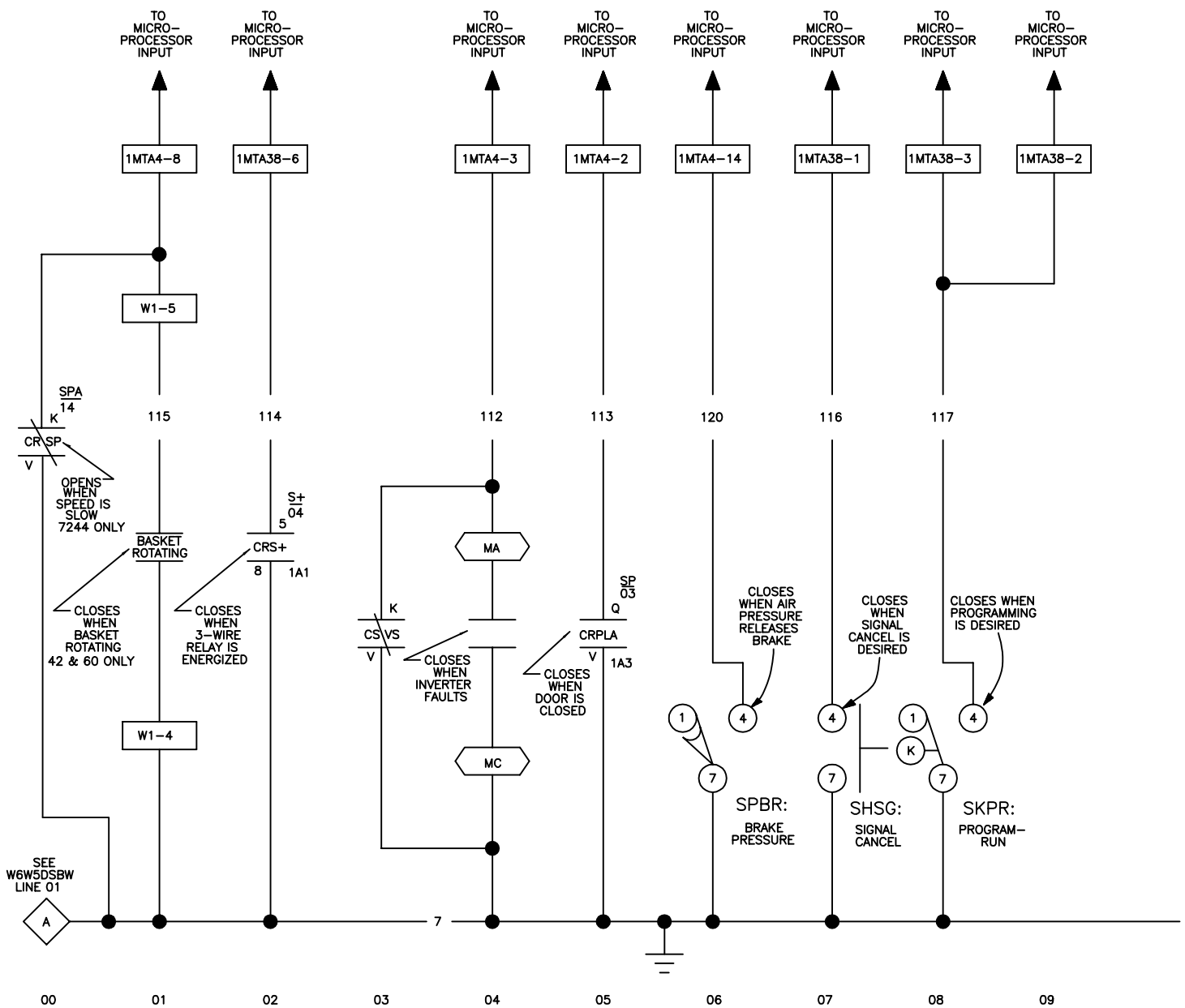
W6W5DSEV
MICRO 6 SYSTEMS
MARK V
SCHEMATIC: ELECTRICAL VALVES
(SERIAL CONTROLS)

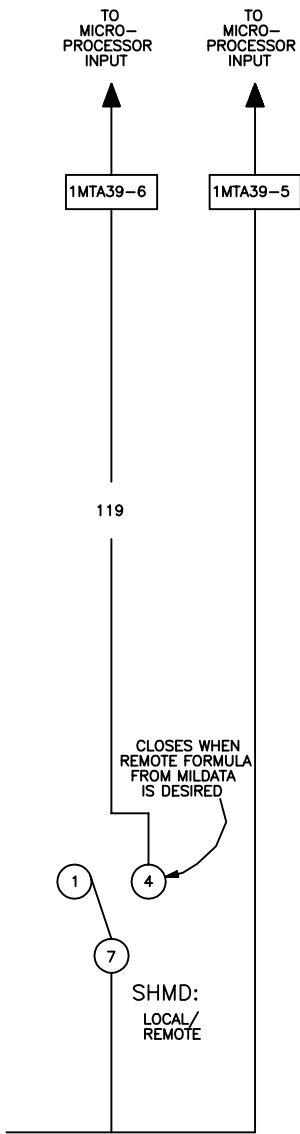
110V1P50HZ/120V1P60HZ
PELLERIN MILNOR CORPORATION





W6W5DSEVA
MICRO 6 SYSTEMS
MARK VI
SCHEMATIC: ELECTRICAL VALVES
FOR 7244WP2/3 ONLY
110V1P50HZ/120V1P60HZ
PELLERIN MILNOR CORPORATION





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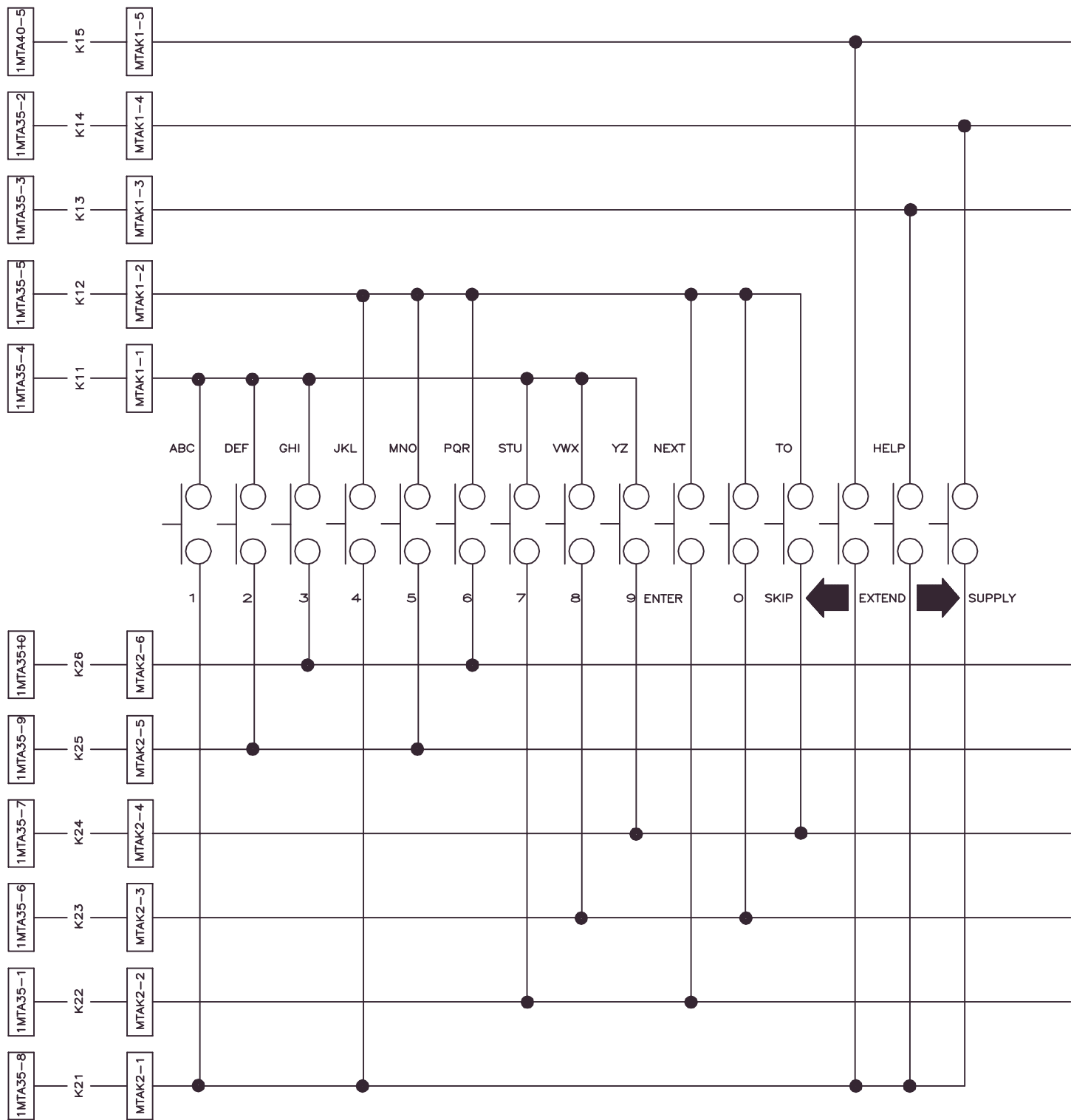
W6W5DSI1

MICRO 6 SYSTEMS

MARK VI

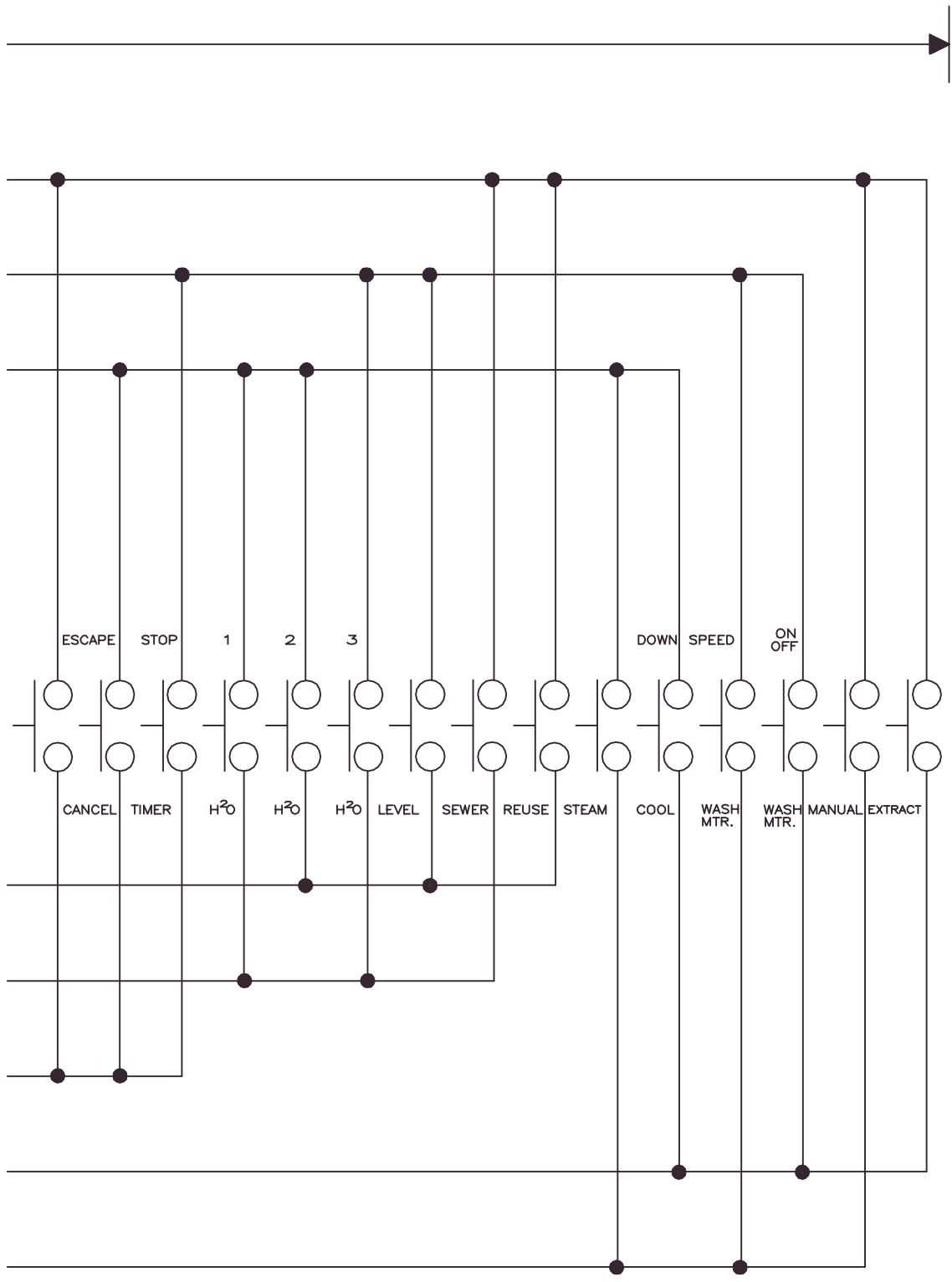
SCHEMATIC: MICROPROCESSOR INPUTS (SERIAL CONTROLS)

PELLERIN MILNOR CORPORATION



LITHO IN U.S.A.

00 01 02 03 04 05 06 07 08 09 10

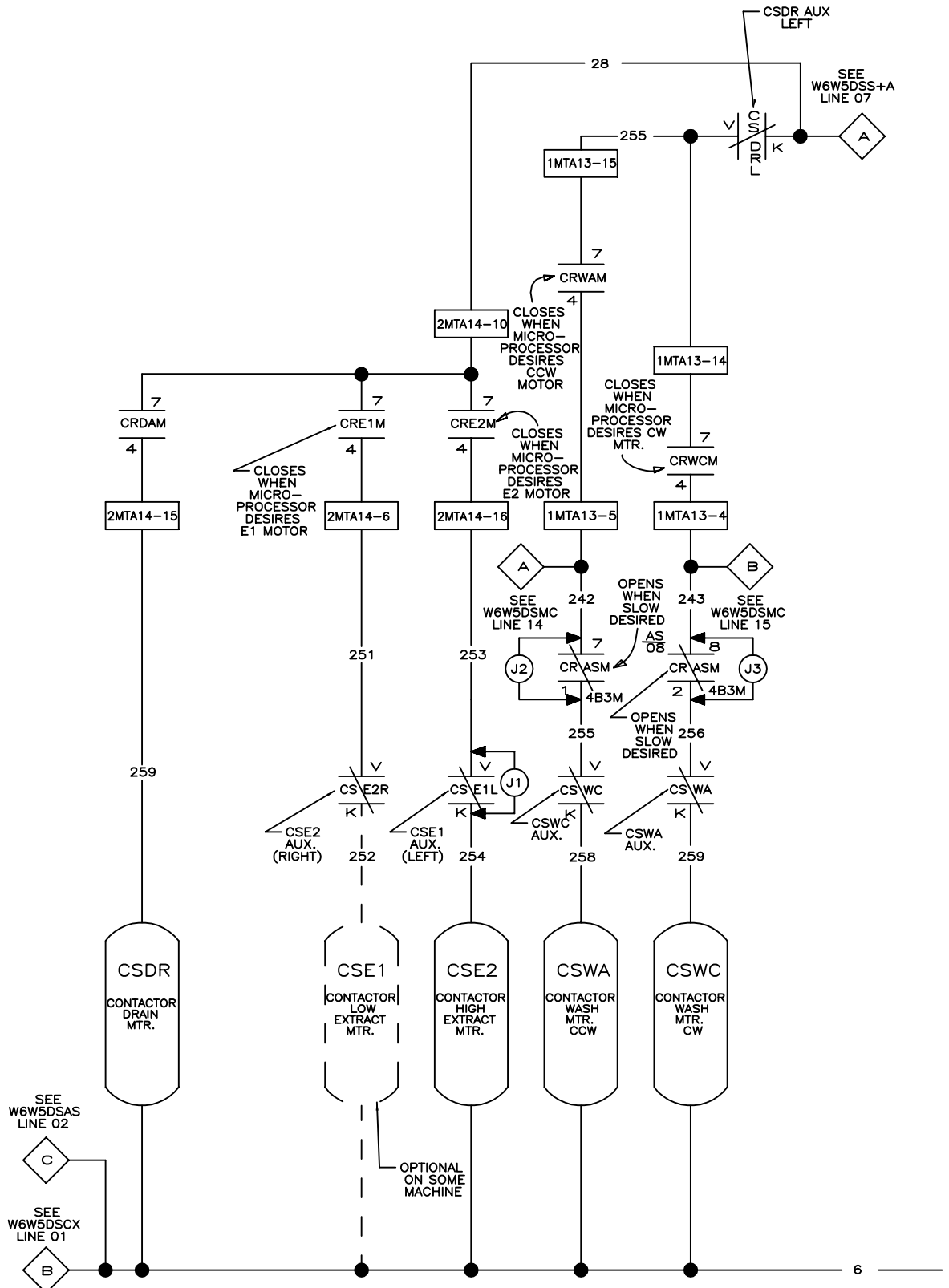


NOTES:

1. MTAK1 & MTAK2 ARE LOCATED ON KEYPAD.
2. 1MTA35 & 1MTA40 ARE LOCATED ON BPB (PROCESSOR BOARD).

W6W5DSKP
MICRO 6 SYSTEMS
MARK V
SCHEMATIC: KEYPAD (SERIAL CONTROLS)

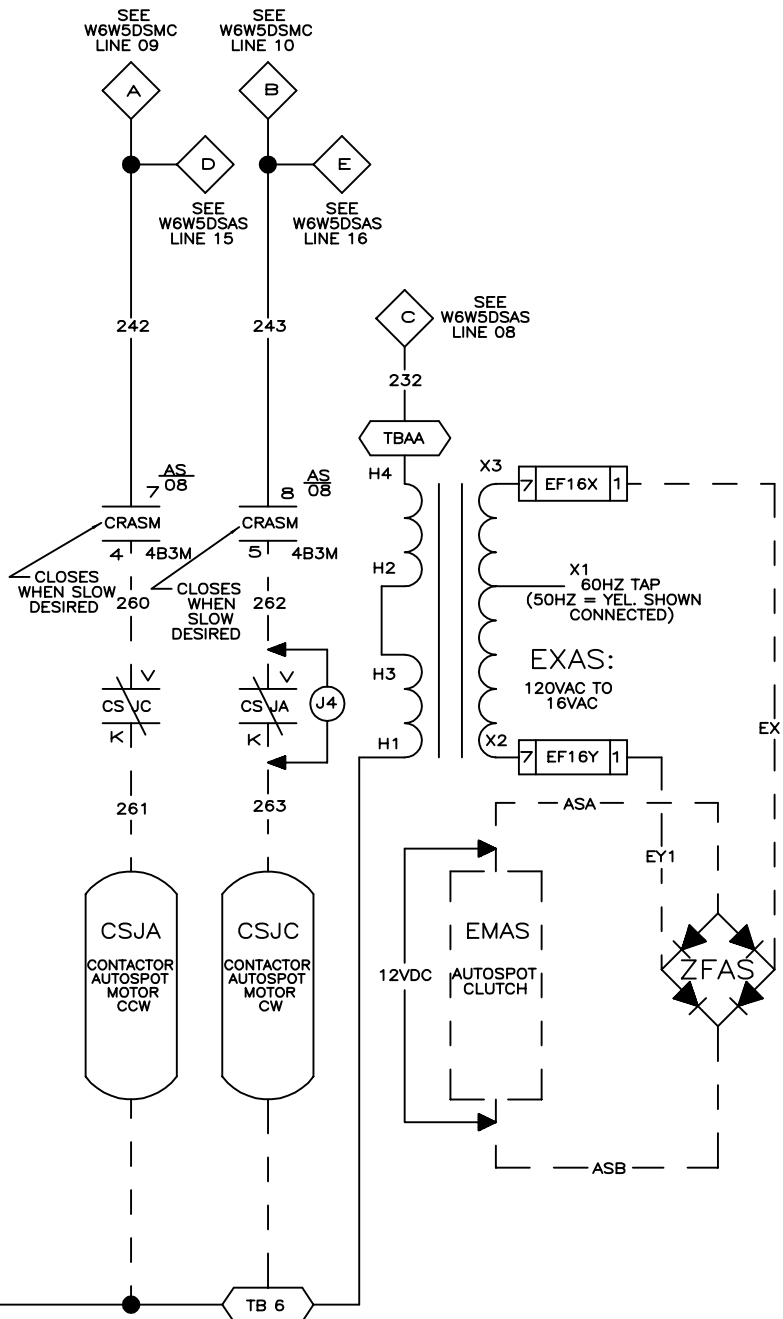
PELLERIN MILNOR CORPORATION



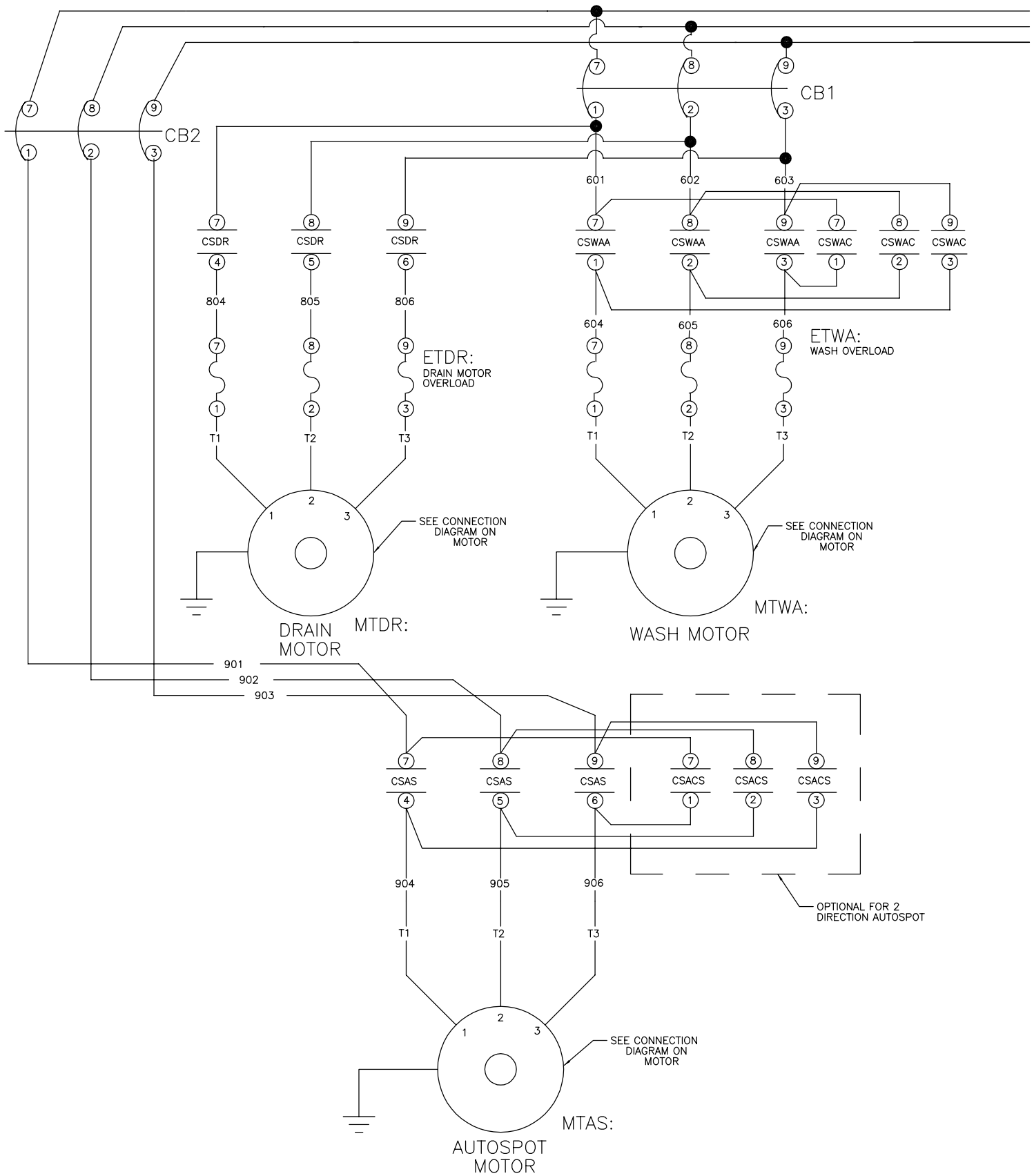
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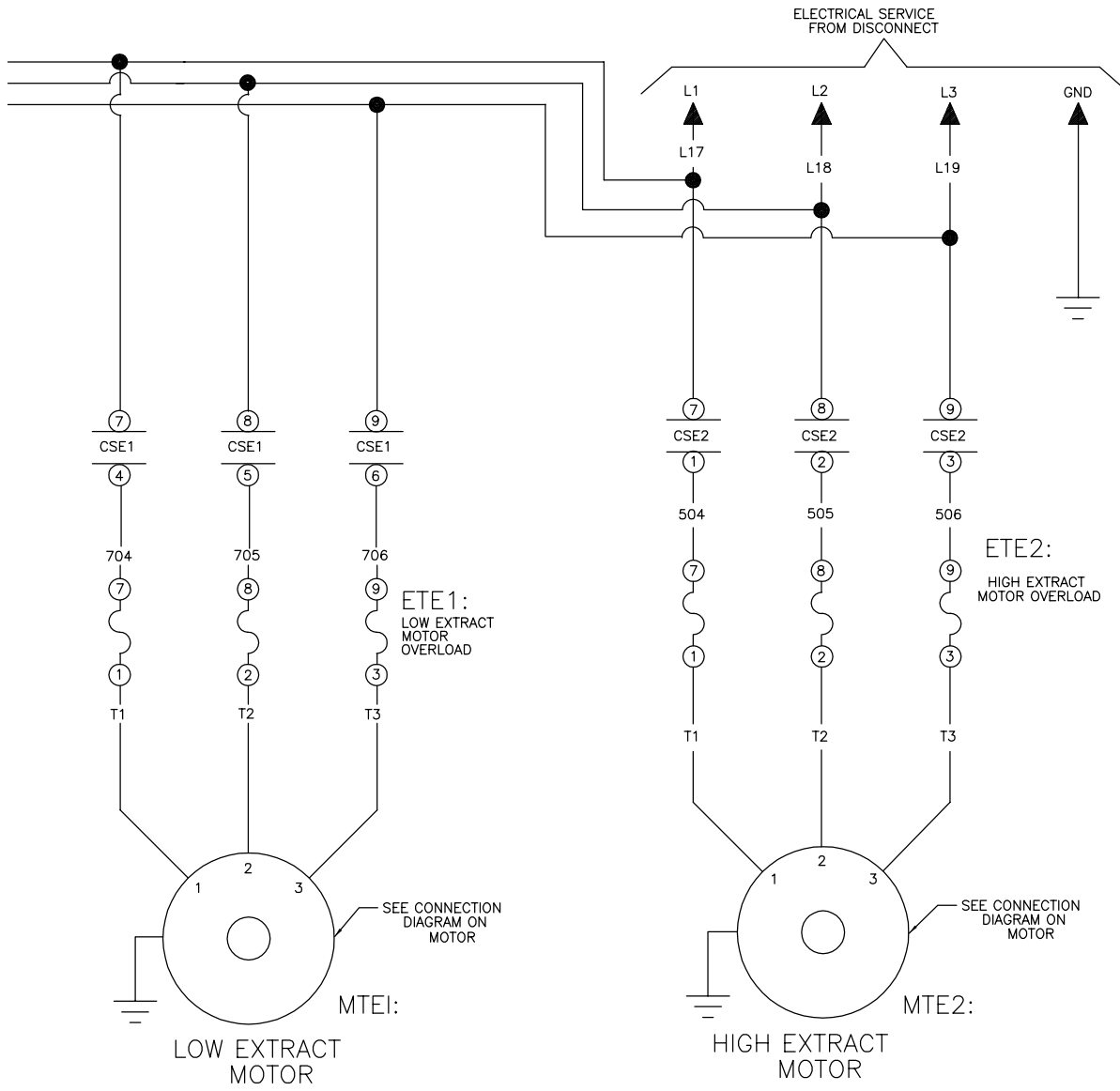
NOTES:

1. 1MTA13, 1MTA14 ARE LOCATED ON B024-1(24 OUTPUT BOARD)
2. 2MTA14 IS LOCATED ON B024-2(24 OUTPUT BOARD)
3. TBA IS LOCATED IN AUTOSPOT CONTROL BOX.
4. REMOVE J1 FOR 2 SPEED EXTRACT
5. REMOVE J2 AND J3 FOR AUTOSPOT
6. 3 POCKET MACHINES WITH AUTOSPOT
DO NOT MOVE CSJA SEE J4



W6W5DSMC
 MICRO 6 SYSTEMS
 MARKVI
 SCHEMATIC: DRIVE MOTOR CONTACTORS
 FOR 7244WP2/3 ONLY
 110V1P50HZ/120V1P60HZ
 PELLERIN MILNOR CORPORATION

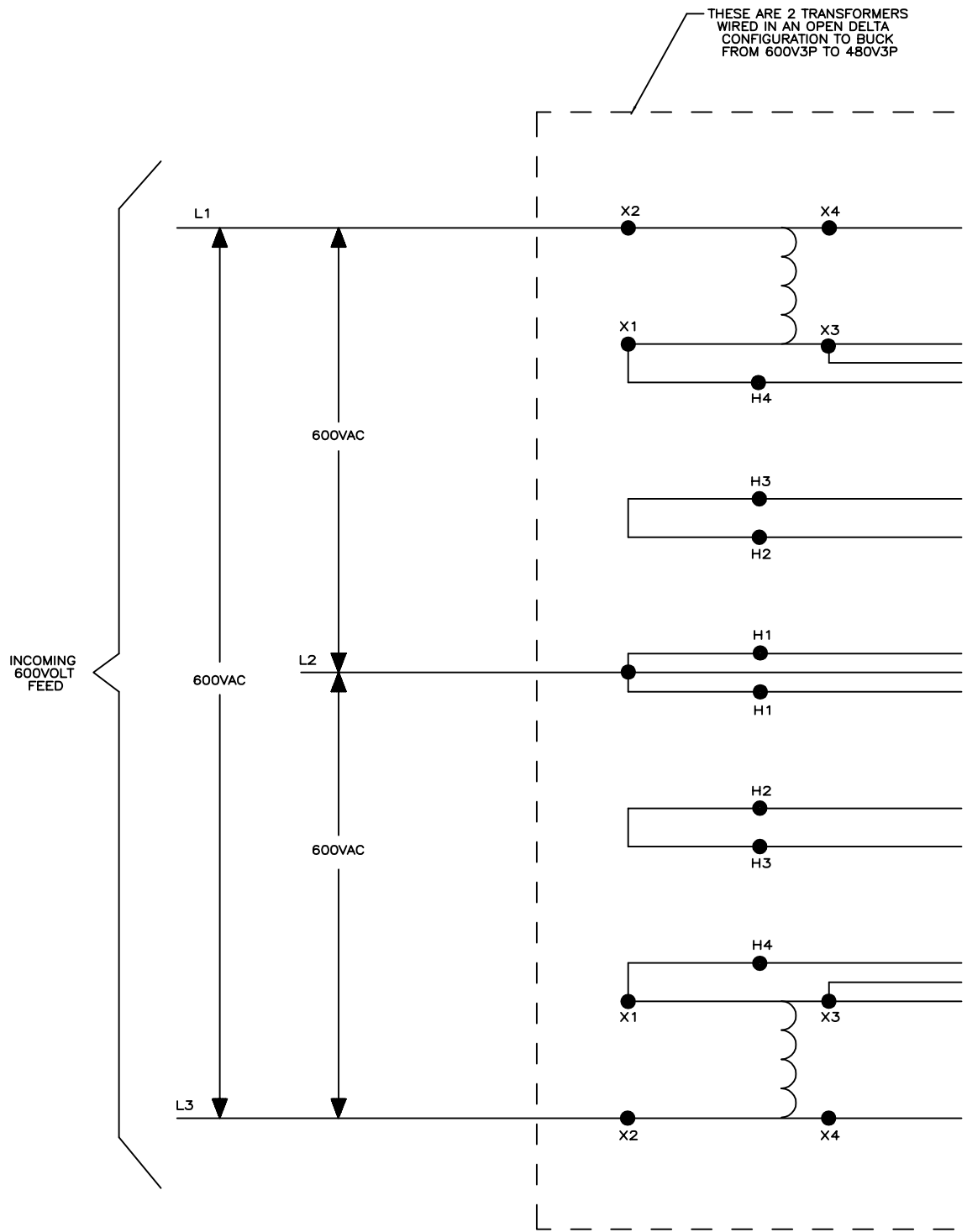




NOTE:
 1. THE FUSING SHOWN ON THIS DRAWING WILL VARY BASED ON VOLTAGE. CHECK MACHINE NAMEPLATE FOR ACTUAL FUSING OF MOTORS.

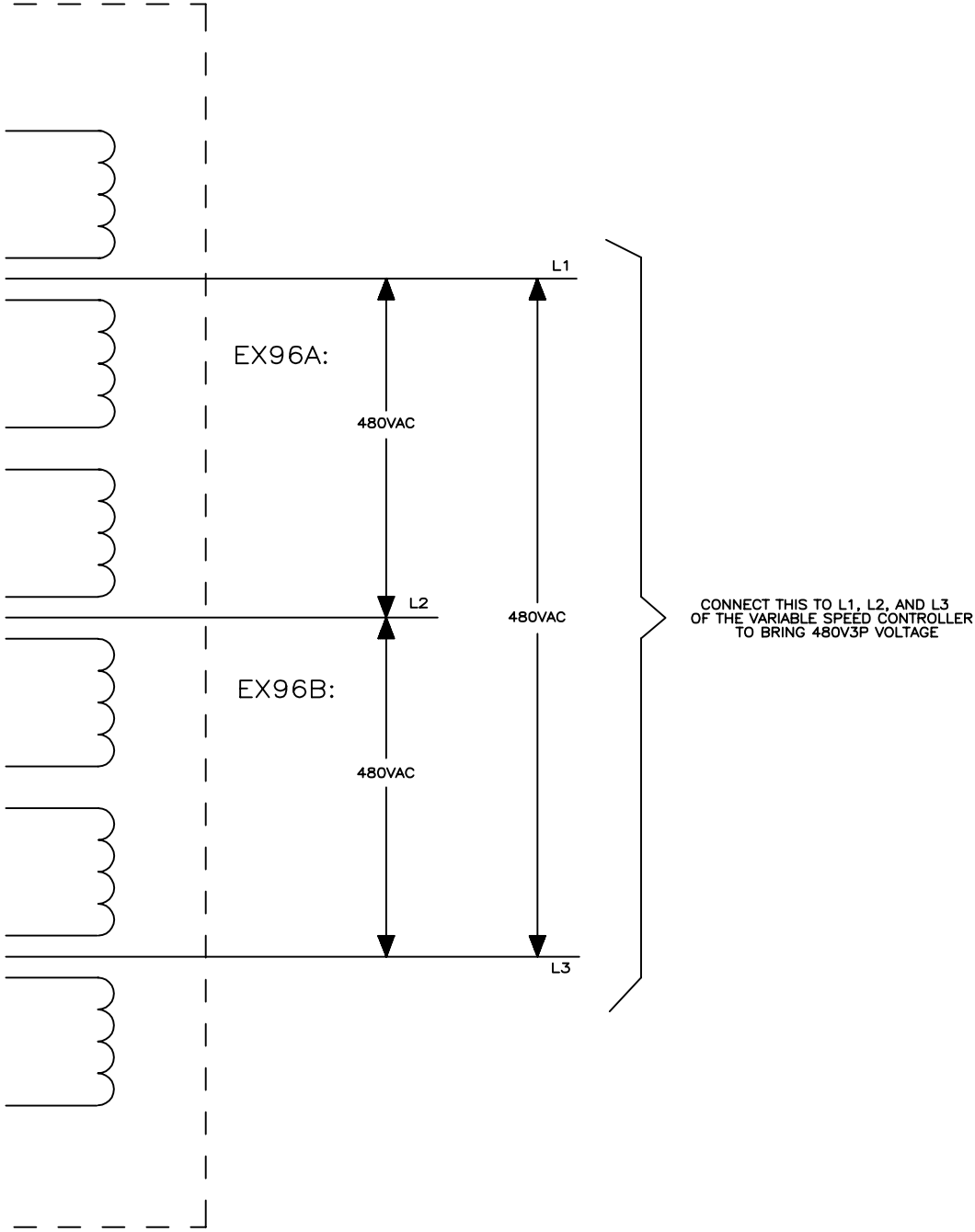
W6W5DSMTA
 2007424B

W6W5DSMTA
 MICRO 6 SYSTEMS
 MARK VI
 SCHEMATIC: 7244WP2/3 MOTOR CONNECTIONS
 PELLERIN MILNOR CORPORATION

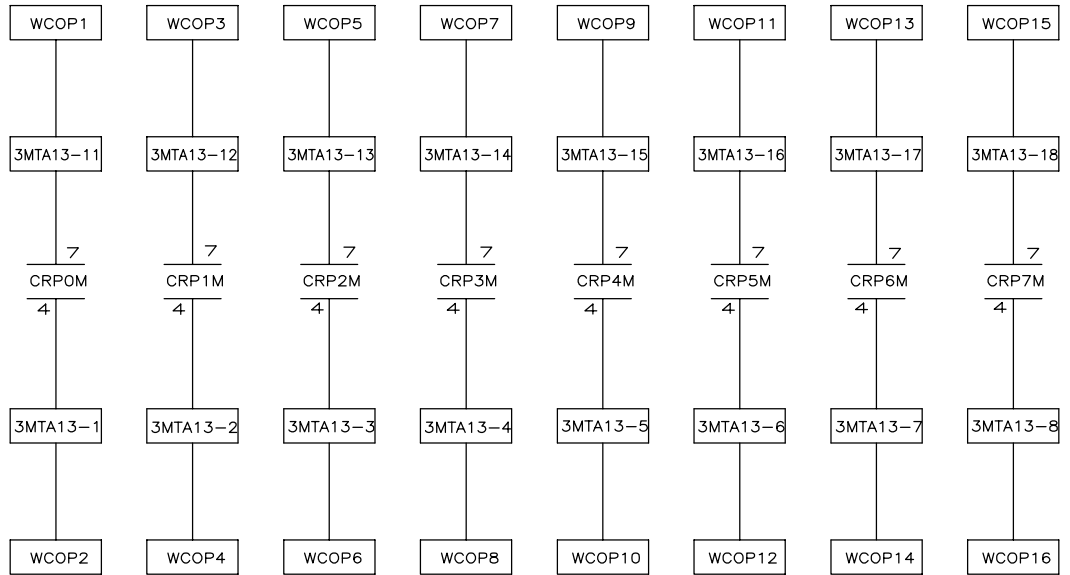


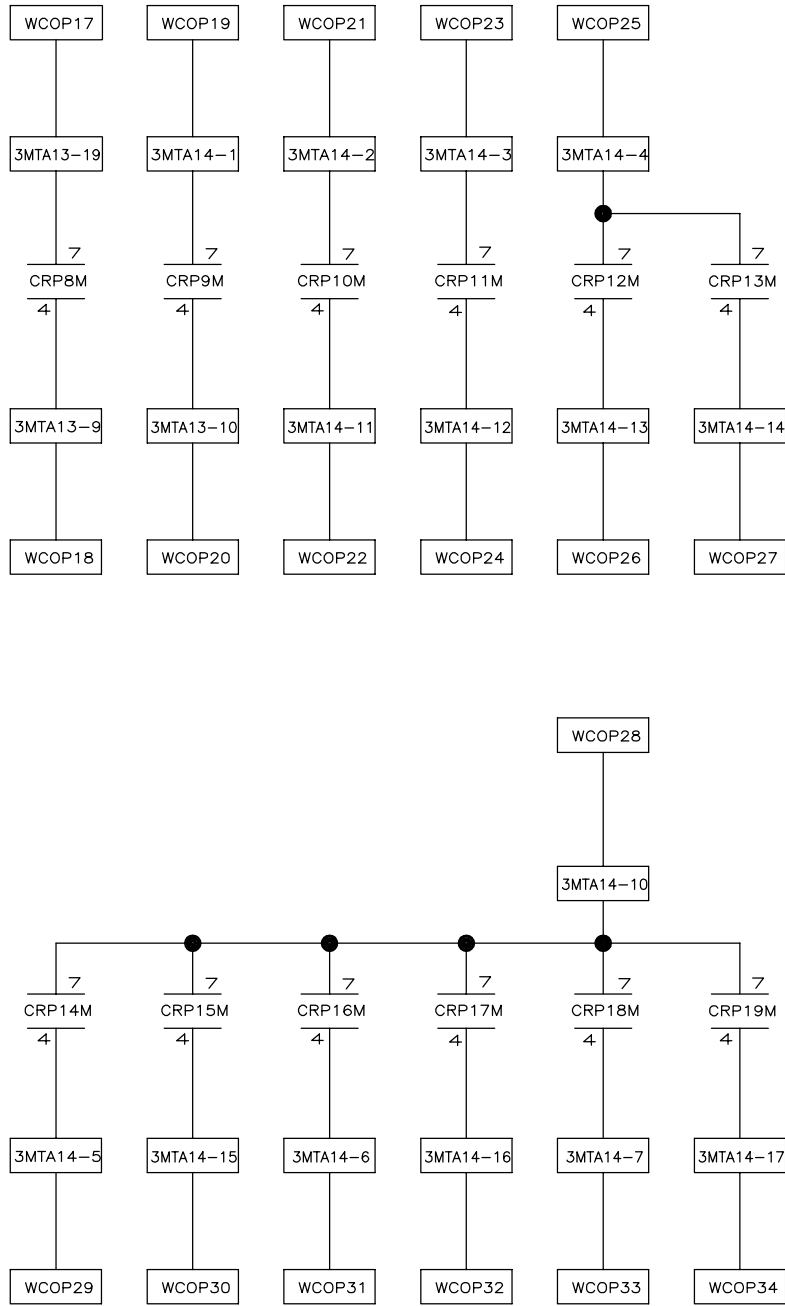
00 01 02 03 04 05 06 07 08 09 10

W6W5DSMT6
2005404B



W6W5DSMT6
MICRO 6 SYSTEMS
MARK V
SCHEMATIC: 600V VARIABLE SPEED
PELLERIN MILNOR CORPORATION





W6W5DSOP

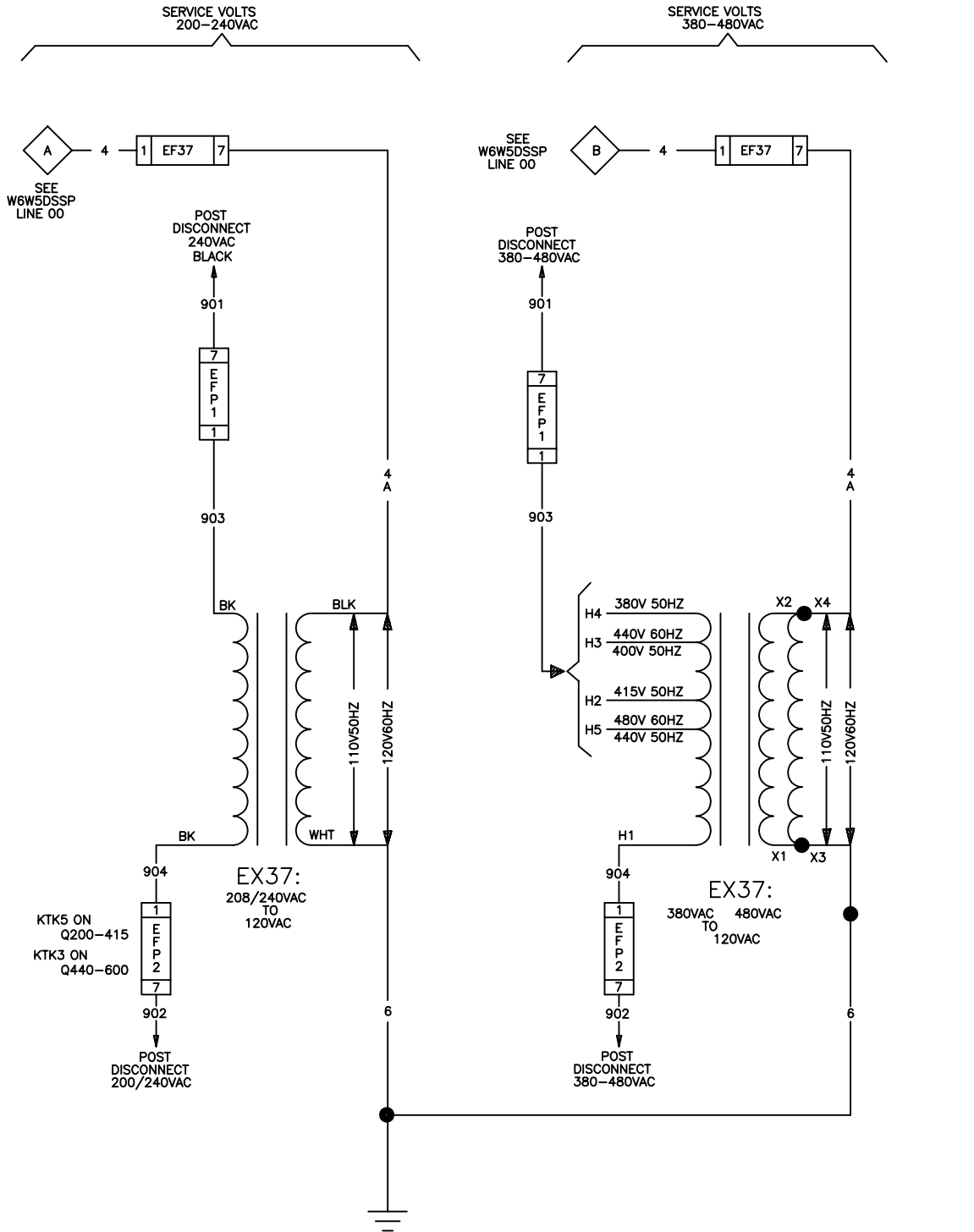
MICRO 6 SYSTEMS SERIAL CONTROLS

SCHEMATIC: 20 OPTIONAL PROGRAMABLE OUTPUTS

PELLERIN MILNOR CORPORATION

W6W5DSOP
2008142B

CONTROL CIRCUIT POWER



00 01 02 03 04 05 06 07 08 09

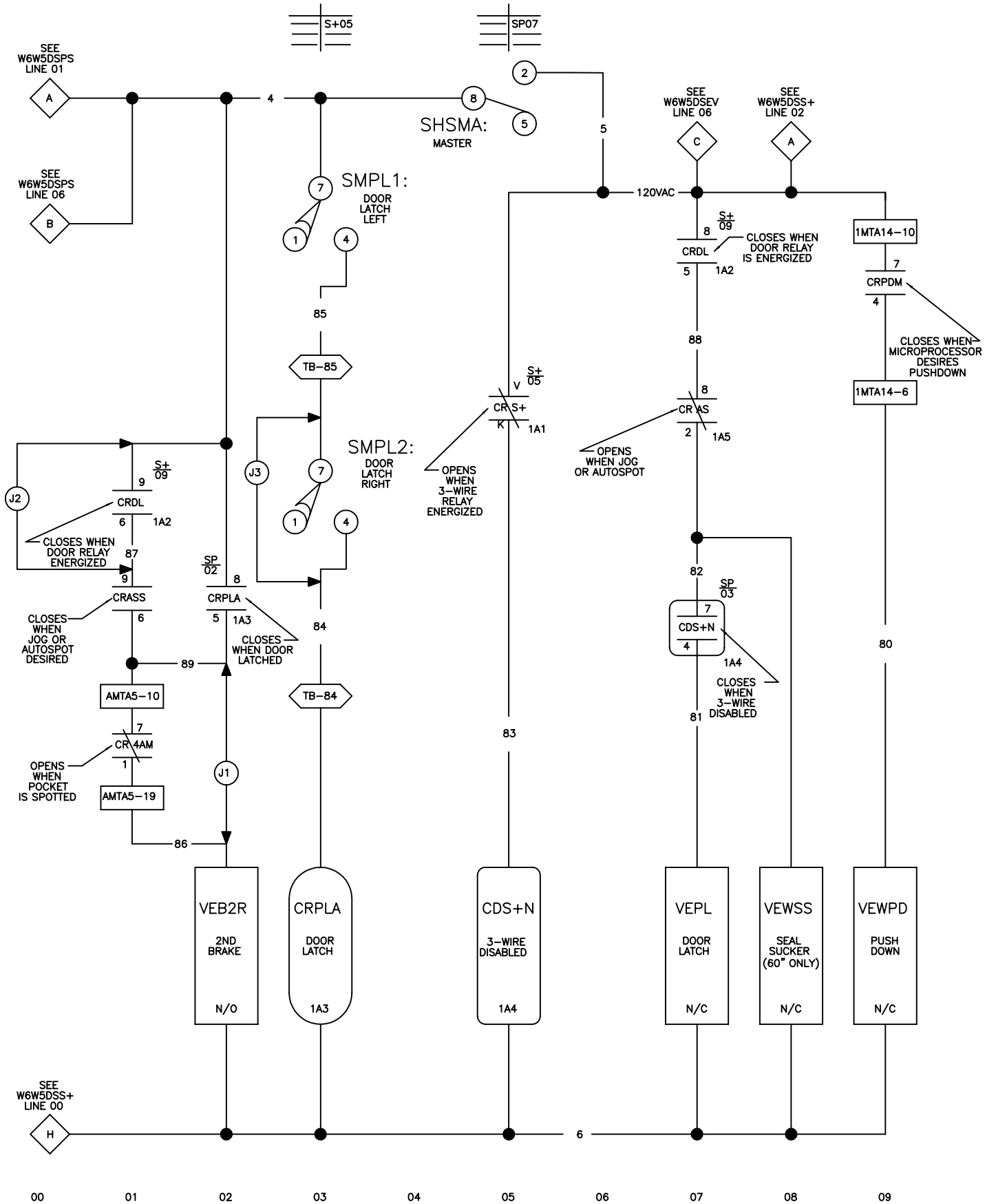
W6W5DSPS

MICRO 6 SYSTEMS
SERIAL CONTROLS

MARK V

SCHEMATIC:SOURCE 110V1P50HZ/120V1P60HZ
CONTROL CIRCUIT POWER

PELLERIN MILNOR CORPORATION



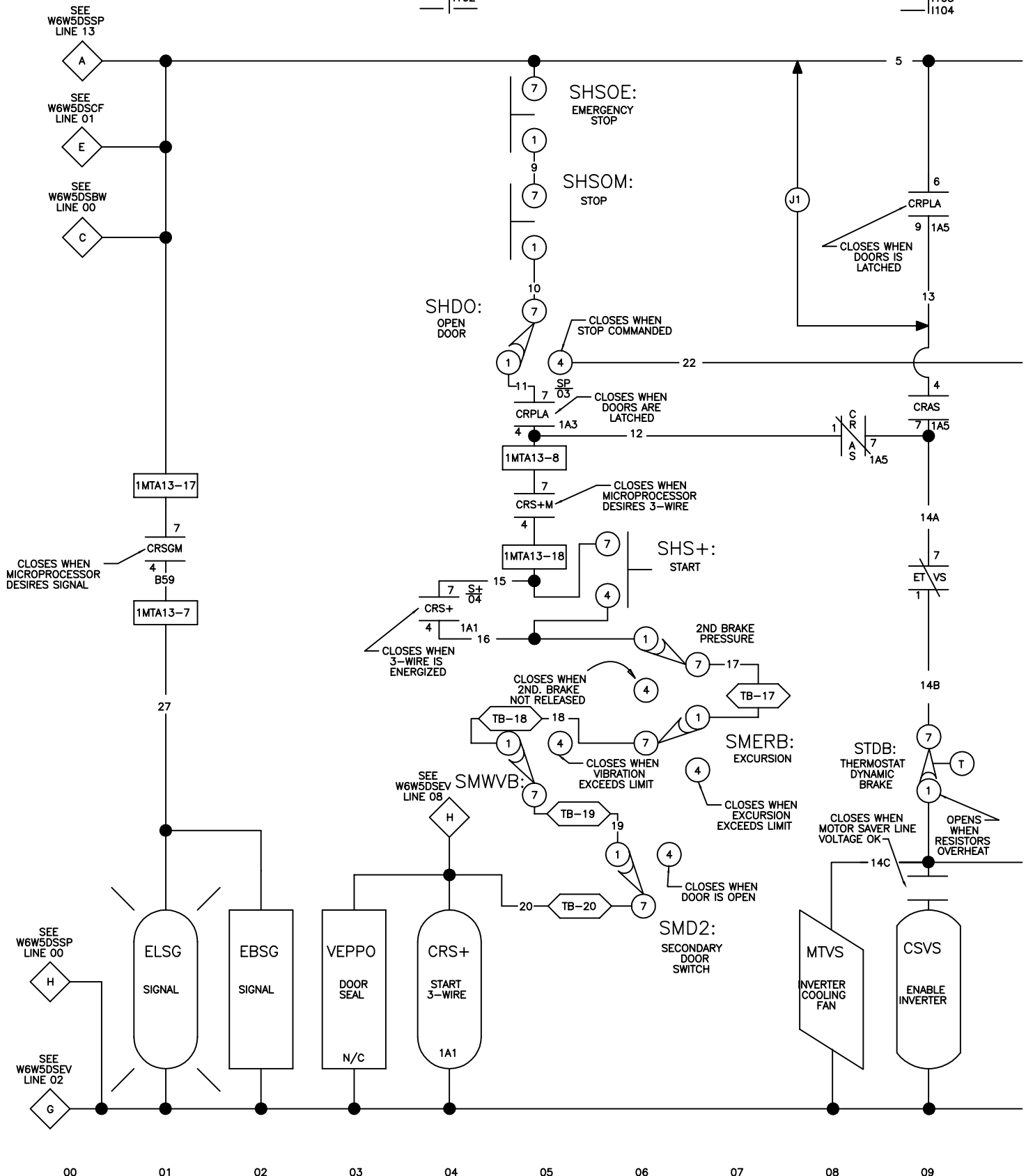
W6W5DSSP
MICRO 6 SYSTEMS
MARK V
SCHEMATIC: DOOR CIRCUITS, &
MASTER SWITCH (SERIAL CONTROLS)
110V1P50HZ/120V1P60HZ
PELLERIN MILNOR CORPORATION

NOTES:

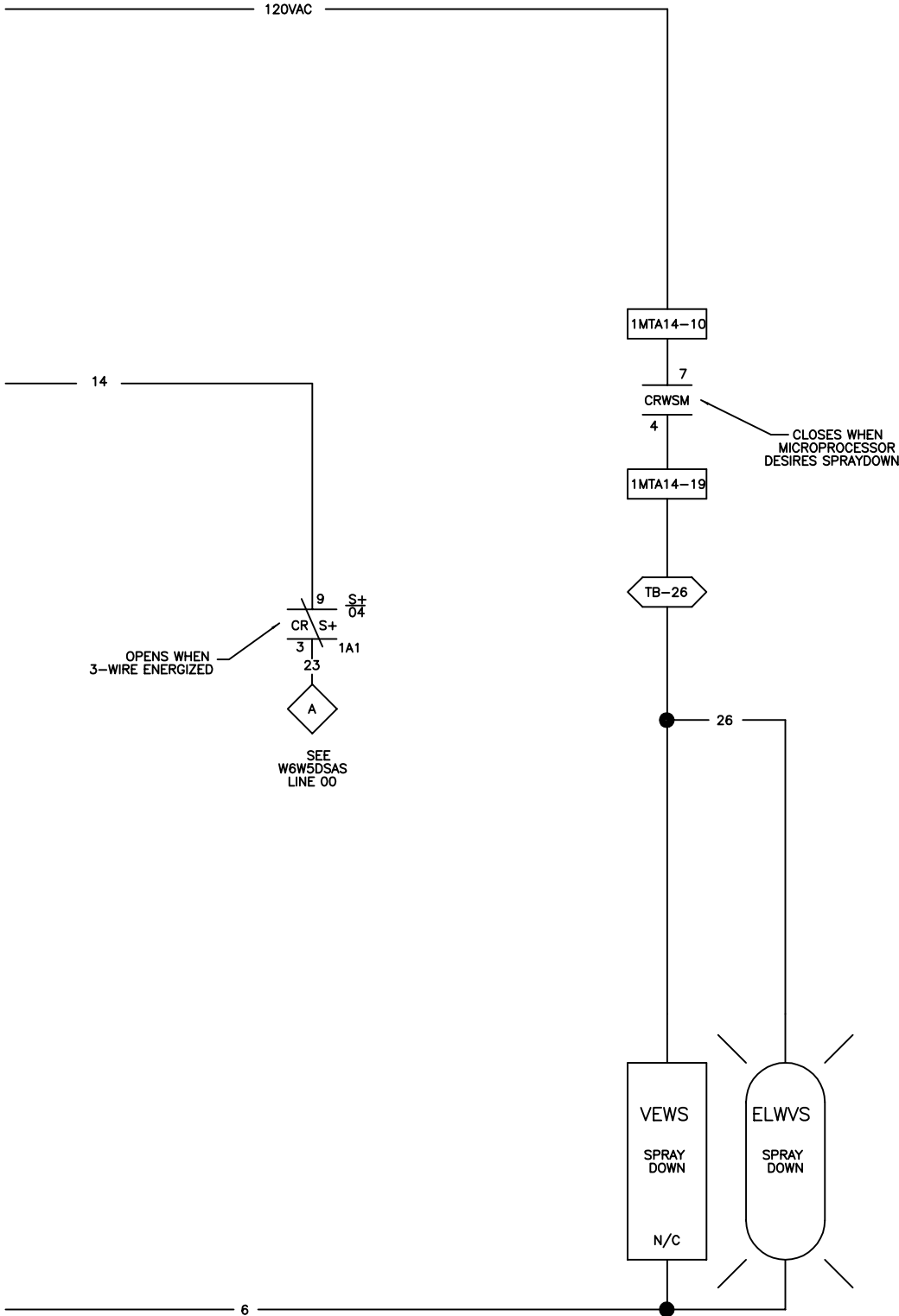
- 1 REMOVE JUMPERS (J1) AND (J2)
FOR MACHINES WITH AUTOSPOT
2. REMOVE JUMPER (J3) FOR
2 DOOR MODEL MACHINES.

S+04
I102

S+09
I103
I104

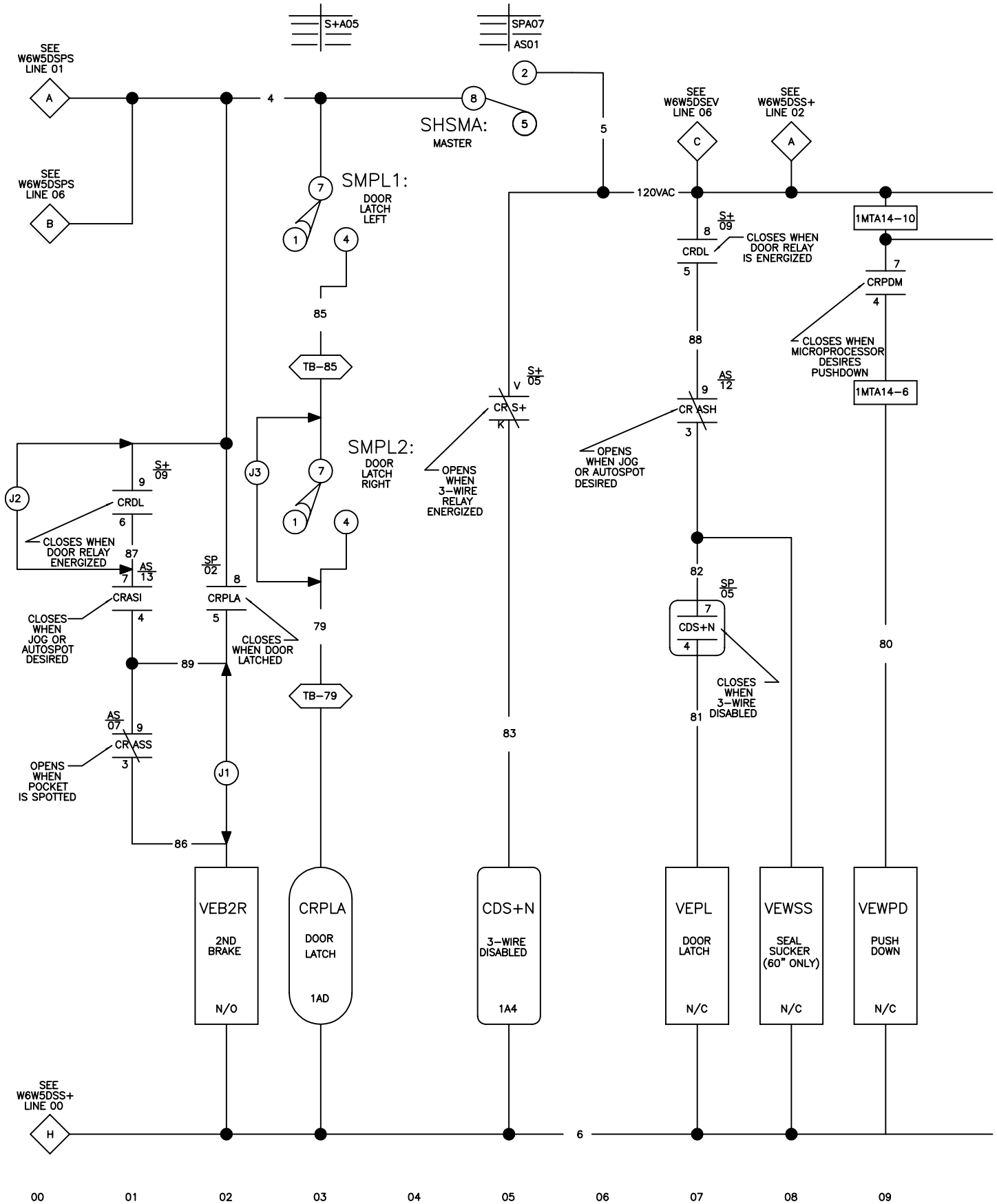


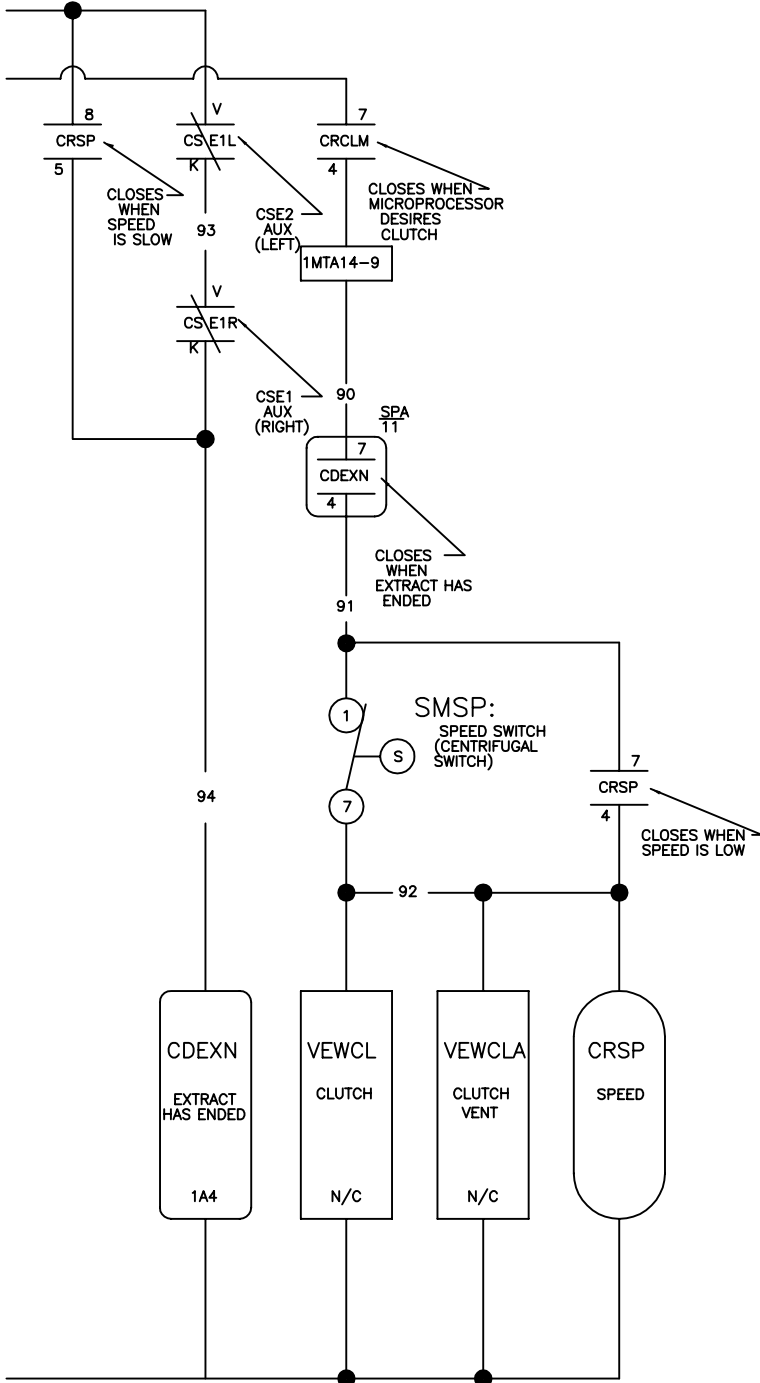
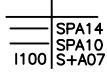
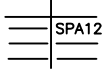
W6W5DSS+
2008283B



W6W5DSS+A
MICRO 6 SYSTEMS
MARK V
SCHEMATIC: START CIRCUIT
(SERIAL CONTROLS)
110V1P50HZ/120V1P60HZ
PELLERIN MILNOR CORPORATION

NOTE:
1 REMOVE JUMPER (J1)
FOR AUTOSPOT



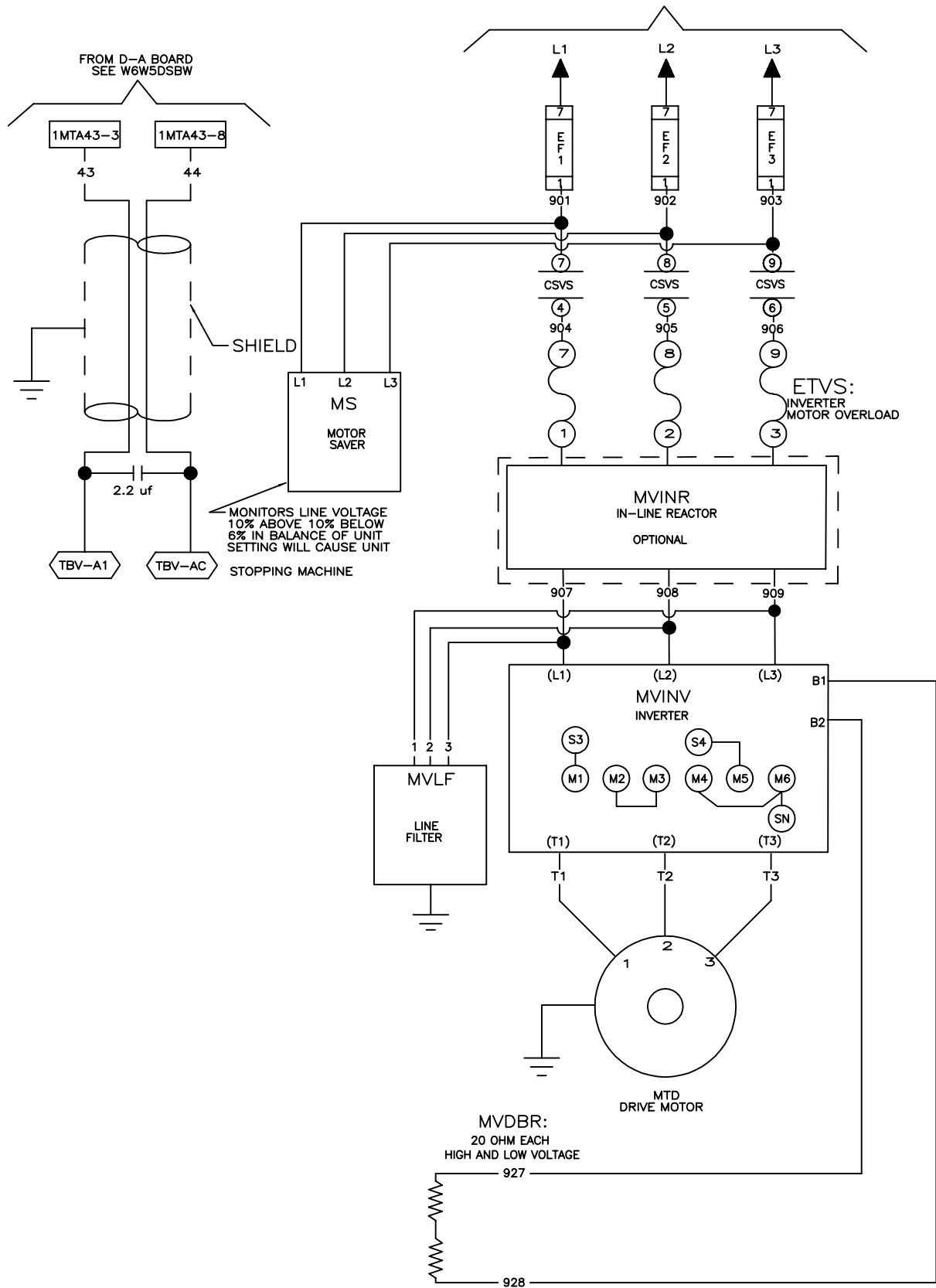


W6W5DSSPA
MICRO 6 SYSTEMS
MARK VI
SCHEMATIC: DOOR CIRCUITS, &
MASTER SWITCH 7244WP2/3 ONLY

110V1P50HZ/120V1P60HZ
PELLERIN MILNOR CORPORATION

NOTES:

- 1 REMOVE JUMPERS (J1) AND (J2) FOR MACHINES WITH AUTOSPOT
2. REMOVE JUMPER (J3) FOR 2 DOOR MODEL MACHINES.



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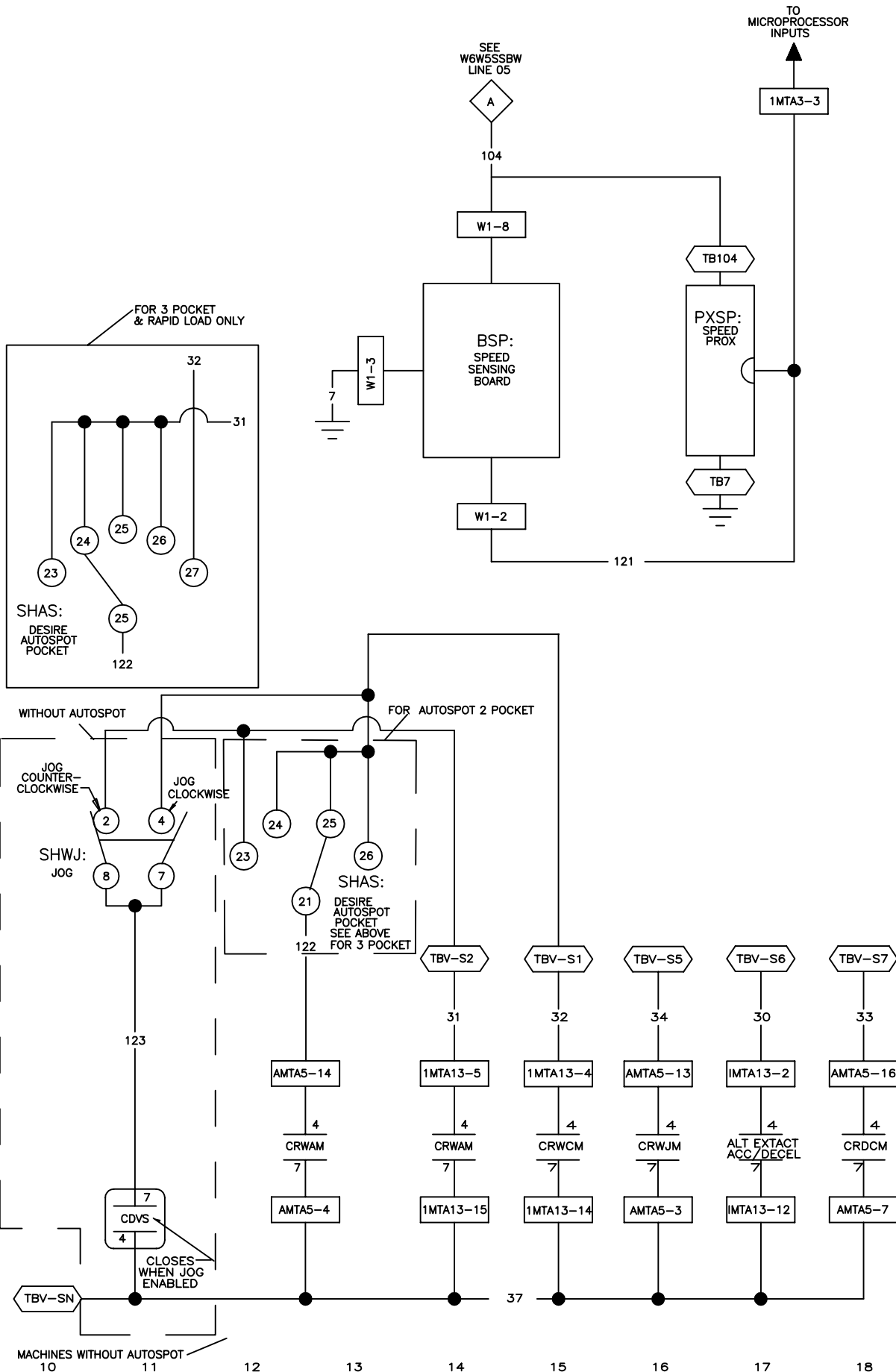
05

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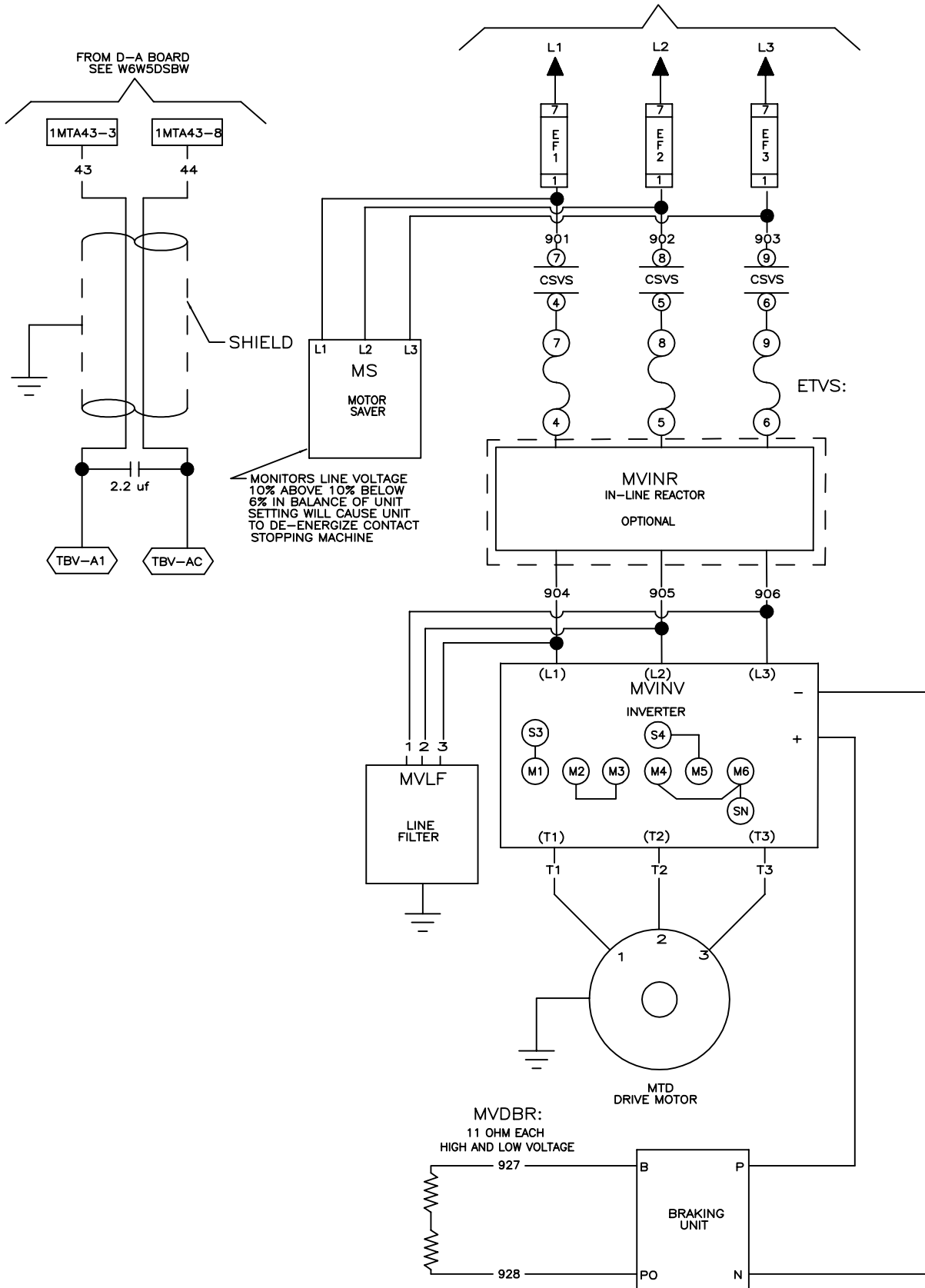
09



W6W5DSVP
 MICRO 6 SYSTEMS
 SCHEMATIC: INVERTOR WIRING
 FOR 42044 WP2
 PELLERIN MILNOR CORPORATION

W6W5DSVP
2010533B

W6W5DSVP
2010533B



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