

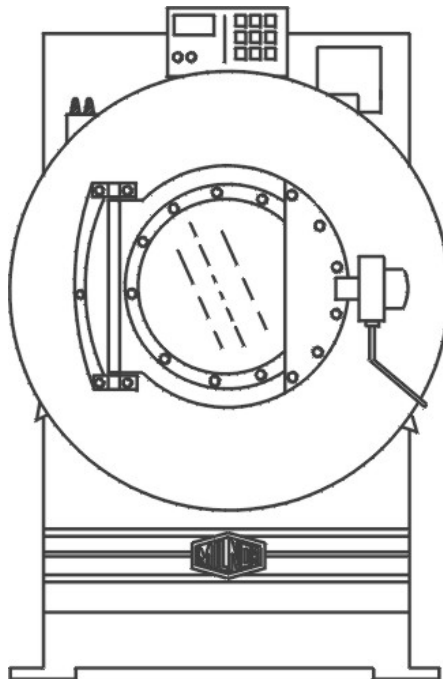
Published Manual Number/ECN: ME6V6W11AE/2008046N

- Publishing System: TPAS
- Access date: 2/12/2008
- Document ECN's: Latest Available



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

# Schematic/Electrical Parts— 36026V7W, 42026V6W Washer-Extractor MARK V CONTROLS



# Please Read

**About the Manual Identifying Information on the Cover**—The front cover displays pertinent identifying information for this manual. Most important, are the published manual number (part number) /ECN (date code). Generally, when a replacement manual is furnished, it will have the same published manual number, but the latest available ECN. This provides the user with the latest information applicable to his machine. Similarly all documents comprising the manual will be the latest available as of the date the manual was printed, even though older ECN dates for those documents may be listed in the table of contents.

When communicating with the Milnor factory regarding this manual, please also provide the other identifying information shown on the cover, including the publishing system, access date, and whether the document ECN's are the latest available or exact.

**Best Available Information**—This manual contains the most accurate and complete information available when Milnor shipped your machine/software. Products are occasionally released with the best available documentation, even though the device identification (model numbers, etc.) on the documentation does not explicitly include the delivered model. In such cases, use the documentation provided.

Although unlikely, incorrect manuals may have been shipped with your machine. If you believe you received the wrong manuals, or if you need specific information about any aspect of your machine not addressed in the provided documentation, contact the Milnor Customer Service group.

**References to Yellow Troubleshooting Pages**—This manual may contain references to “yellow pages.” Although the pages containing trouble-shooting procedures are no longer printed on yellow paper, troubleshooting instructions, if any, will be contained in the easily located “Troubleshooting” section. See the table of contents.

**Trademarks of Pellerin Milnor Corporation**—The following terms, some of which may be used in this publication, are trademarks of Pellerin Milnor Corporation:

CBW <sup>®</sup>	E-P OneTouch <sup>®</sup>	Gear Guardian <sup>®</sup>	Mildata <sup>®</sup>	Milnor <sup>®</sup>	Staph-Guard <sup>®</sup>
E-P Express <sup>®</sup>	E-P Plus <sup>®</sup>	Mentor <sup>®</sup>	Milnet <sup>®</sup>	MultiTrac <sup>™</sup>	Visionex <sup>™</sup>

**Trademarks of Other Companies**—The following terms, some of which may be used in this publication, are trademarks of their respective companies:

Acronis <sup>®</sup>	Microsoft Windows 2000 <sup>®</sup>	Yaskawa <sup>®</sup>	Siemens <sup>®</sup>
Atlas 2000 <sup>®</sup>	Microsoft Office XP <sup>®</sup>	Microsoft Access <sup>®</sup>	Seagate Crystal Reports <sup>®</sup>
IBM <sup>®</sup>	Microsoft Windows NT <sup>®</sup>	Microsoft Windows XP <sup>®</sup>	

## Comments and Suggestions

Help us to improve this manual by sending your comments to:

Pellerin Milnor Corporation  
Attn: Technical Publications  
P. O. Box 400  
Kenner, LA 70063-0400  
Fax: (504) 469-1849

# Table of Contents

## for ME6V6W11AE/2008046N

### 36026V7W, 42026V6W Washer-Extractor MARK V CONTROLS

Page	Description	Document/ECN
1	Component Parts List	W6V5WSPL/2008046N
5	Warranty	BMP720097/92732A
7	How to Order Parts	BMP720097R/72332A
8	How to Use Electrical Schematics	MSFD0106AE/2004414V
18	3 Phase Motor Connection Diagram	BMP850029/99362B
19	3P Motor Diagram-Multivolt	W80008/2001253A
20	Control Box Layouts	W6V5WSTG/2004185B
22	Board to Board Wiring	W6V5WSBW/2008046B
24	Flushing Supplies	W6V5WSCF/2001134B
26	Liquid Supply-Interpret Relays	W6V5WSCP/2001134B
28	Chemical Save (Optional)	W6V5WSCS/2001134B
30	Central Liquid Supply	W6V5WSCX/2001134B
32	Alternate Drain Valve Air Operated	W6V5WSDR/2001134B
34	Extract Commands Satisfied	W6V5WSEA/2001134B
36	Electronic Level	W6V5WSEC/2001134B
38	Electircal Valves	W6V5WSEV/2001134B
40	Microprocessor Inputs	W6V5WSI1/2001134B
42	Keypad	W6V5WSKP/2001134B
44	Control Circuit Transformer	W6V5WSLV/2001134B
46	20 Programmable Outputs Optional	W6V5WSOP/2001134B
48	Start Circuit for V6W with GPD315 Inverter	W6V5WSS+/2006512B



# COMPONENT PARTS LIST

W6V5WSPL/2008046N

<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>
	<b>&gt;&gt;&gt;CONTROL BOX LAYOUTS</b>				
001	DETAIL-36026/42026V6W CONTROL BOX	W6V5WSTG	B2T2001025	36/42 V6W CONTROL BOX	SEE FUNCTION
002	DETAIL-36026/42026V6W SW. PANEL BOX	W6V5WSTG	B2T2001027	36/42 V6W SW PNL BOX	SEE FUNCTION
BA	<b>&gt;&gt;&gt;PRINTED CIRCUIT BOARDS</b>				
BAD-1	BOARD-ANALOG TO DIGITAL CONVERTER	W6V5WSBW	08BSADCT	BD: SERIAL A-D CONVERT->TEST	CONTROL BOX
BAD-1	BOARD-ANALOG TO DIGITAL CONVERTER	W6V5WSEC	08BSADCT	BD: SERIAL A-D CONVERT->TEST	CONTROL BOX
BBB-1	BOARD-MEMORY BATTERY BACKUP	W6V5WSBW	08BSBB1T	BOARD: SER BATT BACKUP-TEST	PROCESSOR BX
BDA-1	BOARD-DIGITAL TO ANALOG CONVERTOR	W6V5WSBW	08BSDAHT	BD:HI-RES SERIAL D-A->TEST	CONTROL BOX
BDVFD	DISPLAY-MICROPROCESSOR	W6V5WSBW	08BSEVFD5V	BD: SERIAL VFD 2LINE 186-19200B-TEST	SWITCH PANEL
BIO-1	BOARD-8OUTPUT/16INPUT #1	W6V5WSBW	08BS816CHT	BD 8OUT-16IN HIGH SPD->TEST	CONTROL BOX
BLB	BOARD-LEVEL TRANSDUCER	W6V5WSEC	08BNLTT	LEVEL TRANSDUCER BD->TEST	CONTROL BOX
BMTH	BOARD-5 CHANNEL MOTHER	W6V5WSBW	08BSMTHAT	BD:SERIAL 5 CARD MOTHER->TEST	CONTROL BOX
BO24-1	BOARD-24 OUTPUT #1	W6V5WSBW	08BSO24AT	BD:SERIAL 24 OUTPUT->TEST	CONTROL BOX
BO24-2	BOARD-24 OUTPUT #2	W6V5WSBW	08BSO24AT	BD:SERIAL 24 OUTPUT->TEST	CONTROL BOX
BPB	BOARD-186 PROCESSOR	W6V5WSBW	08BSPE2T	186 PROC BD+FP->TEST	PROCESSOR BX
CR	<b>&gt;&gt;&gt;RELAY-PILOT OR CONTROL</b>				
CR1	RELAY-ALTERNATE DRAIN	W6V5WSEV	09C024D37	4PDT "KH" 110/120V	CONTROL BOX
CRC01	RELAY-INTERPRET RELAY #1	W6V5WSCP	09C024D37	4PDT "KH" 110/120V	INT RELAY BX
CRC02	RELAY-INTERPRET RELAY #2	W6V5WSCP	09C024D37	4PDT "KH" 110/120V	INT RELAY BX
CRC03	RELAY-INTERPRET RELAY #3	W6V5WSCP	09C024D37	4PDT "KH" 110/120V	INT RELAY BX
CRC04	RELAY-INTERPRET RELAY #4	W6V5WSCP	09C024D37	4PDT "KH" 110/120V	INT RELAY BX
CRC05	RELAY-INTERPRET RELAY #5	W6V5WSCP	09C024D37	4PDT "KH" 110/120V	INT RELAY BX
CRC06	RELAY-INTERPRET RELAY #6	W6V5WSCP	09C024D37	4PDT "KH" 110/120V	INT RELAY BX
CRC07	RELAY-INTERPRET RELAY #7	W6V5WSCP	09C024D37	4PDT "KH" 110/120V	INT RELAY BX
CRC08	RELAY-INTERPRET RELAY #8	W6V5WSCP	09C024D37	4PDT "KH" 110/120V	INT RELAY BX
CRC09	RELAY-INTERPRET RELAY #9	W6V5WSCP	09C024D37	4PDT "KH" 110/120V	INT RELAY BX
CRC10	RELAY-INTERPRET RELAY #10	W6V5WSCP	09C024D37	4PDT "KH" 110/120V	INT RELAY BX
CRC11	RELAY-INTERPRET RELAY #11	W6V5WSCP	09C024D37	4PDT "KH" 110/120V	INT RELAY BX
CRC12	RELAY-INTERPRET RELAY #12	W6V5WSCP	09C024D37	4PDT "KH" 110/120V	INT RELAY BX
CRC13	RELAY-INTERPRET RELAY #13	W6V5WSCP	09C024D37	4PDT "KH" 110/120V	INT RELAY BX
CRC14	RELAY-INTERPRET RELAY #14	W6V5WSCP	09C024D37	4PDT "KH" 110/120V	INT RELAY BX
CRC15	RELAY-INTERPRET RELAY #15	W6V5WSCP	09C024D37	4PDT "KH" 110/120V	INT RELAY BX
CREXA	RELAY-AMPSAVER AMPS OK	W6V5WSEA	09C024D24	RELAY 4PDT DIFGLD 14PIN 24V	CONTROL BOX

# COMPONENT PARTS LIST

<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>
CRS+	RELAY-START 3-WIRE	W6V5WSS+	09C024D37	4PDT "KH" 110/120V	CONTROL BOX
CS	>>>CONTACTOR-MOTOR STARTER				
CSV5	CONTACTOR-VARIABLE SPEED	W6V5WSS+	09MC08C337	16A 3P MCS CONT NR 120V5/6	CONTROL BOX
EB	>>>BUZZER OR AUDIBLE SIGNAL				
EBSG	BUZZER-SIGNAL AUDIBLE	W6V5WSS+	09H015	BUZZ. 115V W/6-32 CTR+6"LEADS	SWITCH PANEL
EF	>>>FUSE OR FUSE HOLDER				
EF37	FUSE-120VAC CONTROL CIRCUIT	W6V5PSLV	09FF006AMA	FUSE BK/ABC 6 AMP 250V BUSS	HIGH VOLT BX
EFP1	FUSE-PRIMARY INCOMING VOLTAGE	W6V5PSLV	09FF005AWN	BUSE BUSS KTK 5AMP 600V=HPS HOLDER	HIGH VOLT BX
EFP2	FUSE-PRIMARY INCOMING VOLTAGE	W6V5PSLV	09FF005AWN	BUSE BUSS KTK 5AMP 600V=HPS HOLDER	HIGH VOLT BX
EL	>>>LIGHT-PILOT OR INDICATOR				
ELSG	LIGHT-SIGNAL VISUAL	W6V5WSS+	09J060A37	LAMP 1/2" AMB 250V IDI 1051QC3	SWITCH PANEL
EM	>>>ELECTROMAGNET AND SOLENOID				
EMDL	SOLENOID-DOOR LATCH	W6V5WSS+	09K062B37	SOLENOID (C-7)120/60--110/50	DOOR LATCH
ES	>>>POWER SUPPLY-ELECTRONIC				
ESPS	POWER SUPPLY-MICROPROCESSOR	W6V5WSBW	08PSS3401T	40 WATT POWER SUPPLY TESTED	CONTROL BOX
ET	>>>THERMAL OVERLOAD DEVICES				
ETDB	OVERLOAD-DYNAMIC BRAKE	W6V5WSS+	09F024A	OL RELAY 1P SZ1 SQD #9065-C01	CONTROL BOX
EX	>>>TRANSFORMERS				
EX37	TRANSFORMER-INCOMING VOLT.120VAC	W6V5PSLV	MESSAGE EW	SEE EX37-1, -2, OR -3 FOR VOLTAGE	HIGH VOLT BX
EX37-1	TRANSFORMER-208/240> 120VAC	W6V5PSLV	09U249AA37	XFMR 200-240V PRI/120VSEC/250VA	HIGH VOLT BX
EX37-2	TRANSFORMER-380/480> 120VAC	W6V5PSLV	09U200AAB	XFMR 380-480V/240-120V-250VA	HIGH VOLT BX
EX37-3	TRANSFORMER-600-> 120VAC	W6V5PSLV	09U251AB37	XFMR 600VPRI/120VSC-250VA-3%REG	HIGH VOLT BX
KB	>>>KEYBOARD-ELECTRONIC				
KBM	KEYPAD-MICROPROCESSOR	W6V5WSKP	08ND5X6WE	KEYPAD:5X6MATRIX WASHER-EXT	SWITCH PANEL
MT	>>>MOTORS				
MTD	MOTOR-DRIVE	W6V5WSS+	MESSAGE SO	SEE SPECIFIC COMPONENT+NAMEPLATE	MACHINE
MTVS	FAN-INVERTOR COOLING	W6V5WSS+	13AF100A37	FAN 92CFM115V60 NEWARK#90F6921	BACK C-BOX
MV	>>>MOTOR POWER INVERTERS				
MV/DBR	RESISTOR-DYNAMIC BRAKE	W6V5WSS+	09MV100RES	RESIST 100 OHM 225WATT ADJ	BELOW C-BX
MV/DH	INVERTER-WASH MOTOR 380-460V	W6V5WSS+	09MV050D96	VARISPEED-TRANS+R 5HP 380-460V	CONTROL BOX
MV/DL	INVERTER-WASH MOTOR 200-240V	W6V5WSS+	09MV050D74	VARISPEED-TRANS+R 5HP 200-230V	CONTROL BOX
MV/LF	FILTER-INVERTER/MOTOR POWER	W6V5WSS+	09MVFILTR1	INCOME POWER FILTER CAP	CONTROL BOX
SH	>>>SWITCH-HAND OPERATED				

# COMPONENT PARTS LIST

W6V5WSPL/2008046N

<u>COMPONENT</u>	<u>FUNCTION OF THIS</u>	<u>WHERE TO FIND</u>	<u>MILNOR P/N</u>	<u>DESCRIPTION</u>	<u>LOCATION</u>
<u>NUMBER</u>	<u>COMPONENT NUMBER</u>	<u>THIS COMPONENT</u>			
SHD	SWITCH-ALTERNATE DRAIN	W6V5WSDR	09N405M220	SWASS M2W 2NO	ALT DRAIN BX
SHD	SWITCH-ALTERNATE DRAIN	W6V5WSEV	09N405M210	SWASS M2W 1NO	CONTROL BOX
SHDOH	SWITCH-DOOR OPEN	W6V5WSS+	09N405PB11	SWASS PBBK 1NO/1NC	SWITCH PANEL
SHEAK	SWITCH-EXTRACT CONTROL	W6V5WSEA	09N405M210	SWASS M2W 1NO	CONTROL BOX
SHMD	SWITCH-MILDATA LOCAL/REMOTE	W6V5WSI1	09N405M210	SWASS M2W 1NO	CONTROL BOX
SHS+	SWITCH-START	W6V5WSS+	09N405PG10	SWASS PBGN 1NO	SWITCH PANEL
SHSG	SWITCH-SIGNAL CANCEL	W6V5WSI1	09N405PY10	SWASS PB YELLOW INO	SWITCH PANEL
SHSMA	SWITCH-MASTER	W6V5WSS+	09N405M210	SWASS M2W 1NO	SWITCH PANEL
SHSO	SWITCH-STOP	W6V5WSS+	09N405PR01	SWASS PBRD 1NC	SWITCH PANEL
SHSOE	SWITCH-EMERGENCY STOP	W6V5WSS+	09N505	SW ASSY EMER STOP	SWITCH PANEL
SK	>>>SWITCH-KEYLOCK				
SKPR	SWITCH-RUN/PROGRAM (KEY OP)	W6V5WSI1	09N127C	KEYSW SPST 7A120VAC SCREW TERM	SWITCH PANEL
SM	>>>SWITCH-MECHANICAL OPERATED				
SMPLL	SWITCH-DOOR CLOSED	W6V5WSS+	09R014A	MINI-SW SPDT STAKON #V15G1C26	DOOR LATCH
SMWVB	SWITCH-VIBRATION	W6V5WSS+	09R020	SWITCH NC VIBR#WZ-2RW84429-P52	CONTROL BOX
SP	>>>SWITCH-PRESSURE OPERATED				
SPD	PRESSURE SW-LEVEL OK TO OPEN DOOR	W6V5WSS+	09N086A	PRESS SWITCH EATON #738-761	CONTROL BOX
VE	>>>VALVE-ELECTRIC OPERATED				
VEAD	VALVE-ALTERNATE DRAIN	W6V5WSDR	96R301A37	1/8" PILOT 3W-NC 110/50 120/60	ALT DRAIN BX
VEC01	VALVE-CHEMICAL #1 FLUSH	W6V5WSCF	96P013G37	3/4" 2WAYPLASTCVL 120V60C	SUPPLY INJEC
VEC02	VALVE-CHEMICAL #2 FLUSH	W6V5WSCF	96P013G37	3/4" 2WAYPLASTCVL 120V60C	SUPPLY INJEC
VEC03	VALVE-CHEMICAL #3 FLUSH	W6V5WSCF	96P013G37	3/4" 2WAYPLASTCVL 120V60C	SUPPLY INJEC
VEC04	VALVE-CHEMICAL #4 FLUSH	W6V5WSCF	96P013G37	3/4" 2WAYPLASTCVL 120V60C	SUPPLY INJEC
VEC05	VALVE-CHEMICAL #5 FLUSH	W6V5WSCF	96P013G37	3/4" 2WAYPLASTCVL 120V60C	SUPPLY INJEC
VEC06	VALVE-CHEMICAL #6	W6V5WSCX	96R301A37	1/8" PILOT 3W-NC 110/50 120/60	SUPPLY VLVST
VEC07	VALVE-CHEMICAL #7	W6V5WSCX	96R301A37	1/8" PILOT 3W-NC 110/50 120/60	SUPPLY VLVST
VEC08	VALVE-CHEMICAL #8	W6V5WSCX	96R301A37	1/8" PILOT 3W-NC 110/50 120/60	SUPPLY VLVST
VEC09	VALVE-CHEMICAL #9	W6V5WSCX	96R301A37	1/8" PILOT 3W-NC 110/50 120/60	SUPPLY VLVST
VEC10	VALVE-CHEMICAL #10	W6V5WSCX	96R301A37	1/8" PILOT 3W-NC 110/50 120/60	SUPPLY VLVST
VEC11	VALVE-CHEMICAL #11	W6V5WSCX	96R301A37	1/8" PILOT 3W-NC 110/50 120/60	SUPPLY VLVST
VEC12	VALVE-CHEMICAL #12	W6V5WSCX	96R301A37	1/8" PILOT 3W-NC 110/50 120/60	SUPPLY VLVST
VEC13	VALVE-CHEMICAL #13	W6V5WSCX	96R301A37	1/8" PILOT 3W-NC 110/50 120/60	SUPPLY VLVST
VEC14	VALVE-CHEMICAL #14	W6V5WSCX	96R301A37	1/8" PILOT 3W-NC 110/50 120/60	SUPPLY VLVST

# COMPONENT PARTS LIST

<u>COMPONENT NUMBER</u>	<u>FUNCTION OF THIS COMPONENT NUMBER</u>	<u>WHERE TO FIND THIS COMPONENT</u>	<u>MILNOR P/N</u>	<u>DESCRIPTION</u>	<u>LOCATION</u>
VEC15	VALVE-CHEMICAL #15	W6V5WSCX	96R301A37	1/8" PILOT 3W-NC 110/50 120/60	SUPPLY VLVST
VEDRR	VALVE-REUSE DRAIN	W6V5WSEV	96R302A37	1/8" AIRPILOT 3W NO 120V50/60	AIR VALVE BX
VEDRS	VALVE-DRAIN	W6V5WSEV	96D350A37	DRIN/VAL 3"MTDR 120V 50/60C	REAR OF MACH
VESTM	VALVE-STEAM	W6V5WSEV	96R301A37	1/8" PILOT 3W-NC 110/50 120/60	AIR VALVE BX
VETCD	VALVE-COOLDOWN-AIR OPERATED	W6V5WSEV	96R301A37	1/8" PILOT 3W-NC 110/50 120/60	AIR VALVE BX
VEWC	VALVE-COLD WATER	W6V5WSEV	96R301A37	1/8" PILOT 3W-NC 110/50 120/60	AIR VALVE BX
VEWH	VALVE-HOT WATER	W6V5WSEV	96R301A37	1/8" PILOT 3W-NC 110/50 120/60	AIR VALVE BX
VEWVX	VALVE-EXTRA WATER	W6V5WSEV	96R301A37	1/8" PILOT 3W-NC 110/50 120/60	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 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 repaired or altered in any way without MILNOR's written consent.

Parts which require routine replacement due to normal wear – such as gaskets, contact points, brake and clutch linings and similar parts – are not covered by this warranty, nor are parts damaged by exposure to weather or to chemicals.

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

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

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 order repair parts**

Repair parts may be ordered either from the authorized dealer who sold you this machine, or directly from the MILNOR factory. In most cases, your dealer will have these parts in stock.

When ordering parts, please be sure to give us the following information:

1. Model and serial number of the machine for which the parts are required
2. Part number
3. Name of the part
4. Quantity needed
5. Method of shipment desired
6. In correspondence regarding motors or electrical controls, please include all nameplate data, including wiring diagram number and the make or manufacturer of the motor or controls.

All parts will be shipped C.O.D. transportation charges collect only.

## **Please read this manual**

It is strongly recommended that you read the installation and operating manual before attempting to install or operate your machine. We suggest that this manual be kept in your business office so that it will not become lost.

### **PELLERIN MILNOR CORPORATION**

P.O. BOX 400, KENNER, LA., 70063-0400, U.S.A.

FAX: Administration 504/468-9307, Engineering 504/469-1849, Service 504/469-9777

**BMP720097R**  
**72332A**

## HOW TO USE MILNOR<sup>®</sup> ELECTRICAL SCHEMATICS

Milnor<sup>®</sup> electrical schematic manuals contain a *table of contents/component list*, a set of *schematic drawings*, and a *signal routing table*. 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.

The *schematic drawings* use symbols for each electro-mechanical 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 but are shown in the signal routing table. **Most machines (manuals) require several schematics to describe the complete control system including all available options. However, this means that there are usually some schematics that do not apply to a specific machine.** Each schematic is devoted to circuits with common functions (e.g., microprocessor inputs, motor contactors). Schematics appear in the manual in alphanumeric order.

The *signal routing table* assists in determining wire routing. It identifies each group of conductors in a control system connected with zero resistance. Groups are identified by a two or three character wire number. Each wire belonging to such a group of conductors has that group's wire number printed along the wire insulation. Although there are some exceptions, generally each group of conductors within the entire electrical system for a machine family has its own unique wire number. The signal routing table for the manual lists each wire alphanumerically by wire number and each component/pin number to which *the wire is attached*, including those not shown on the schematics (e.g., wire connectors). Milnor<sup>®</sup> document MST50202BE "HOW TO USE THE SIGNAL ROUTING TABLE" provides more information.

## Component Prefix Classifications and Descriptions

The *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.

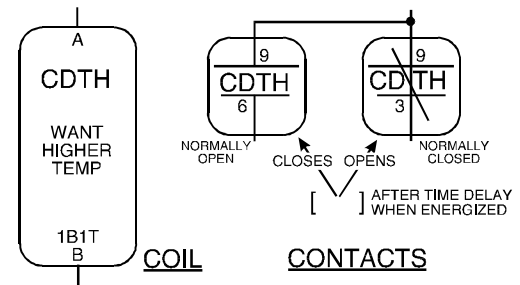
The following are descriptions of the electrical components used in Milnor<sup>®</sup> machines. Descriptions are in alphabetical order of the component class code (two character prefix).

**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.

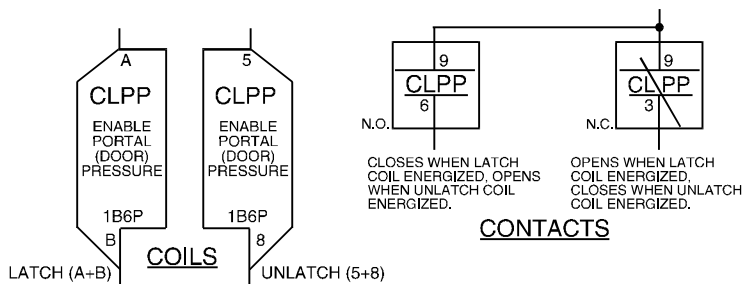
**CB=Circuit Breaker** Automatic switch that opens an electric circuit in abnormal current conditions (e.g., an overload).



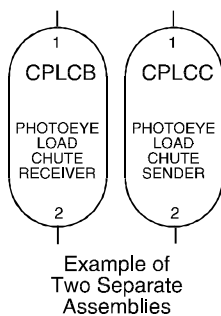
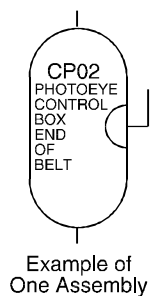
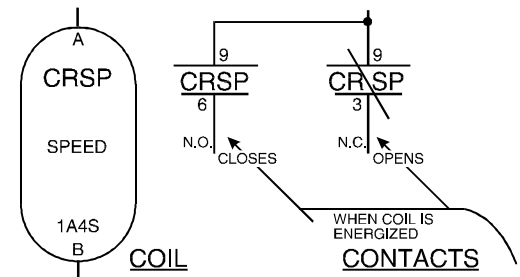
**CD=Control, Time Delay Relay** A relay whose contacts switch only after a fixed or adjustable delay, once voltage has been applied to its coil. The contacts switch back to normal (de-energized state) immediately when the voltage is removed.



**CL=Control, Latch Relay** 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*).



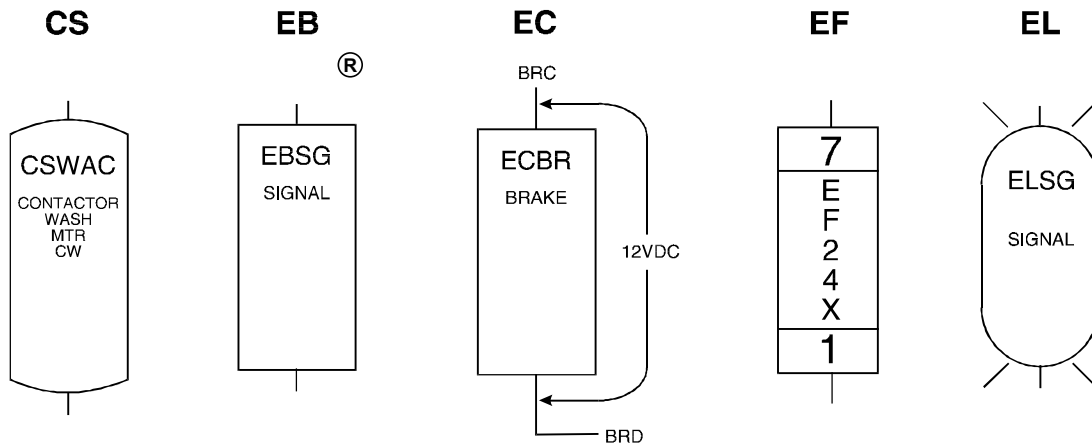
**CR=Control, Relay** A relay whose contacts switch immediately when voltage is applied to its coil and revert to normal when the voltage is removed.



**CP=Control, Photo-Eyes** 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 unblocked (light operate).

## HOW TO USE MILNOR® ELECTRICAL SCHEMATICS



**CS=Control, Contactor/Motor Starter** A relay capable of handling heavier electrical loads, usually a motor.

**EB=Electric Buzzer** An audible signaling device.

**EC=Electric Clutch** 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** 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.

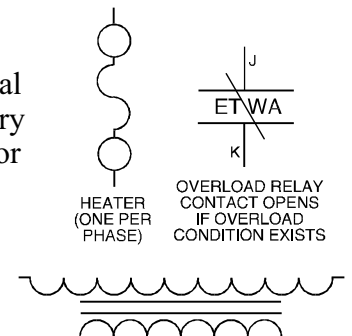
**EL=Electric Light** Indicator lights may be either incandescent or fluorescent.

**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** 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.

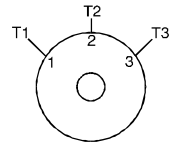
**EX=Electrical Transformer** A device that transfers electrical energy from one isolated circuit to another, often raising or lowering the voltage in the process.



**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** Electro-mechanical device that converts electrical energy into mechanical energy.

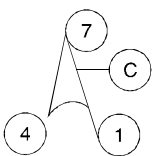
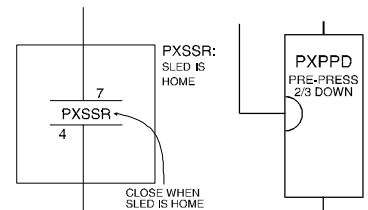


**MV=Motor (Variable Speed) Inverter** To vary the speed of an AC motor, the volts to frequency ratio must be kept constant. The motor will overheat if this ratio is not maintained.

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.

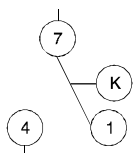
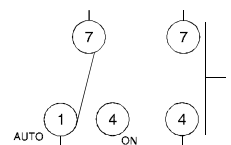
**NOTE: Switch symbols used in the schematics and described below always depict the switch in its unactuated state.**

**PX=Proximity Switch** A device which reacts to the proximity of an 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.



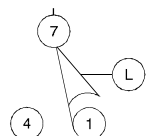
**SC=Switch, Cam Operated** A switch in which the electrical contacts are opened and/or closed by the mechanical action of a cam(s). Applications include 35-50 pound timer operated machines, autospot, timer reversing motor assembly, and some balancing systems.

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



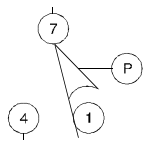
**SK=Switch, Key Lock** A switch that requires a key to operate. This prevents unauthorized personnel from gaining access to certain functions (e.g., the *Program Menu*).

**SL=Switch, Level Operated** A switch connected to a float that causes the switch to open and close as the level changes.

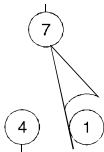


HOW TO USE MILNOR® ELECTRICAL SCHEMATICS

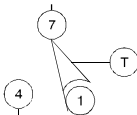
**SM=Switch, Mechanically Operated** A switch that is mechanically operated by a part of or the motion of the machine (e.g., door closed switch, tilt limit switches, etc.)



**SP=Switch, Pressure Operated** A switch consisting of a diaphragm that pushes against a switch actuator.

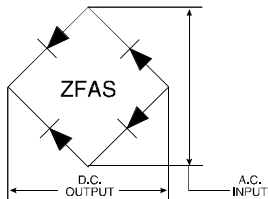


**ST=Switch, Temperature Operated** A switch that is actuated at a preset temperature (e.g., dryer safety probes) or has adjustable set points (e.g., Motometers or Combistats).



**TB=Terminal Board** A strip or block for attaching or terminating wires.

**VE=Valve, Electric Operated** A valve operated by an electric coil to control the flow of fluid. The fluid can be air, water or hydraulics.



**ZF=Rectifier** A solid state device that converts alternating current to direct current.

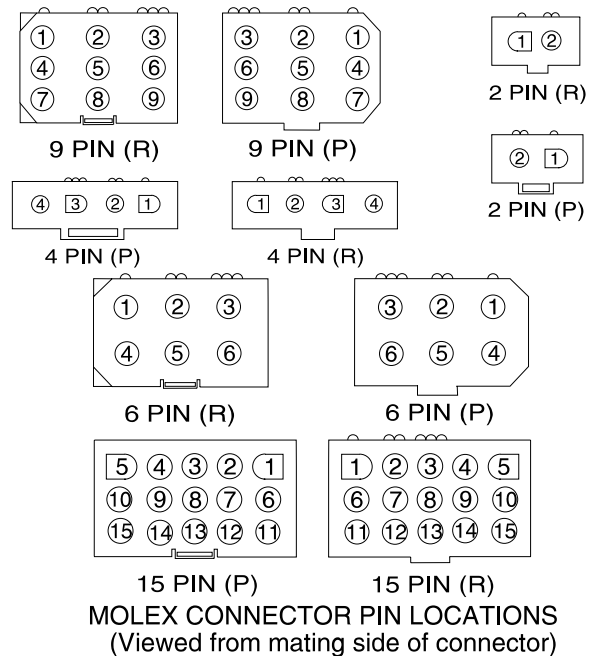
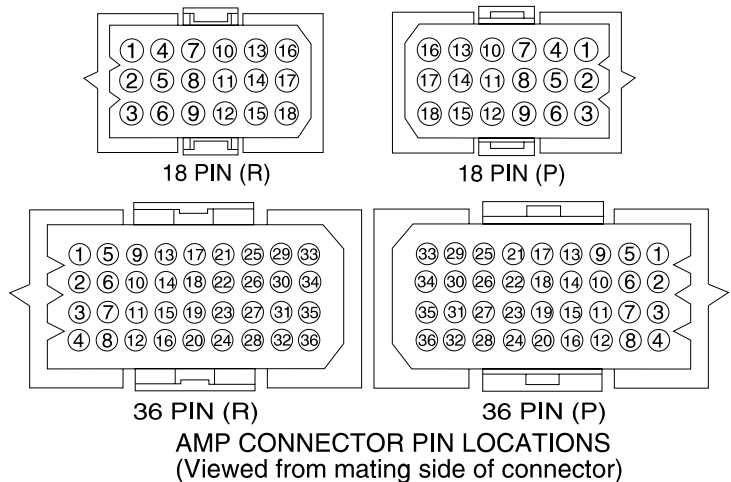
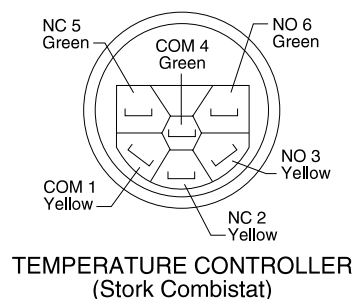
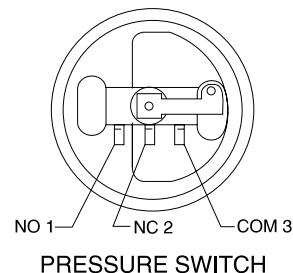
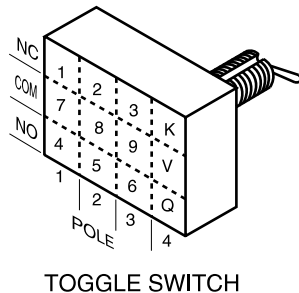
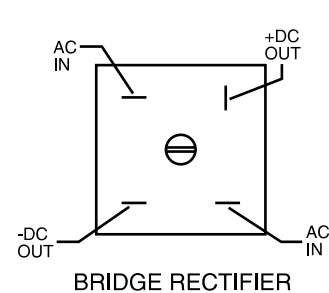
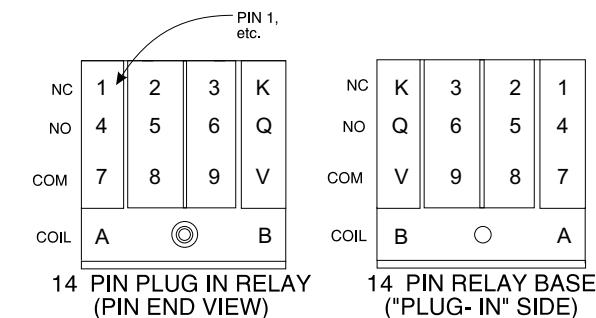
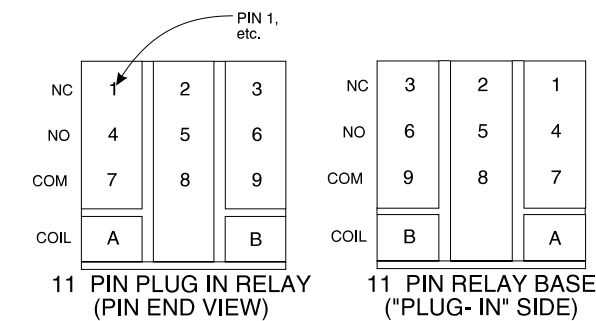


**WC=Wiring Connector** A coupling device for joining two cables or connecting a cable to an electronic circuit or piece of equipment. Connectors are male or female, according to whether they plug into or receive the mating connector.

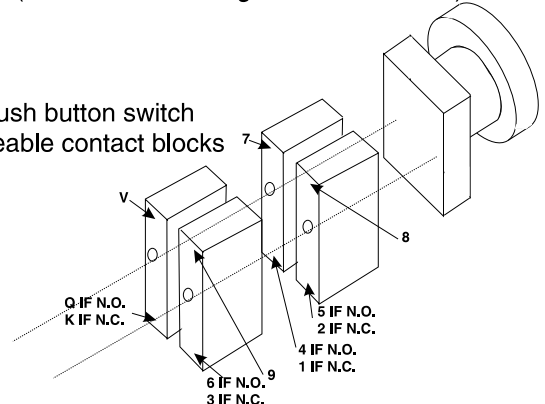


# Component Terminal Numbering

NOTE: Numbers shown usually appear on the component.



Rotary or push button switch with replaceable contact blocks



### Features of Milnor® Electrical Schematics

Document W6DRYGS+A shown on the next page, is part of an actual schematic for the Milnor<sup>æ</sup> Gas Dryer. For the purposes of this instruction, 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<sup>æ</sup> 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 General functions of the circuit or portions thereof are stated across the top edge of the drawing.
- ⑤ 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.
- ⑥ Relay coils show the page and line number on which its associated contacts are located.
- ⑦ Relay contacts and relay coils show the physical location of the relay if mounted on a tray..

- ⑧ 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 II washer-extractor control and their designations are as follows:

MTA1-MTA6 = 8 output, 16 input (8/16) boards.

MTA11-MTA16 = 16 output boards

MTA30-MTA40 = processor boards

MTA41-MTA43 = digital to analog (D/A) boards

MTA51-MTA56 = analog to digital (A/D) boards

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

- ⑨ The wire numbers, as described in the explanation of the signal routing table at the beginning of this section, are shown at appropriate locations on the schematic drawing.
- ⑩ 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.

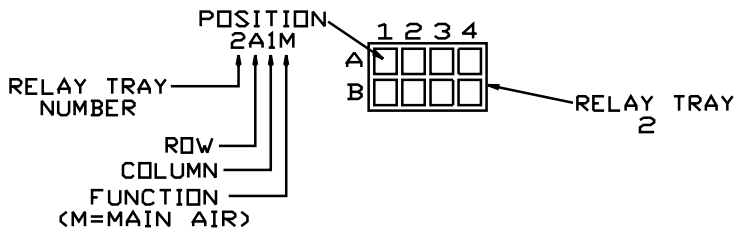
# 4 CIRCUIT FUNCTION

5 THIS INDICATES ON WHICH PAGE (W6DRYGS+) AND LINE NUMBER (08) THE RELAY COIL CAN BE FOUND FOR THIS SET OF CONTACTS.

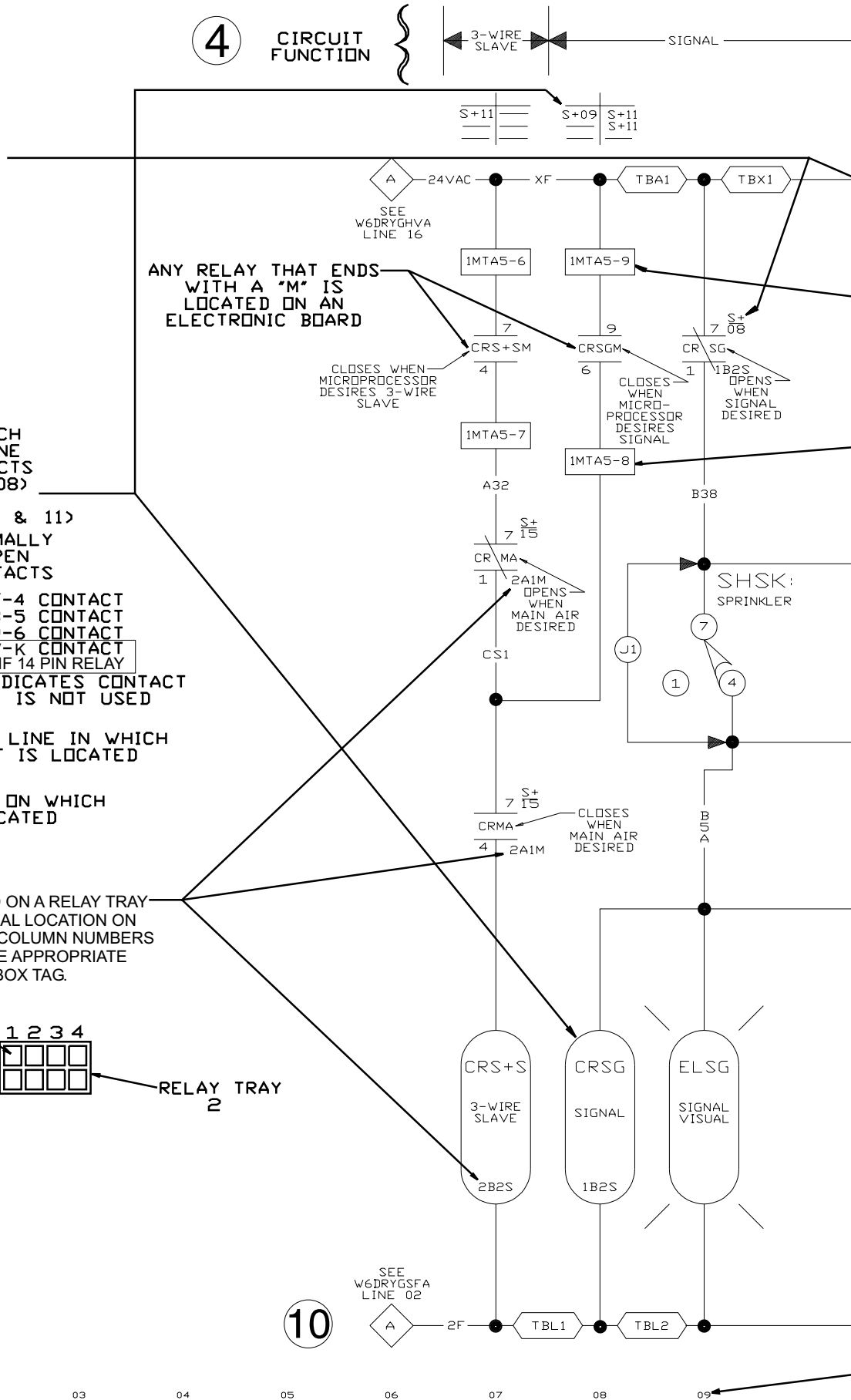
6 THIS INDICATES ON WHICH SCHEMATIC PAGE AND LINE NUMBER THE RELAY CONTACTS OF THIS COIL (ON LINE 08) ARE LOCATED. (I.E.: W6DRYGS+, LINES 9 & 11)

NORMALLY CLOSED CONTACTS  
 7-1 CONTACT → S+09  
 8-2 CONTACT → S+11  
 9-3 CONTACT → S+11  
 V-Q CONTACT IF 14 PIN RELAY  
 NORMALLY OPEN CONTACTS  
 7-4 CONTACT → S+11  
 8-5 CONTACT → S+11  
 9-6 CONTACT → S+11  
 V-K CONTACT IF 14 PIN RELAY  
 INDICATES CONTACT IS NOT USED  
 INDICATES LINE IN WHICH CONTACT IS LOCATED  
 INDICATES DRAWING ON WHICH CONTACT IS LOCATED

7 IF RELAY IS LOCATED ON A RELAY TRAY THIS IS THE PHYSICAL LOCATION ON THE TRAY. ROW AND COLUMN NUMBERS OR SHOWN ON THE APPROPRIATE CONTROL BOX TAG.

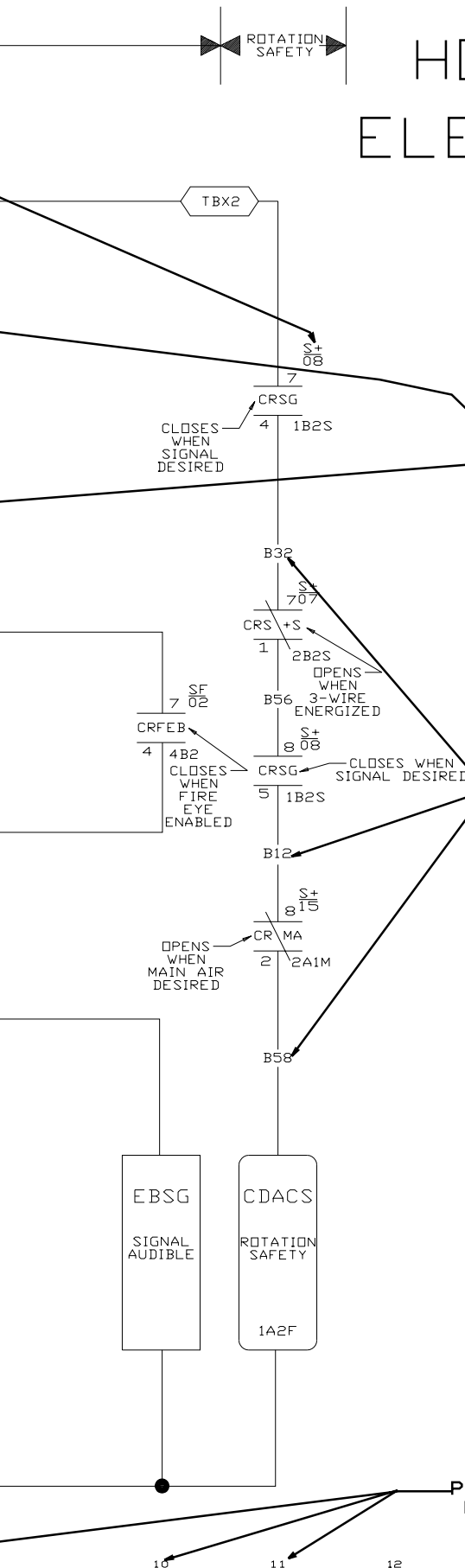


10



# HOW TO READ MILNOR ELECTRICAL SCHEMATICS

W6DRYGS+A  
93226D



8

MASS TERMINATION ASSEMBLY  
MTA DESIGNATION ON BOARD

1MTA5-9

PIN NUMBER  
BOARD MTA GROUP DESIGNATION

AN MTA IS A CONNECTION ON AN ELECTRONIC CIRCUIT BOARD. THE NOTES AND THE TAG PAGE CAN LOCATE THE APPROPRIATE BOARD.

9

WIRE IDENTIFICATION MARKING. THIS DESIGNATION IS STAMPED ON THE WIRE EVERY 6." THIS MARKING IS USED IN CONJUNCTION WITH THE SIGNAL ROUTING TABLE.

1

MAJOR REVISION (LETTER)

PAGE NUMBER (S+)

TYPE OF MACHINE (GAS FIRED DRYER)

6TH GENERATION OF CONTROLS

W=WIRING

CLASS OF CONTROL SYSTEM

TITLE OF THIS CIRCUIT

VOLTAGE OF CIRCUIT SHOWN

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.

MICRO 6 SYSTEMS  
SCHEMATIC: 3-WIRE CIRCUIT  
24V1P50HZ/24V1P60HZ  
PELLERIN MILNOR CORPORATION

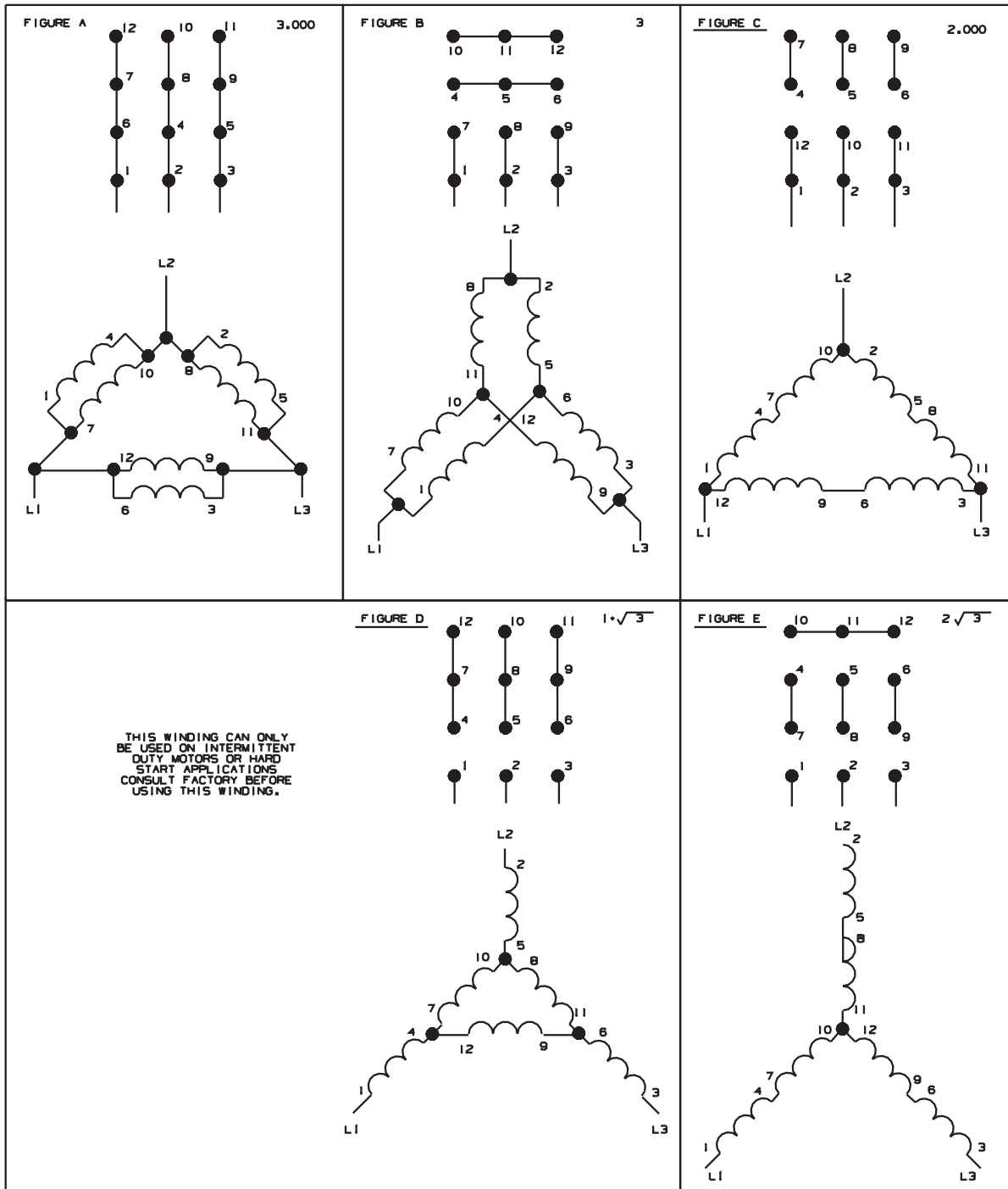
PAGE LINE NUMBERS

3

W6DRYGS+A  
93226D

10 11 12 13 14 15 16

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



06

07

08

09

10

11

12

13

14

15

16

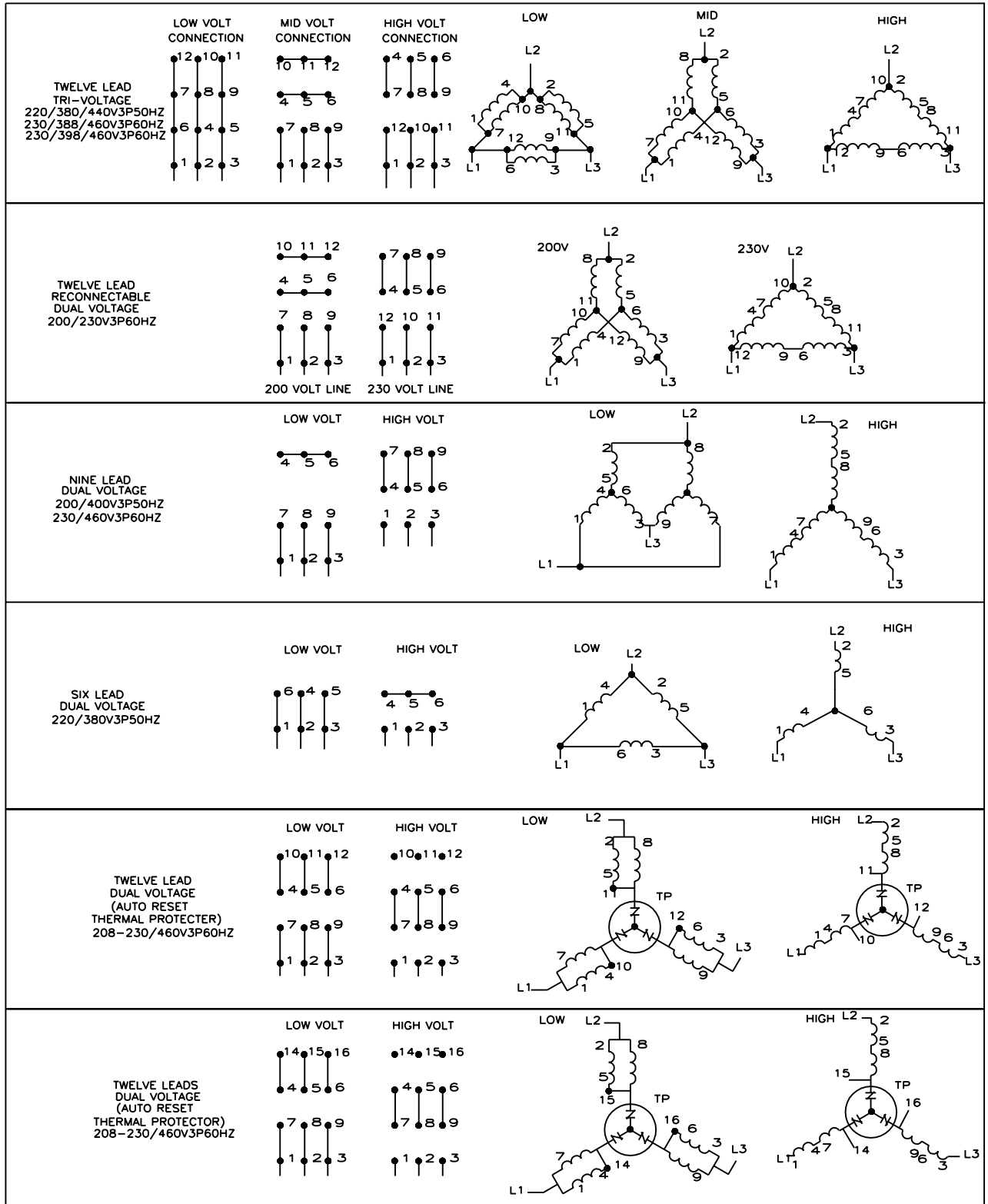
17

# BMP850029

## MOTOR CONNECTION DIAGRAMS

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

PELLERIN MILNOR CORPORATION



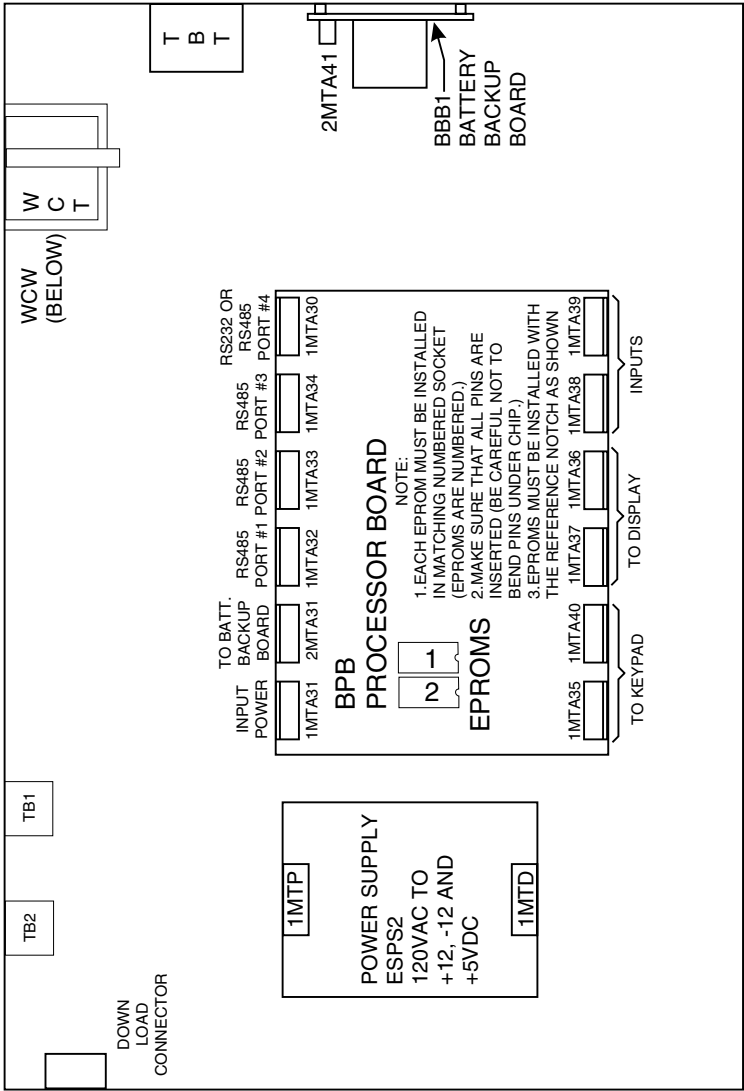
# W80008

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

W80008  
2001253A



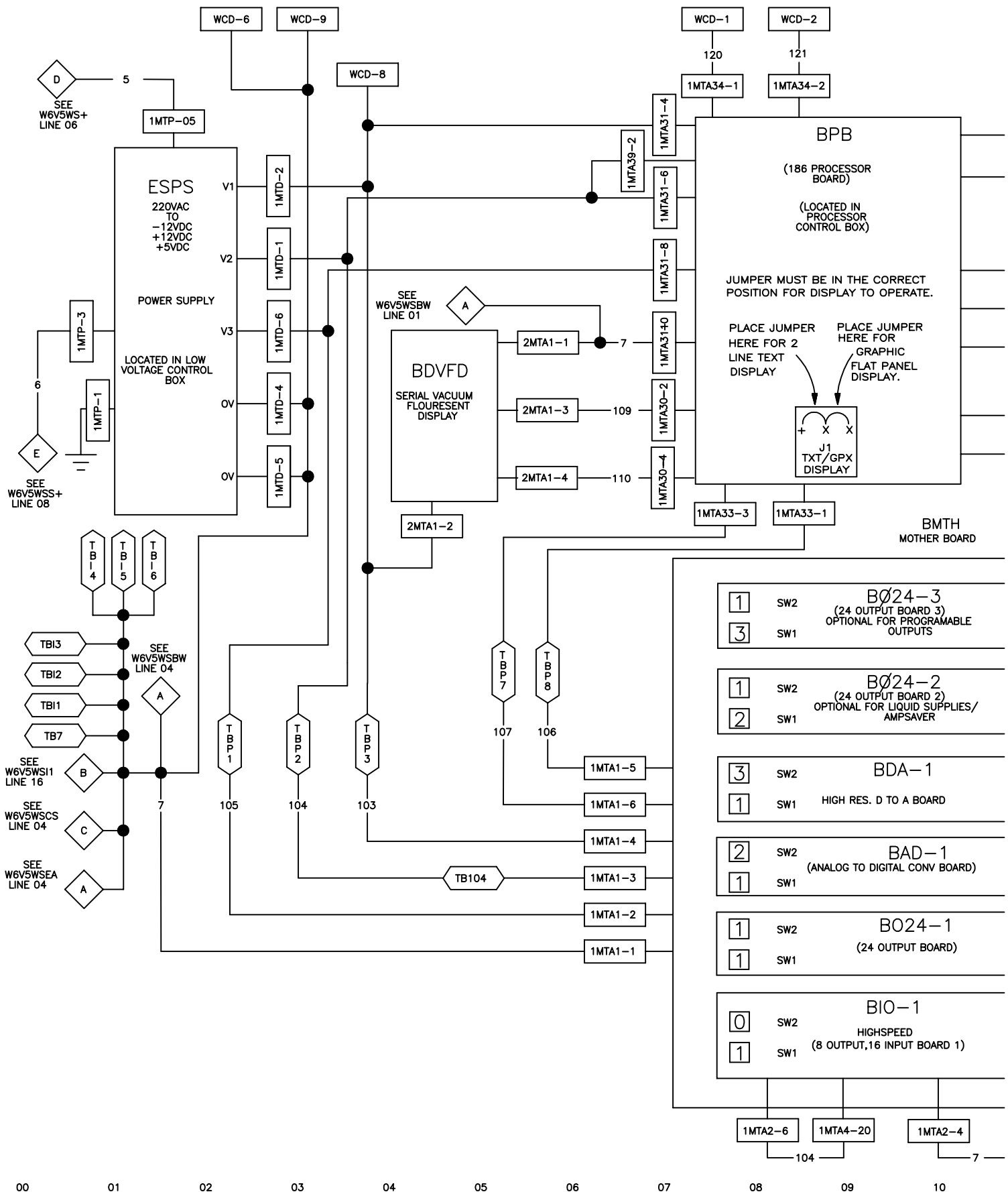


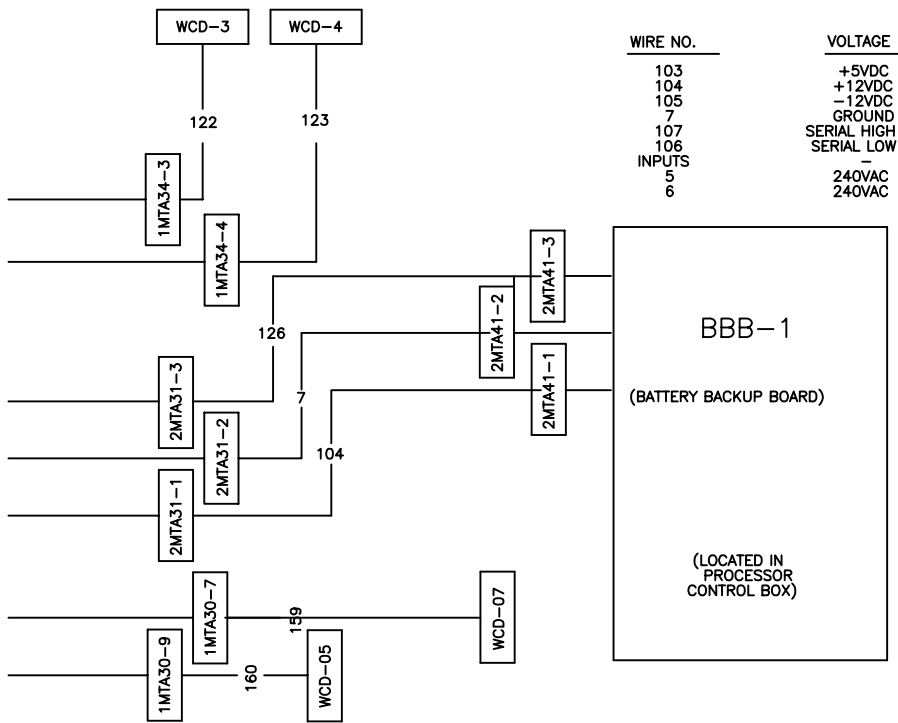


**MICRO 6 SYSTEMS**  
**36026/42026 V6W**  
**SWITCH PANEL BOX**  
PELLERIN MILNOR CORPORATION

B2T2004012  
2004185G

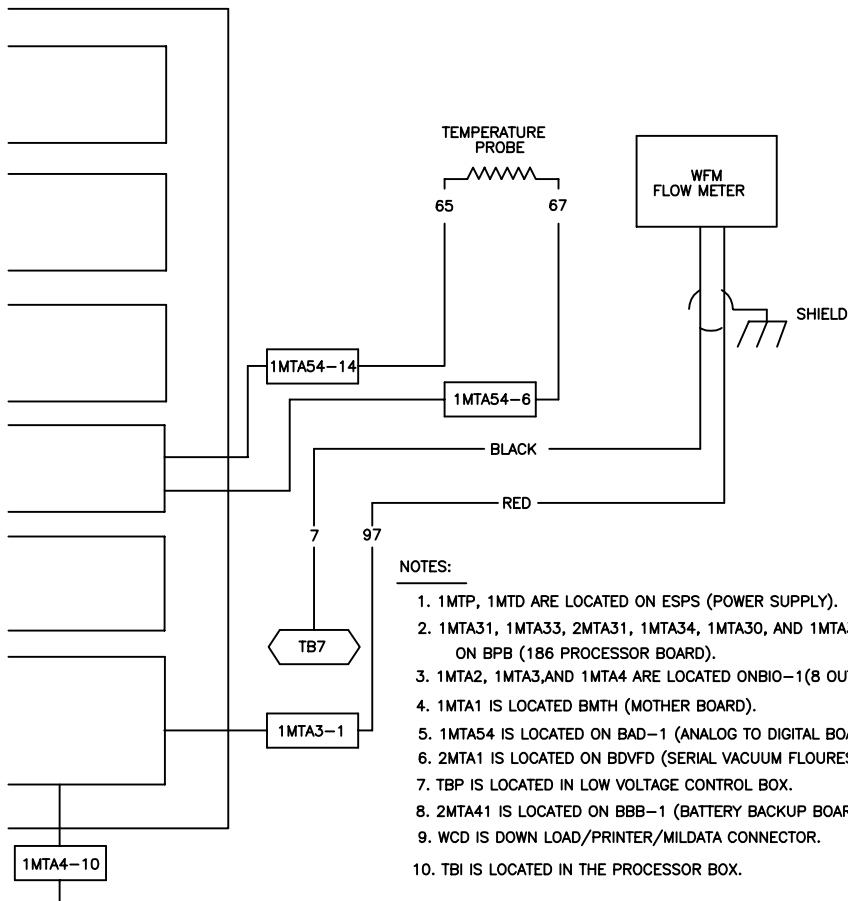
**W6V5WSTG**  
**TAG:36026/42026 V6W**  
PELLERIN MILNOR CORPORATION





WIRE NO.	VOLTAGE
103	+5VDC
104	+12VDC
105	-12VDC
7	GROUND
107	SERIAL HIGH
106	SERIAL LOW
INPUTS	-
5	240VAC
6	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.

# W6V5WSBW

## MICRO 6 SYSTEMS SERIAL CONTROLS

### MARK V

### SCHEMATIC: BOARD TO BOARD WIRING

### (SERIAL CONTROLS)

(MODIFIED FOR 186 PROCESSOR BOARD)

PELLERIN MILNOR CORPORATION

SEE  
W6V5WSS+  
LINE 08



SEE  
W6V5WSCX OR  
W6V5WSCP  
LINE 00

110/120VAC

1MTA5-4

1MTA5-2

1MTA5-3

1MTA5-7

1MTA5-1

1MTA5-8

7  
CRO1M  
4

7  
CRO2M  
4

7  
CRO3M  
4

7  
CRO4M  
4

7  
CRO5M  
4

7  
CRFLM  
4

CLOSES  
WHEN  
MICRO-  
PROCESSOR  
DESIRES  
CHEMICAL  
#1

CLOSES  
WHEN  
MICRO-  
PROCESSOR  
DESIRES  
CHEMICAL  
#2

CLOSES  
WHEN  
MICRO-  
PROCESSOR  
DESIRES  
CHEMICAL  
#3

CLOSES  
WHEN  
MICRO-  
PROCESSOR  
DESIRES  
CHEMICAL  
#4

CLOSES  
WHEN  
MICRO-  
PROCESSOR  
DESIRES  
CHEMICAL  
#5

CLOSES  
WHEN  
MICRO-  
PROCESSOR  
DESIRES  
FLUSH

1MTA5-14

1MTA5-12

1MTA5-13

1MTA5-16

1MTA5-11

1MTA5-17

47

48

49

50

51

62

TB47

TB48

TB49

TB50

TB51

TB62

MTA32-5

MTA32-6

MTA31-9

MTA31-10

MTA32-3

MTA31-6

VEC01  
CHEM  
#1  
FLUSH  
N/C

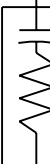
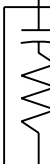
VEC02  
CHEM  
#2  
FLUSH  
N/C

VEC03  
CHEM  
#3  
FLUSH  
N/C

VEC04  
CHEM  
#4  
FLUSH  
N/C

VEC05  
CHEM  
#5  
FLUSH  
N/C

VEFL  
FLUSH  
N/C



SEE  
W6V5WSCX OR  
W6V5WSCP  
LINE 00



6

TB6

LITHO IN U.S.A.

00

01

02

03

04

05

06

07

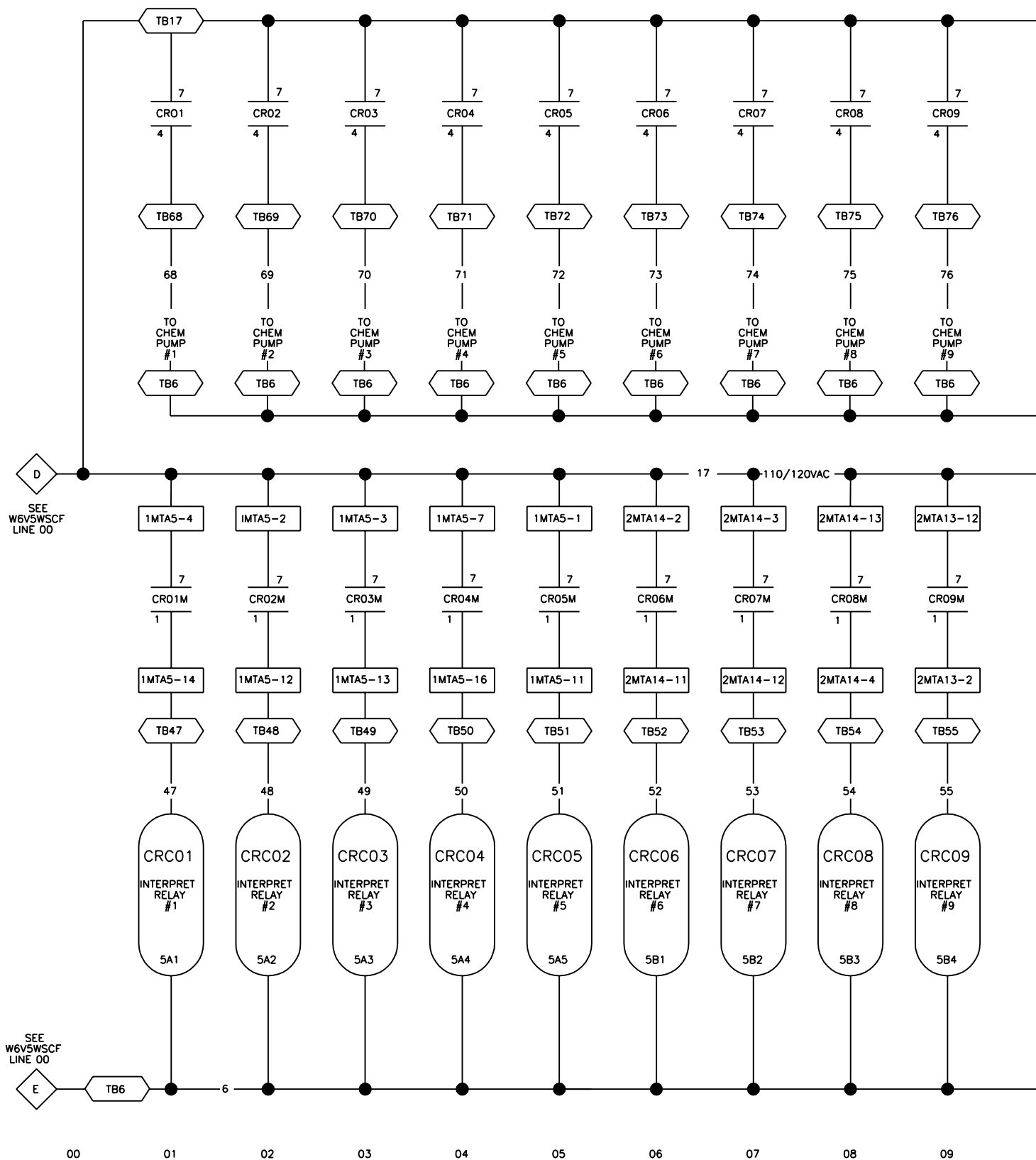
08

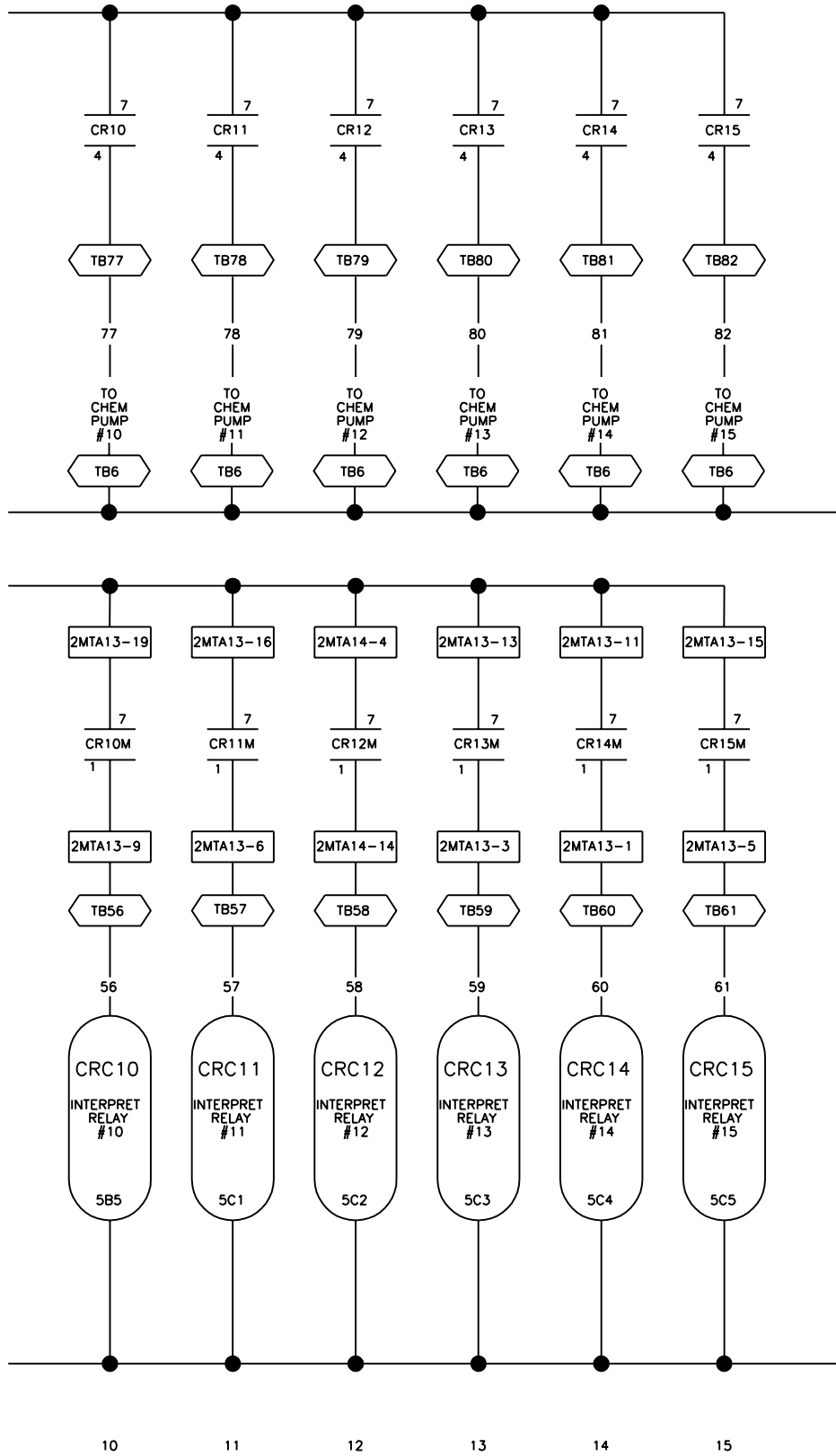
NOTES:

1. 1MTA5, 1MTA6 ARE LOCATED  
ON BIO-1 (8 OUTPUT-16 INPUT)

W6V5WSCF  
MICRO 6 SYSTEMS SERIAL CONTROLS  
MARK V  
SCHEMATIC: FLUSHING SUPPLIES  
220V1P50HZ/120V1P50/60HZ  
PELLERIN MILNOR CORPORATION

IF CUSTOMER IS SUPPLYING  
VOLTAGE FOR CHEMICAL  
PUMPS THEN TB17 & TB6 FEEDING  
THE INTERPRET RELAY CONTACTS  
MUST BE DISCONNECTED FROM  
THE INTERNAL 110/120VAC SUPPLY.





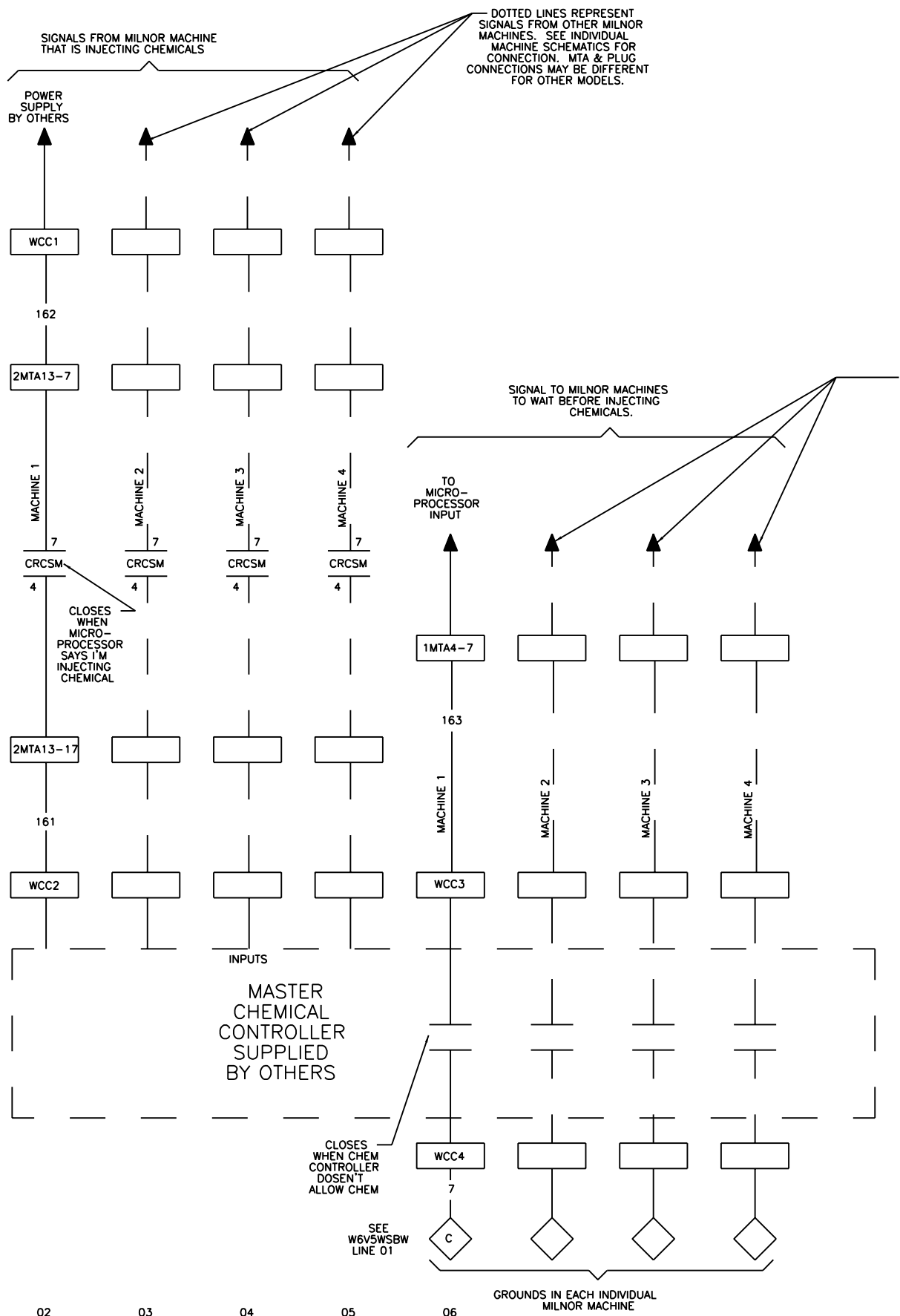
# W6V5WSCP

## MICRO 6 SYSTEMS SERIAL CONTROLS

### SCHEMATIC: LIQUID SUPPLY-INTERPRET RELAYS

110V1P50HZ/120V1P60HZ

PELLERIN MILNOR CORPORATION



00

01

02

03

04

05

06



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

#### NOTES:

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

# W6V5WSCS

## MICRO 6 SYSTEMS

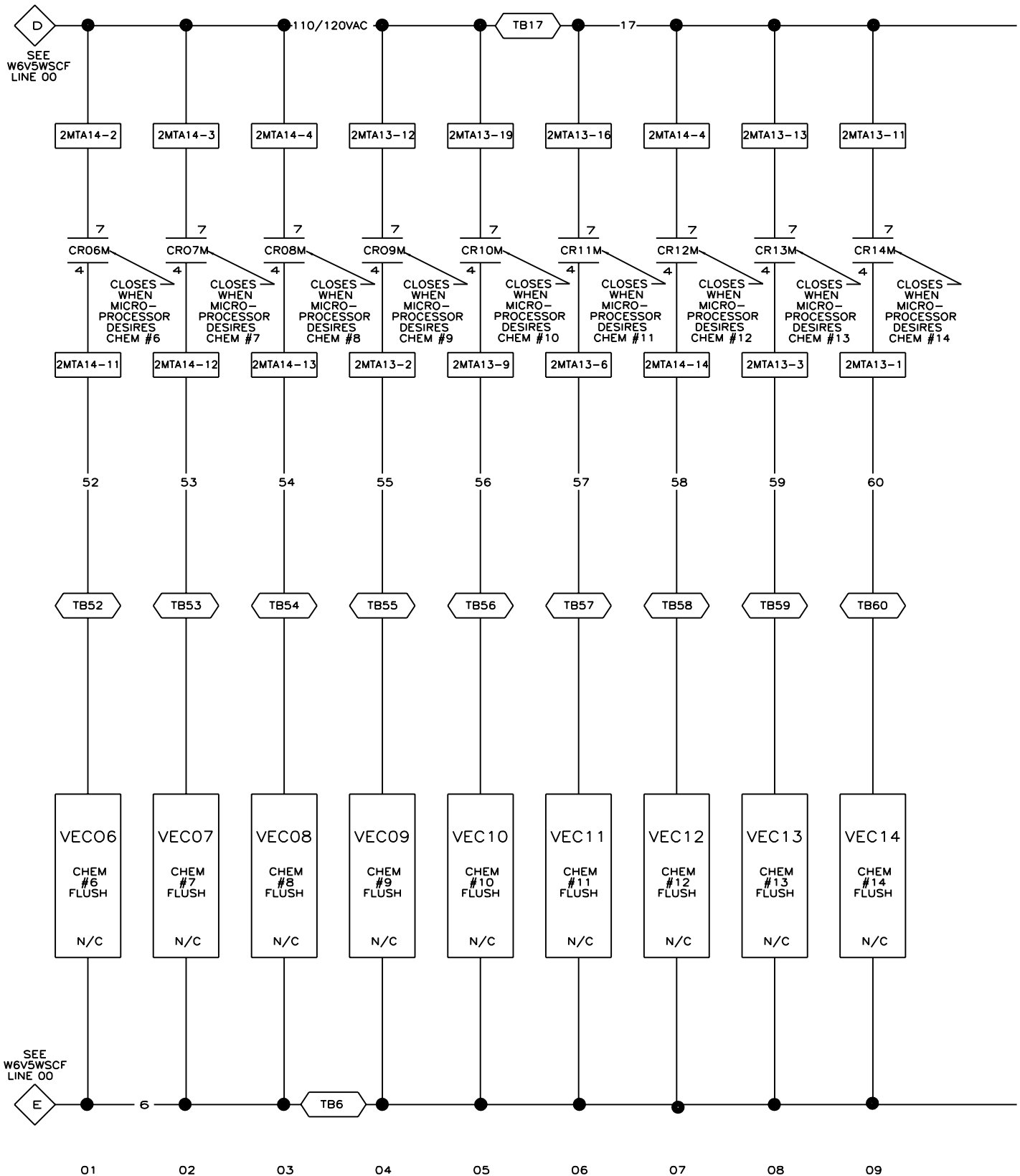
### MARK V

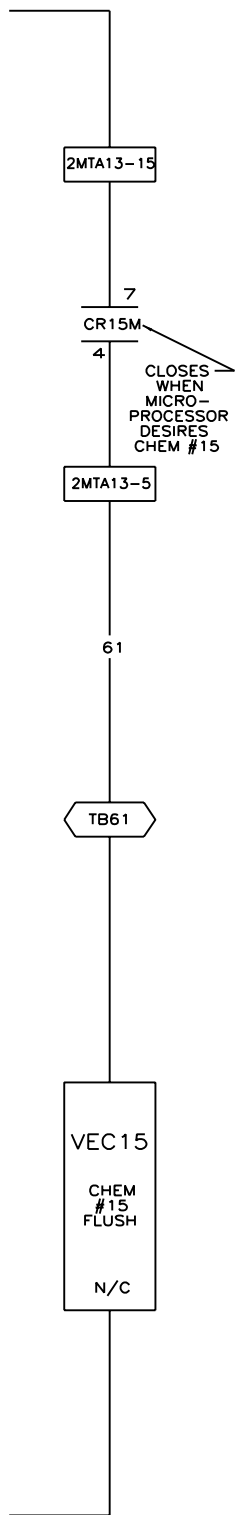
SCHEMATIC: CHEMICAL SAVE (OPTIONAL)

PELLERIN MILNOR CORPORATION

W6V5WSCS  
2001134B

W6V5WSCS  
2001134B





# W6V5WSCX

## MICRO 6 SYSTEMS

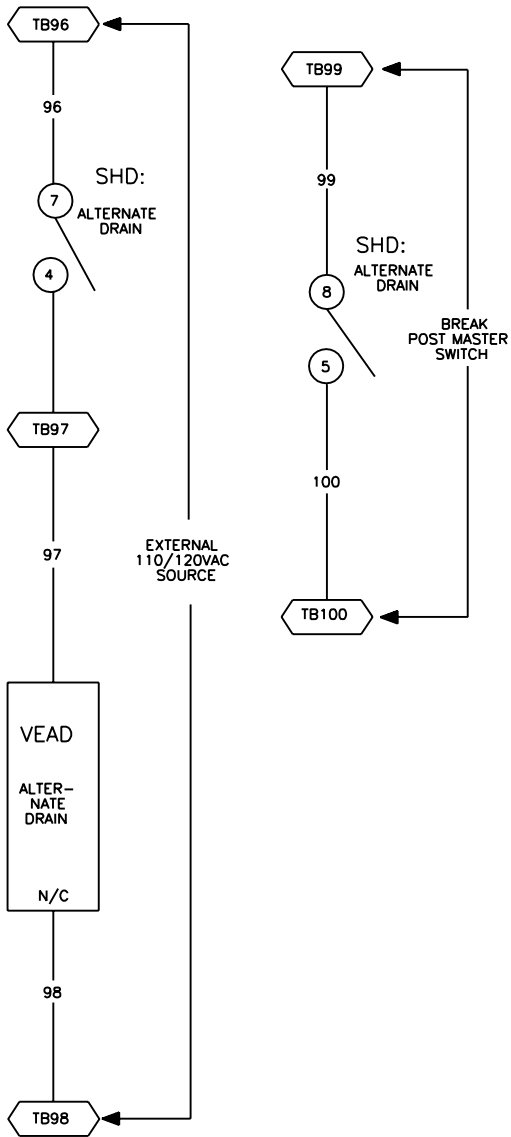
## SERIAL CONTROLS

### MARK V

SCHEMATIC: CENTRAL LIQUID SUPPLY  
FLUSH 6 THRU 15

PELLERIN MILNOR CORPORATION

W6V5WSCX  
2001134B



00

01

02

03

04

05

06

07

# W6V5WSDR

SCHEMATIC: ALTERNATE DRAIN VALVE  
FOR AIR OPERATED DRAINS ONLY

110V1P50HZ/120V1P60HZ

PELLERIN MILNOR CORPORATION

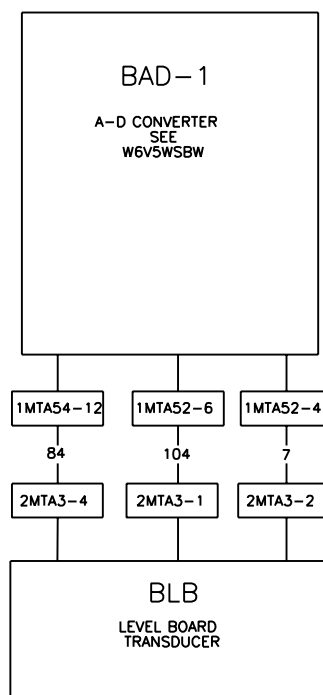


# W6V5WSEA

## MICRO 6 SYSTEMS SERIAL CONTROLS MARK V

### SCHEMATIC: EXTRACT COMMANDS SATISFIED

24V1P50HZ/24V1P60HZ  
PELLERIN MILNOR CORPORATION





# W6V5WSEC

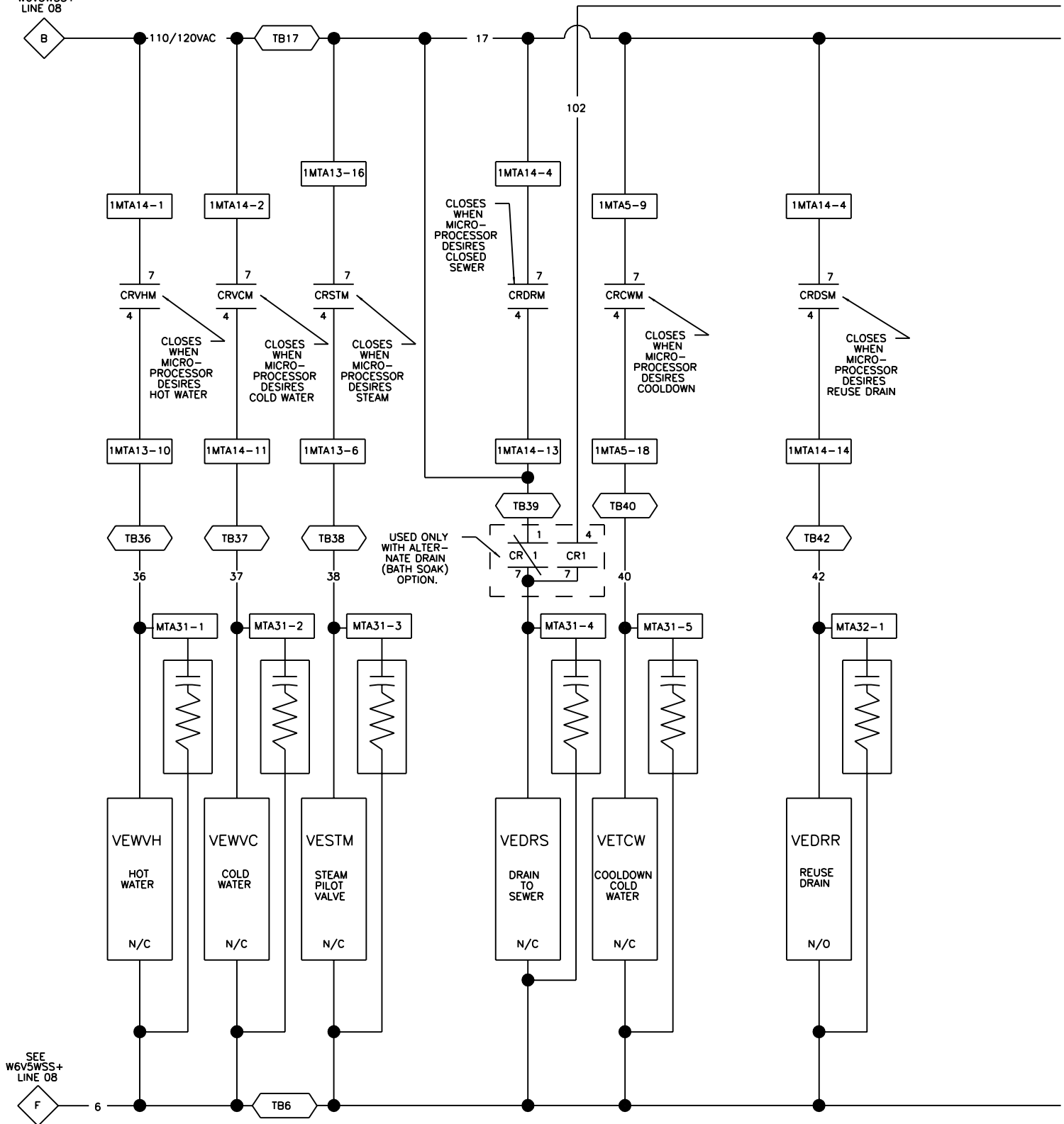
MICRO 6 SYSTEMS  
SERIAL CONTROLS

MARK V

SCHEMATIC: ELECTRONIC RPM/LEVEL

PELLERIN MILNOR CORPORATION

SEE  
W6V5WSS+  
LINE 08



SEE  
W6V5WSS+  
LINE 08

00

01

02

03

04

05

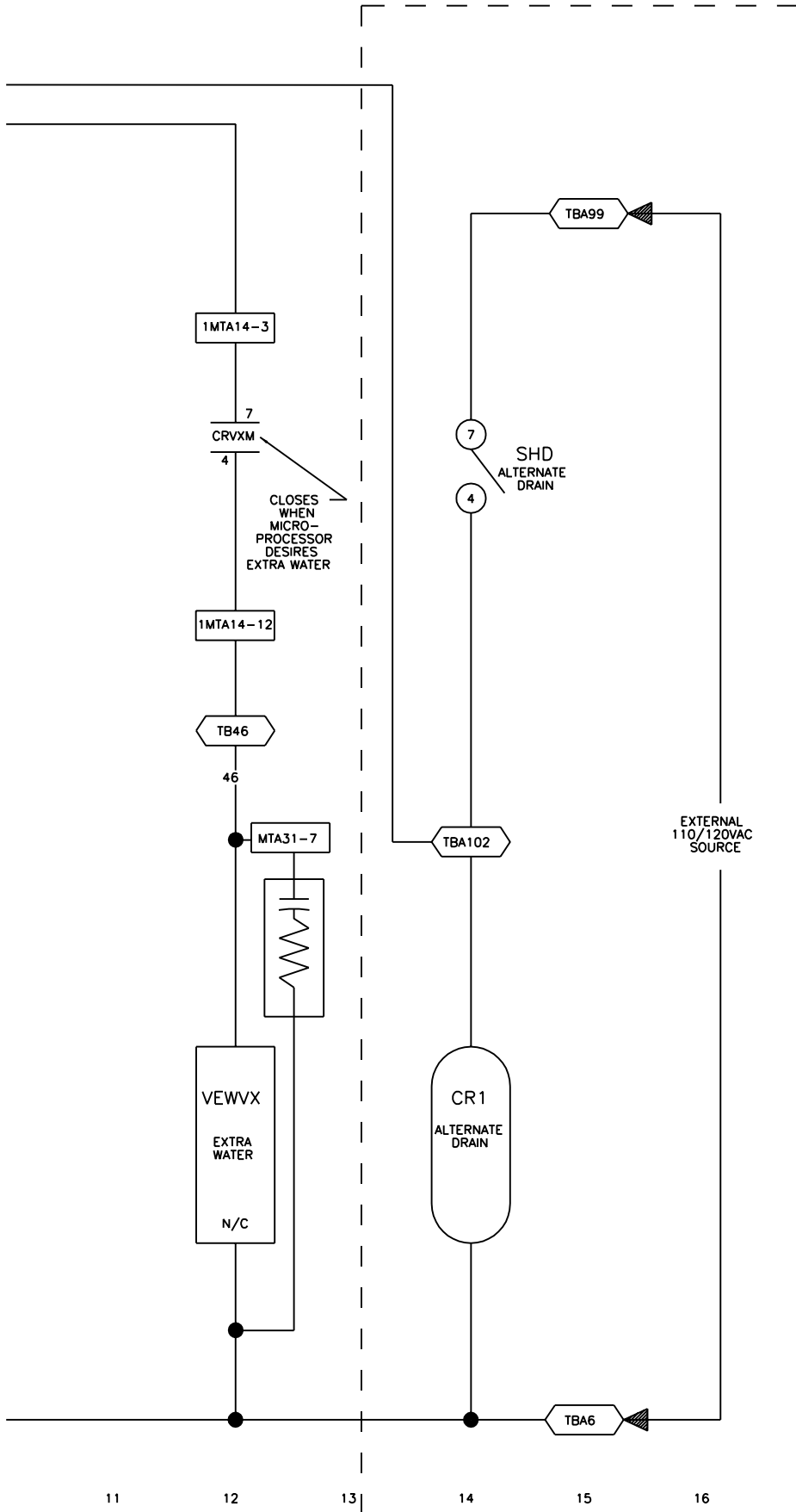
06

07

08

09

10



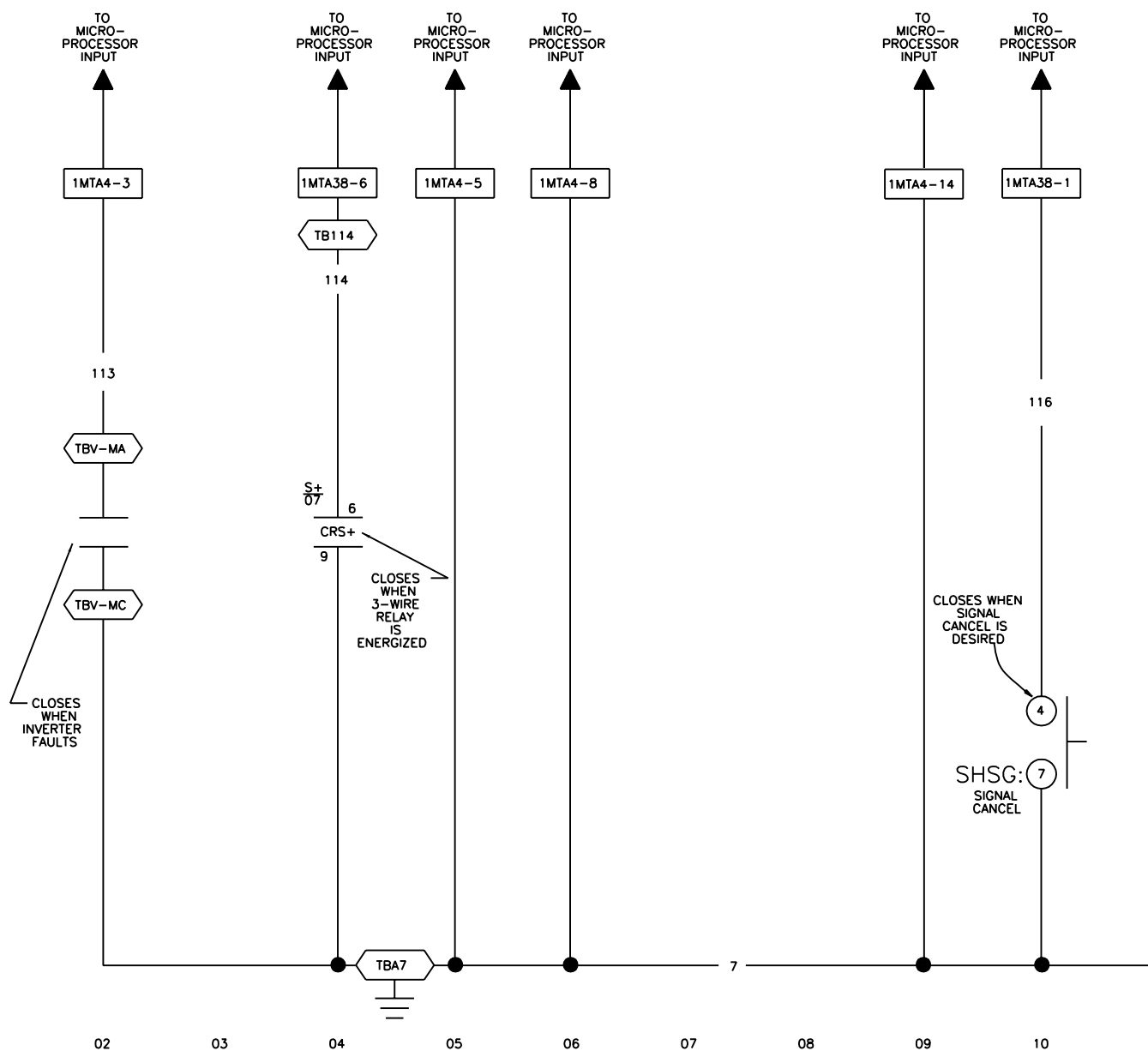
# W6V5WSEV

## MICRO 6 SYSTEMS

### MARK V CONTROLS

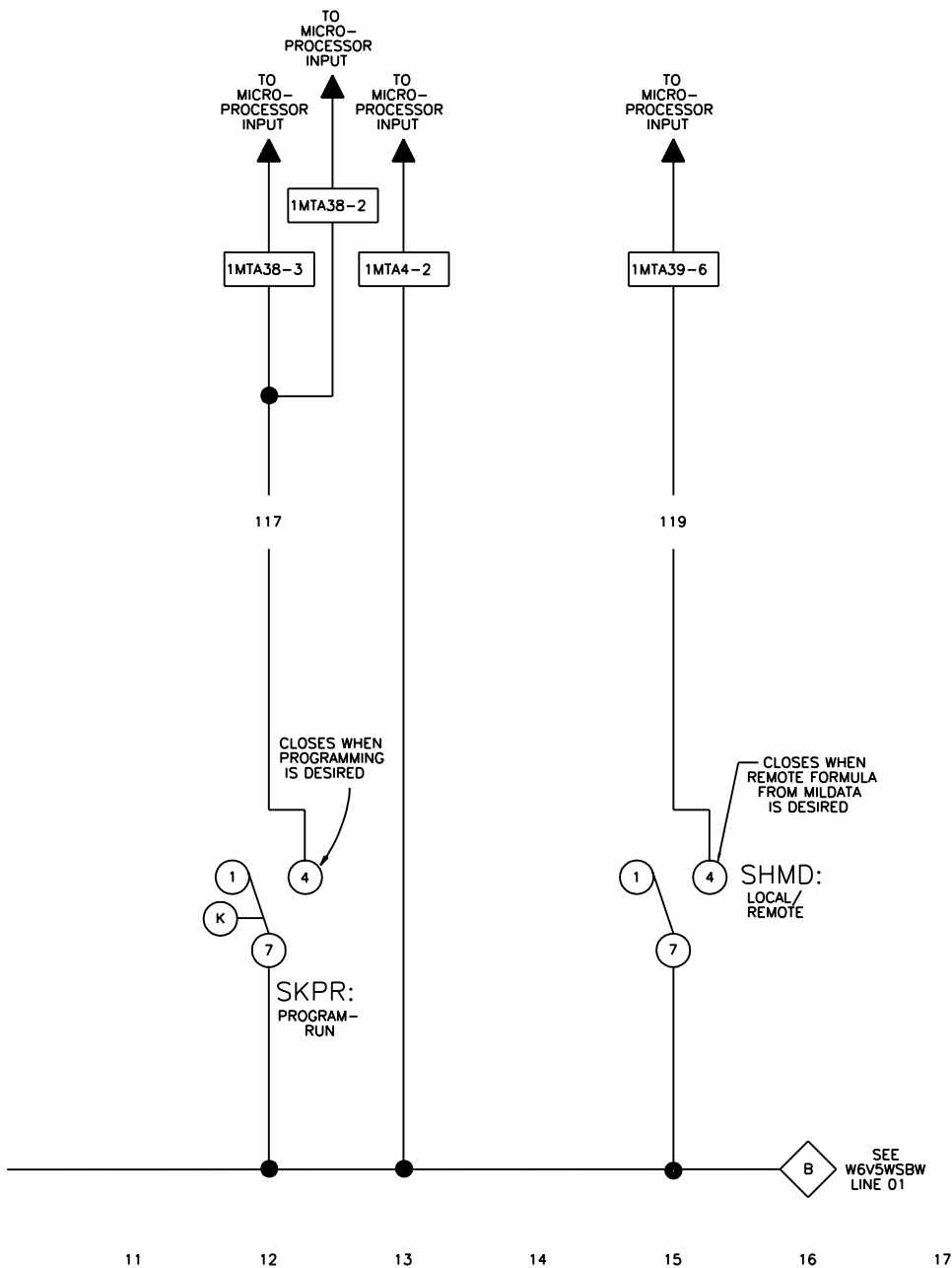
#### SCHEMATIC: ELECTRICAL VALVES

110V1P50HZ/120V1P60HZ  
PELLERIN MILNOR CORPORATION

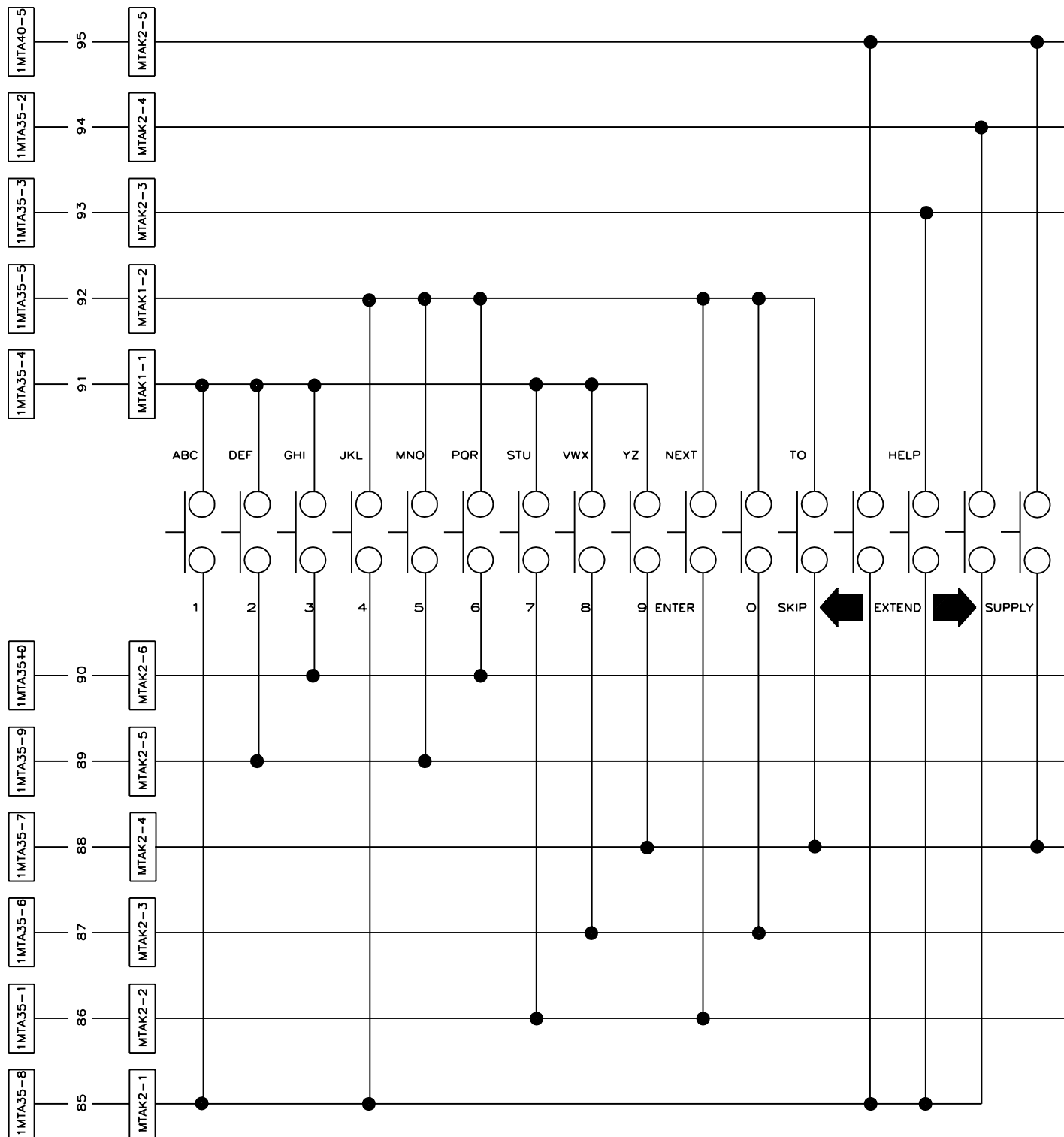


NOTES:

1. 1MTA38 AND 1MTA39 ARE LOCATED ON BPB (PROCESSOR BOARD).
2. MTA4 IS LOCATED ON BIO-1 (8 OUTPUT-16 INPUT BOARD).
3. INVERTER FAULT CONTACTS TBV-MA AND MC ARE FOR GPD315 INVERTER.



W6V5WSI1  
MICRO 6 SYSTEMS  
MARK V CONTROLS  
186 PROCESSOR  
SCHEMATIC: MICROPROCESSOR INPUTS  
PELLERIN MILNOR CORPORATION

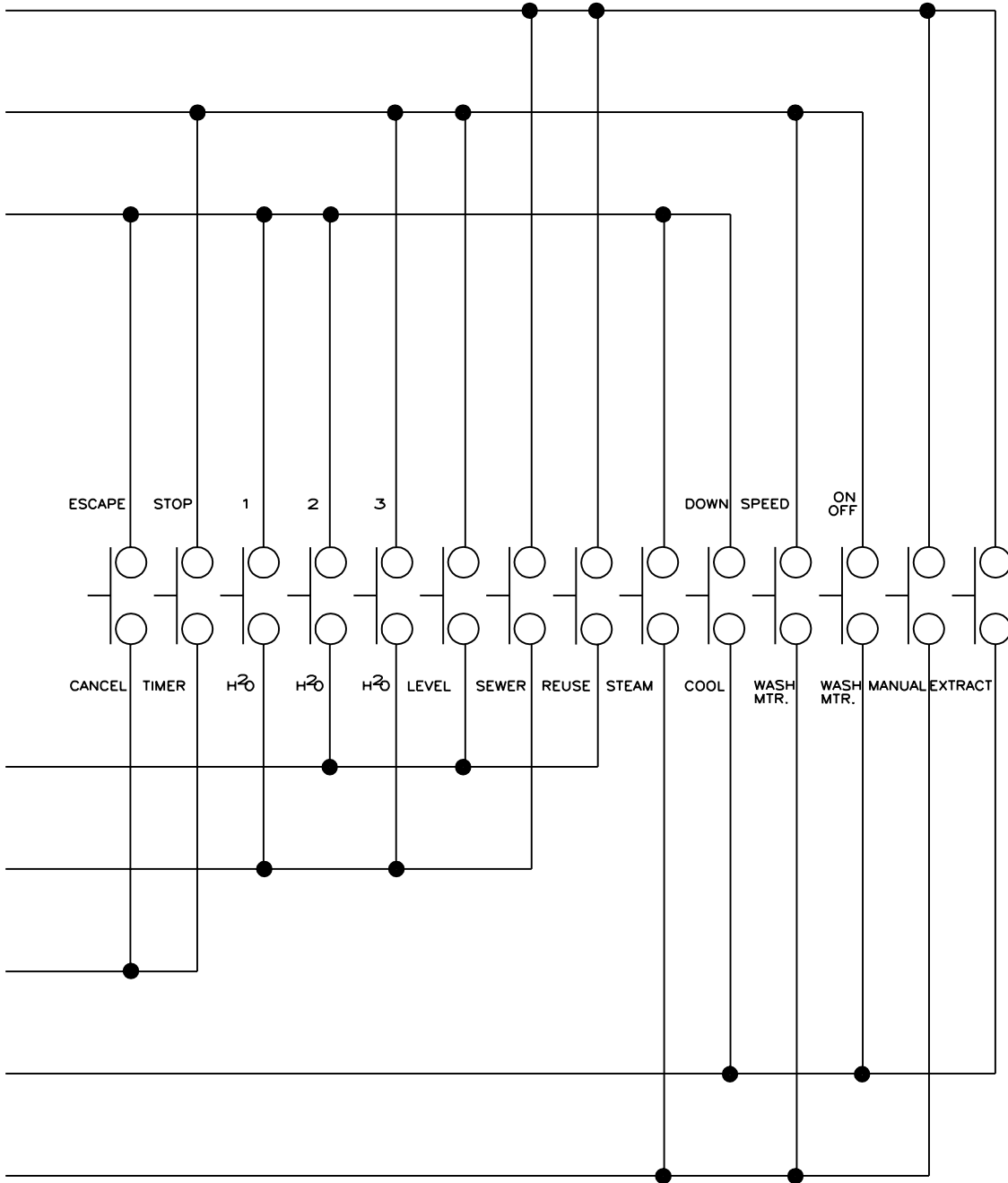


# W6V5WSKP

## MICRO 6 SYSTEMS MARK V

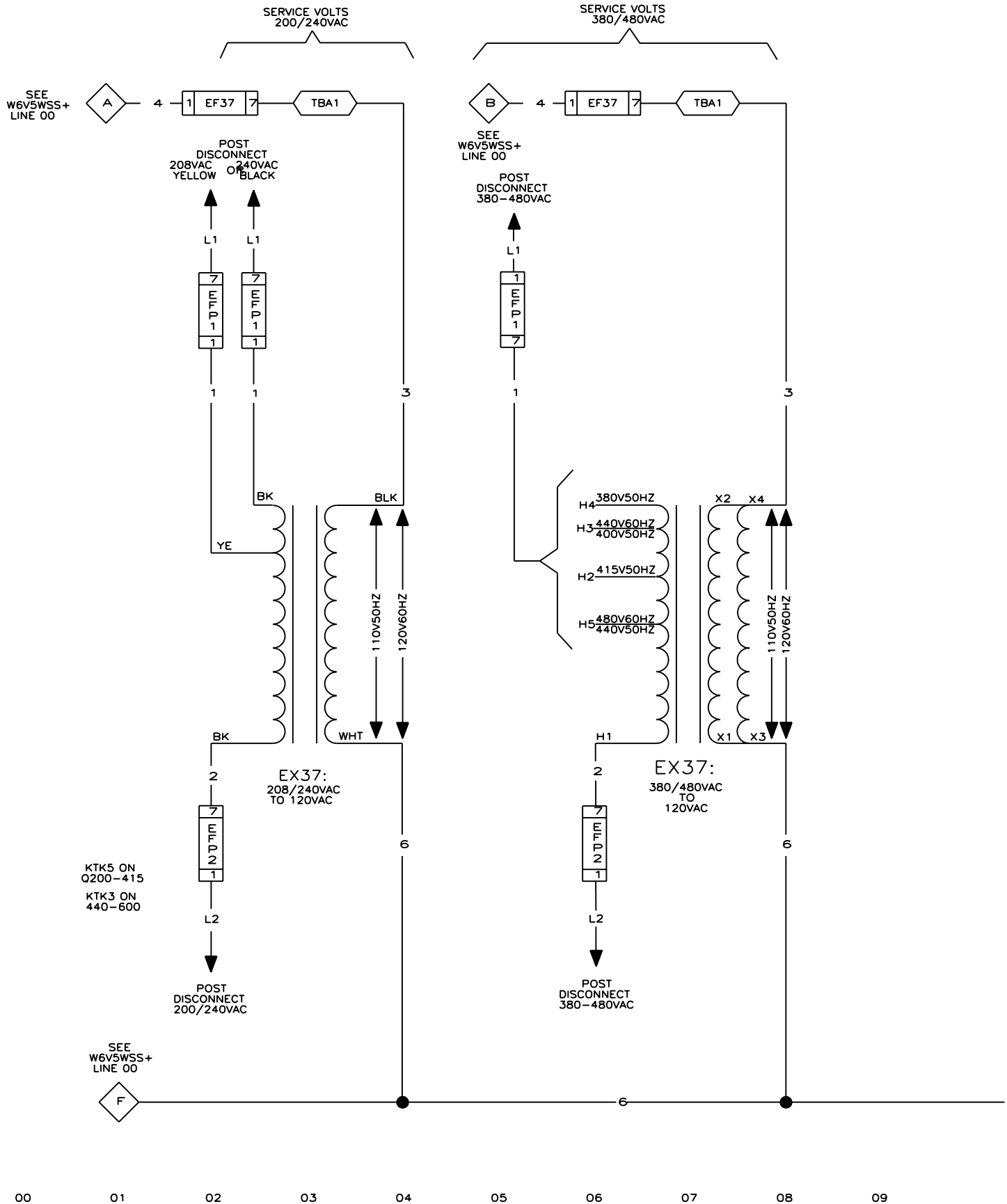
### SCHEMATIC: KEYPAD (SERIAL CONTROLS)

PELLERIN MILNOR CORPORATION

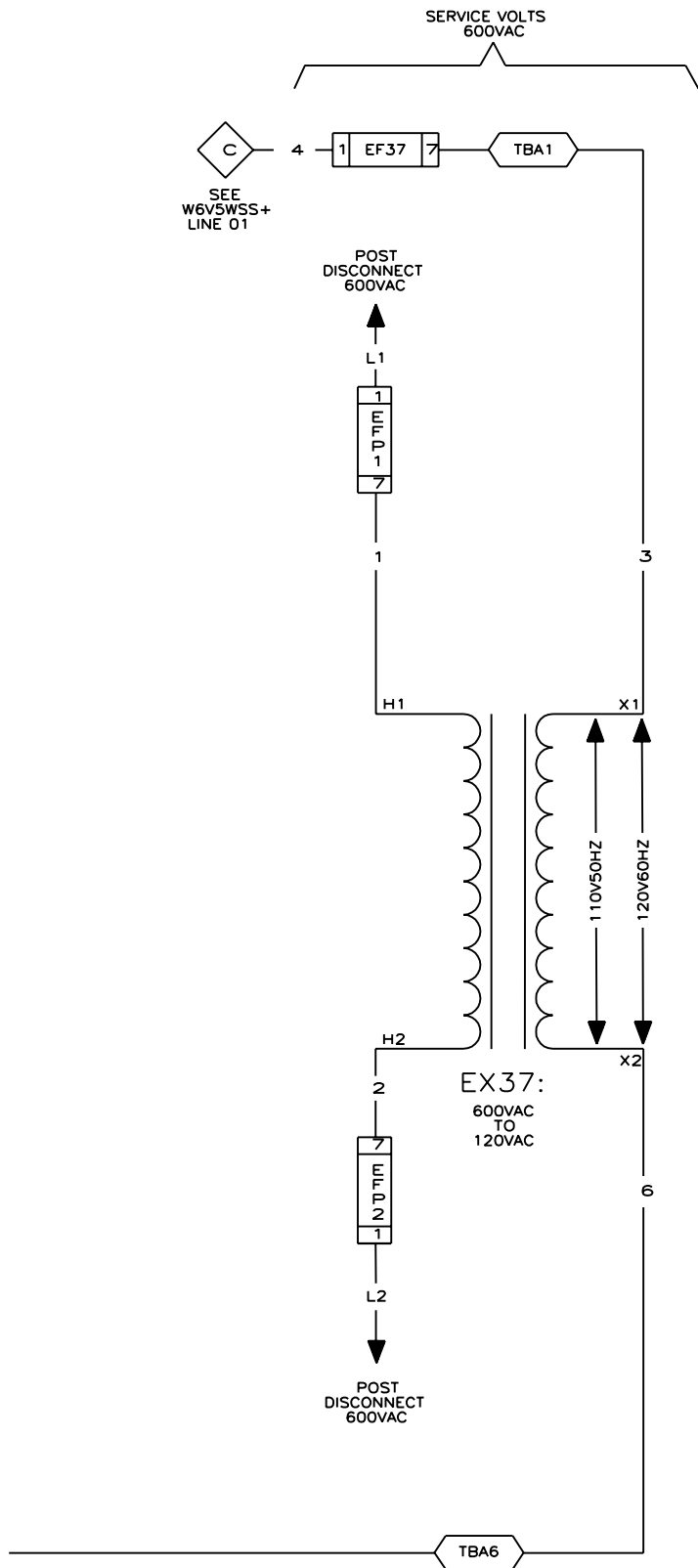


#### NOTES:

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







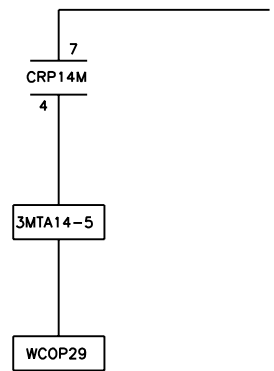
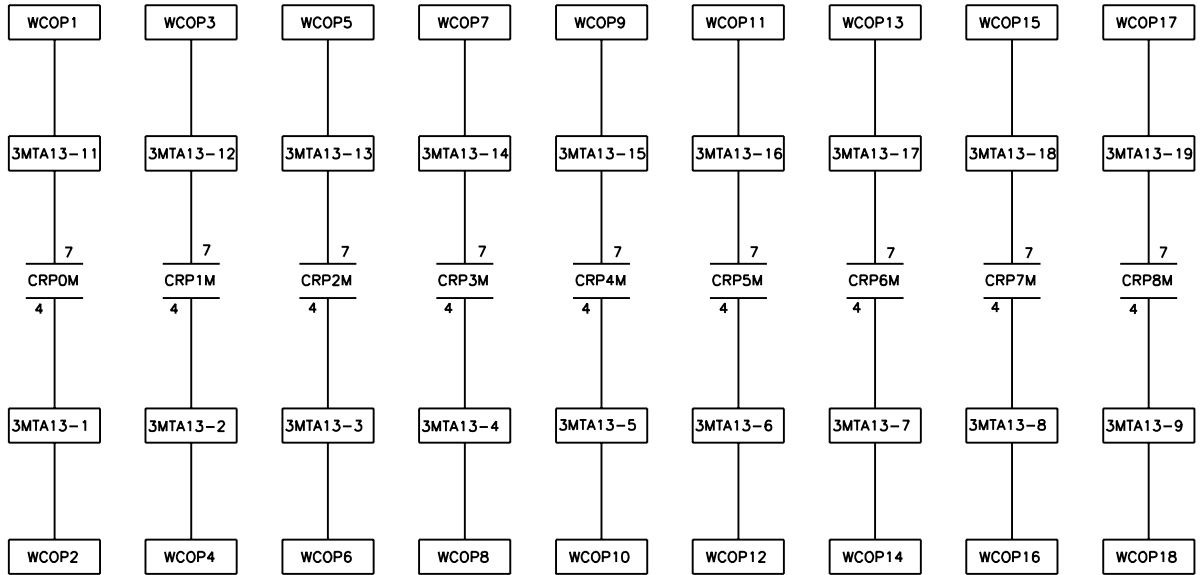
# W6V5WSLV

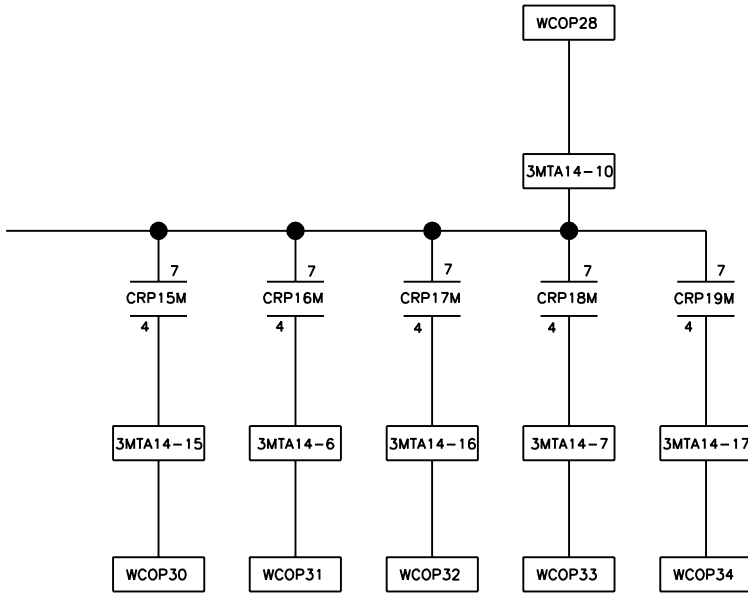
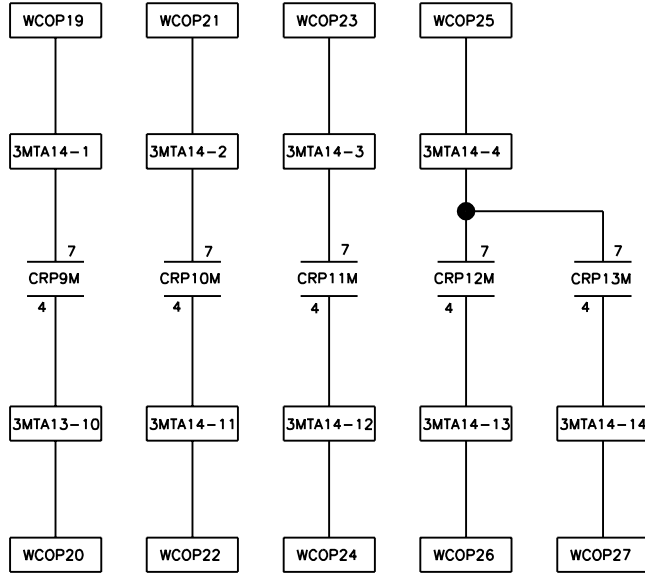
## MICRO 6 SYSTEMS SERIAL CONTROLS

### MARK V

### SCHEMATIC: SOURCE 110V1P50HZ/120V1P60HZ

PELLERIN MILNOR CORPORATION



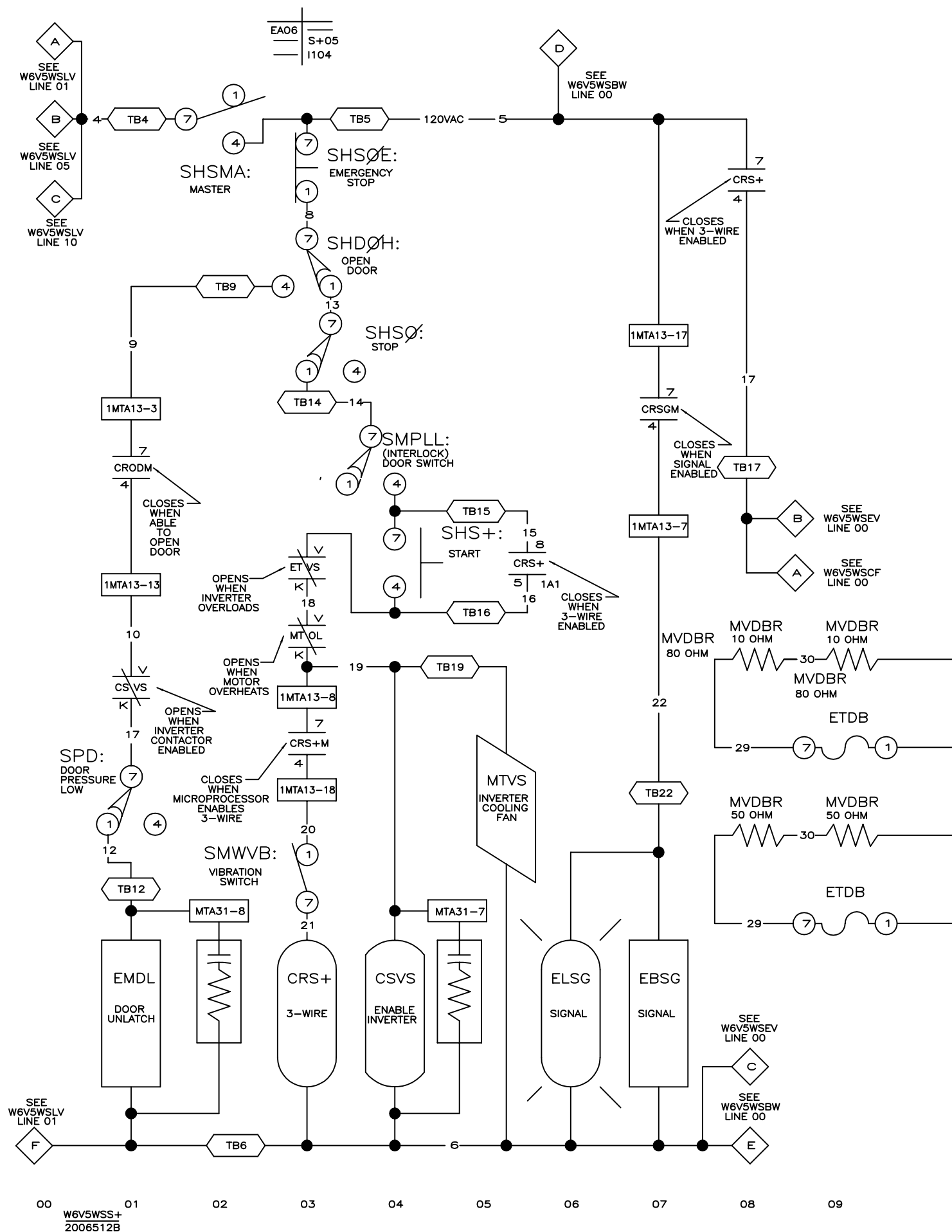


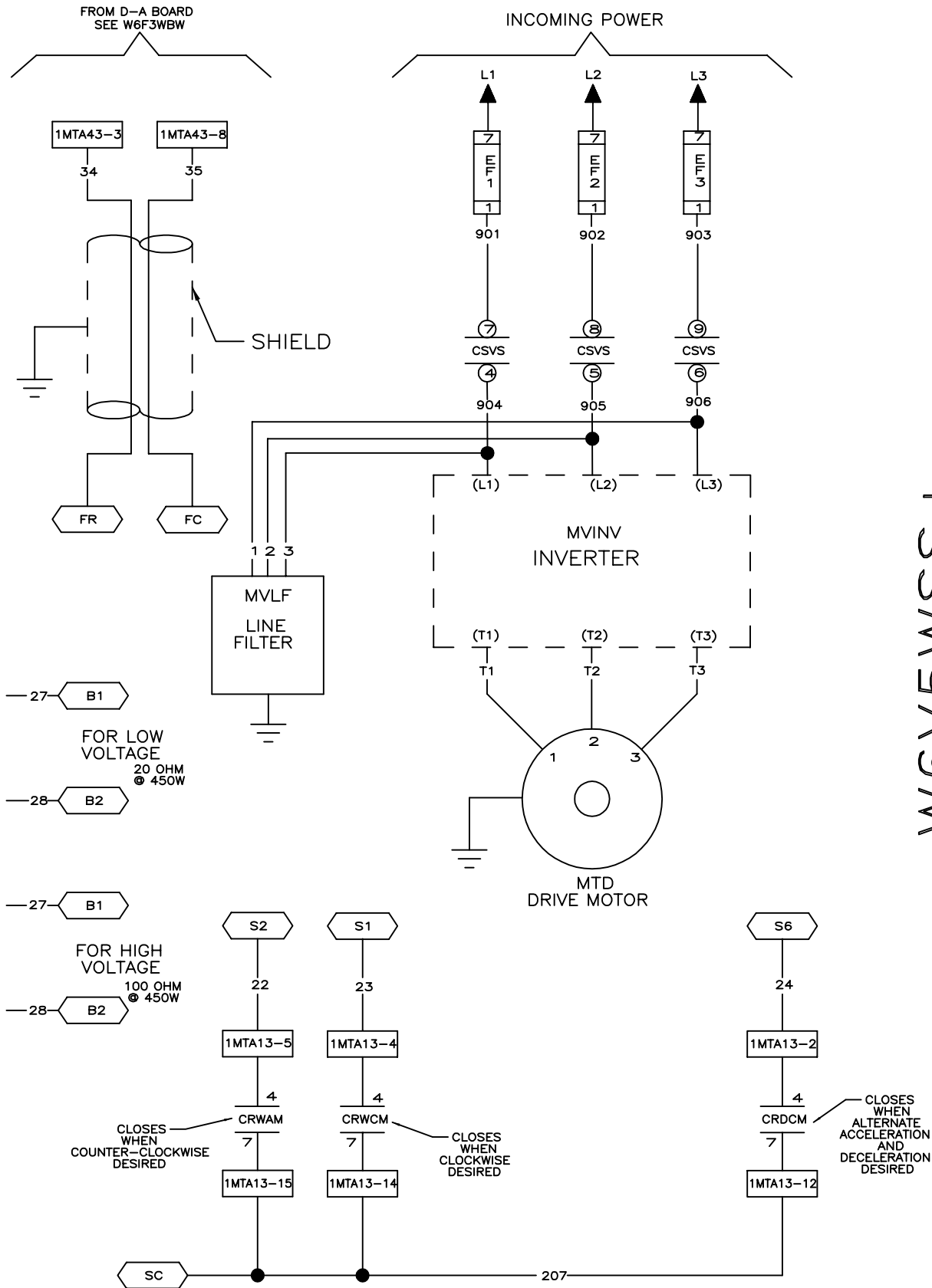
# W6V5WSOP

## MICRO 6 SYSTEMS SERIAL CONTROLS

### SCHEMATIC: 20 OPTIONAL PROGRAMMABLE OUTPUTS

PELLERIN MILNOR CORPORATION





**W6V5WSS+**  
MICRO 6 SYSTEMS  
SCHEMATIC: 3-WIRE CIRCUIT  
FOR 42026 V6W ONLY (GPD315)  
220V1P50HZ/240V1P60HZ  
PELLERIN MILNOR CORPORATION