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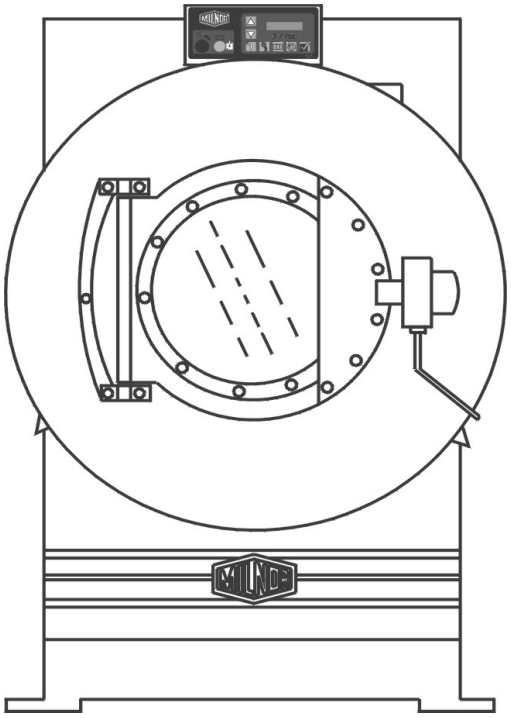
Schematic/Electrical Parts—

36026V5J and V7J
42026V6J
With "H" Controls



Read the Safety Manual

PELLERIN MILNOR CORPORATION POST OFFICE BOX 400, KENNER, LOUISIANA 70063-0400, U.S.A.

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**.

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References to Yellow Troubleshooting Pages

This manual may contain references to "yellow pages." Although the pages containing troubleshooting procedures are no longer printed on yellow paper, troubleshooting instructions, if any, will be contained in the easily located "Troubleshooting" chapter or section. See the table of contents.

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Table of Contents
for ME7V5JG1BE/2003065N
36026V5J and V7J 42026V6J With "H" Controls

COMPONENT PARTS LIST

W7V6JPL/2002493N

COMPONENT NUMBER	FUNCTION OF THIS COMPONENT NUMBER	WHERE TO FIND THIS COMPONENT	MILNOR P/N	DESCRIPTION	LOCATION
	>>COMPONENT LOCATION DETAILS				
001	DETAIL-36 V6J & 42 V7J CONTROL BOX	W7V6JTG1	B2T2001045	36026V7J/42026V6J CONTROL PNL	SEE FUNCTION
002	DETAIL-36026 V5J CONTROL PANEL	W7V6JTG1	B2T2001046	36026V5J CONTROL PANEL	SEE FUNCTION
BA	**>>PRINTED CIRCUIT BOARDS**				
BADV	BOARD-DISPLAY/SWITCH PANEL	W7V6JBW	08BHEPSPBT	BD:EP+ SW PANEL VER2->TEST	SWPL CTL BOX
BAFR	BOARD-V#J START CIRCUIT	W7V6JBW	08BHFRAT	BD:V#J START CIRCUIT->TEST	CONTROL BOX
BAUP	BOARD-PROCESSOR+I/O	W7V6JBW	08BH18EPT	188 PROCESSOR EP+->TESTED	SWPL CTL BOX
CR	**>>RELAY-PILOT OR CONTROL**				
CRDL	RELAY-DOOR IS CLOSED	W7V6JS+	09C024D37	4PDT "KH" 110/120V	CONTROL BOX
CRD	RELAY-OK TO OPEN DOOR	W7V6JS+	09C024D37	4PDT "KH" 110/120V	CONTROL BOX
CRDRR	RELAY-DRAIN TO REUSE	W7V6JEV	09C024D37	4PDT "KH" 110/120V	CONTROL BOX
CS	**>>CONTACTOR-MOTOR STARTER**				
CSVP	CONTACTOR-INVERTER	W7V6JS+	09MC08G337	37A 3P MCS CONT NR 120V5/6	CONTROL BOX
EF	**>>FUSE OR FUSE HOLDER**				
EFP1	FUSE-TRANSFORMER PRIMARY X-BUS	W7V6JLV	MESSAGE VS	SEE EFP1HV OR LV FOR PART NUMBER	CONTROL BOX
EFP1HV	FUSE-XFORMER PRIMARY <415 VOLTS	W7V6JLV	09FF003AWN	FUSE #KTK 3A600V=HPS HOLDER	CONTROL BOX
EFP1LV	FUSE-XFORMER PRIMARY >415 VOLTS	W7V6JLV	09FF005AWN	FUSE #KTK 5A600V=HPS HOLDER	CONTROL BOX
EFP2	FUSE-TRANSFORMER PRIMARY Y-BUS	W7V6JLV	MESSAGE VS	SEE EFP1HV OR LV FOR PART NUMBER	CONTROL BOX
EFP2HV	FUSE-XFORMER PRIMARY <415 VOLTS	W7V6JLV	09FF003AWN	FUSE #KTK 3A600V=HPS HOLDER	CONTROL BOX
EFP2LV	FUSE-XFORMER PRIMARY >415 VOLTS	W7V6JLV	09FF005AWN	FUSE #KTK 5A600V=HPS HOLDER	CONTROL BOX
EM	**>>ELECTROMAGNET AND SOLENOID**				
EMCF	FAN-INVERTER COOLING	W7V6JS+	13AF100A37	FAN 92CFM115V60 NEWARK#90F6921	CONTROL BOX
EMDL	SOLENOID-DOOR UNLOCK	W7V6JS+	09K062B37	SOLENOID (C-7)120/60--110/50	DOOR LTCH BX
EMDR	SOLENOID-DRAIN VALVE	W7V6JEV	96R301A37	1/8" AIRPILOT 3W NC 120V50/60	AIR VALVE BX
ES	**>>POWER SUPPLY-ELECTRONIC**				
ESUPS	POWER SUPPLY-MICROPROCESSOR	W7V6JBW	08PSS3401T	30 WATT POWER SUPPLY TESTED	SW PANEL BOX
ET	**>>THERMAL OVERLOAD DEVICES**				
ETBD	OVERLOAD-RESISTOR	W7V6JVPA	09F024A	0L RELAY 1P SZ1 SQD #9065-CO1	CONTROL BOX
EX	**>>TRANSFORMERS**				
EXHV	TRANSFORMER-INCOMING VOLT.120VAC	W7V6JLV	MESSAGE EW	SEE EX37-1, -2, OR -3 FOR VOLTAGE	CONTROL BOX
EXHV-1	TRANSFORMER-208/240>120VAC	W7V6JLV	09U249AA37	XFMR 200-240V PRI/120VSEC/250VA	CONTROL BOX
EXHV-2	TRANSFORMER-380/480>120VAC	W7V6JLV	09U200AAB	XFMR 380-480V/240-120V-250VA	CONTROL BOX
MT	**>>MOTORS**				

COMPONENT PARTS LIST

W7V6JPL/2002493N

COMPONENT NUMBER	FUNCTION OF THIS COMPONENT NUMBER	WHERE TO FIND THIS COMPONENT	MILNOR P/N	DESCRIPTION	LOCATION
MTWE	MOTOR	W7V6JVPA	MESSAGE SN	SEE SPECIFIC MACHINE+NAMEPLATE	BOTTOM REAR
SH	**>>SWITCH-HAND OPERATED**				
SHD	SWITCH-ALTERNATE DRAIN	W7V6JDR	09N405M211	SWASS M2W 1NO+1NC	ALT DRAIN BX
SHDD	SWITCH-UNLATCH DOOR	W7V6JS+	09N405PB10	SWASS PBBK 1NO	SWITCH PANEL
SK	**>>SWITCH-KEYLOCK**				
SKPR	SWITCH-RUN/PROGRAM (KEY OP)	W7V6JIA	09N127C	KEYSW SPST 7A120VAC SCREW TERM	SWITCH PANEL
SM	**>>SWITCH-MECHANICAL OPERATED**				
SMD	SWITCH-DOOR INTERLOCK	W7V6JS+	09R014A	MINI-SW SPDT STAKON #V15G1C26K	DOOR LTCH BX
SMVB	SWITCH-VIBRATION	W7V6JIA	09R020	SWITCH NC VIBR#WZ-2RW84429-P52	CONTROL BOX
VE	**>>VALVE-ELECTRIC OPERATED**				
VEAD	VALVE-ALTERNATE DRAIN	W7V6JDR	96TAU3AA37	1/8"UNIV 3WAY 120V50/60	ALT DRAIN BX
VEC1	VALVE-CHEMICAL #1 FLUSH	W7V6JCF	96P013G37	3/4" 2WAYPLASTCVAL 120V60C	SUPPLY INJEC
VEC2	VALVE-CHEMICAL #2 FLUSH	W7V6JCF	96P013G37	3/4" 2WAYPLASTCVAL 120V60C	SUPPLY INJEC
VEC3	VALVE-CHEMICAL #3 FLUSH	W7V6JCF	96P013G37	3/4" 2WAYPLASTCVAL 120V60C	SUPPLY INJEC
VEC4	VALVE-CHEMICAL #4 FLUSH	W7V6JCF	96P013G37	3/4" 2WAYPLASTCVAL 120V60C	SUPPLY INJEC
VEC5	VALVE-CHEMICAL #5 FLUSH	W7V6JCF	96P013G37	3/4" 2WAYPLASTCVAL 120V60C	SUPPLY INJEC
VEDR	VALVE-OPTIONAL ELECTRIC DRAIN	W7V6JEV	96D350A37	DRINVAL 3"N/O MTRDR120V 50/60C	BELOW SHELL
VEDRR	VALVE-DRAIN TO REUSE	W7V6JEV	96D350B37	DRAINVAL 3"N/C MTRDRV120V 50/6	BELOW SHELL
VEFL	VALVE-CHEM FLUSH	W7V6JCF	96P013G37	3/4" 2WAYPLASTCVAL 120V60C	SUPPLY INJEC
VESTM	VALVE-STEAM	W7V6JEV	96R301A37	1/8" PILOT 3W-NC 110/50 120/60	AIR VALVE BX
VEWC	VALVE-COLD WATER	W7V6JEV	96P056A37	3/4"NC 110V 50/60 W/LEADSBURK	SIDE OF MACH
VEWH	VALVE-HOT WATER	W7V6JEV	96P056A37	3/4"NC 110V 50/60 W/LEADSBURK	SIDE OF MACH
VEWVX	VALVE-EXTRA WATER	W7V6JEV	96P056A37	3/4"NC 110V 50/60 W/LEADSBURK	SIDE OF MACH

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.

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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

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HOW TO USE MILNOR® ELECTRICAL SCHEMATICS

Milnor® electrical schematic manuals contain a ***table of contents/component list*, a set of s*chematic 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® document MSTS0202BE HOW TO USE THE SIGNAL ROUTING TABLE provides more information.

Component Prefix Classifications and Descriptions

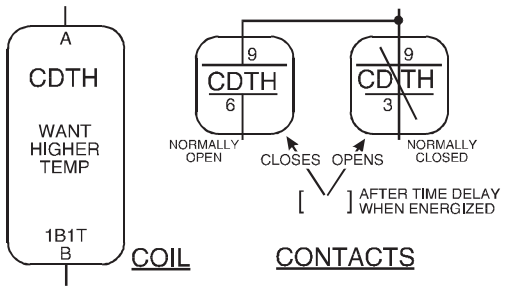
The ***component item numbers*** consist of up to six characters and appear as part of a component's symbol on the schematic. The first two characters indicate the general class of component and the remaining characters are a mnemonic for the function. For example, CD is the code for all time delay relays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

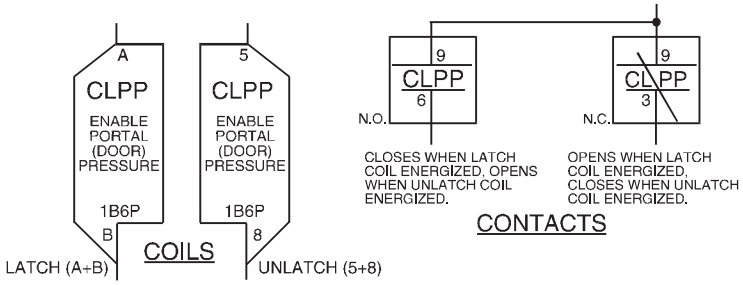
The following are descriptions of the electrical components used in Milnor® machines. Descriptions are in alphabetical order of the component class code (two character prefix).

BA=Printed Circuit Board Insulating substrate on which a thin pattern of copper conductors has been formed to connect discreet 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).

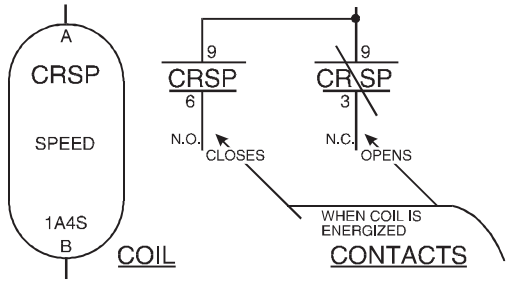
CD=Control, Time Delay Relay A relay whose contacts switch only after a fixed or adjustable delay, once voltage has been applied to its coil. The contacts switch back to normal (de-energized state) immediately when the voltage is removed.

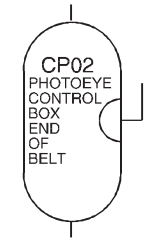




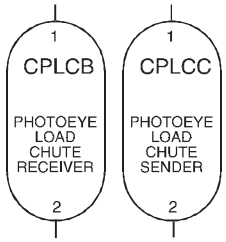
CL=Control, Latch Relay A relay which latches in an energized or set position when operated by one coil (the *latch/set coil*). The relay stays latched, even though coil voltage is removed. The relay releases or unlatches when voltage is applied to a second coil, (the *unlatch/reset coil*).

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.





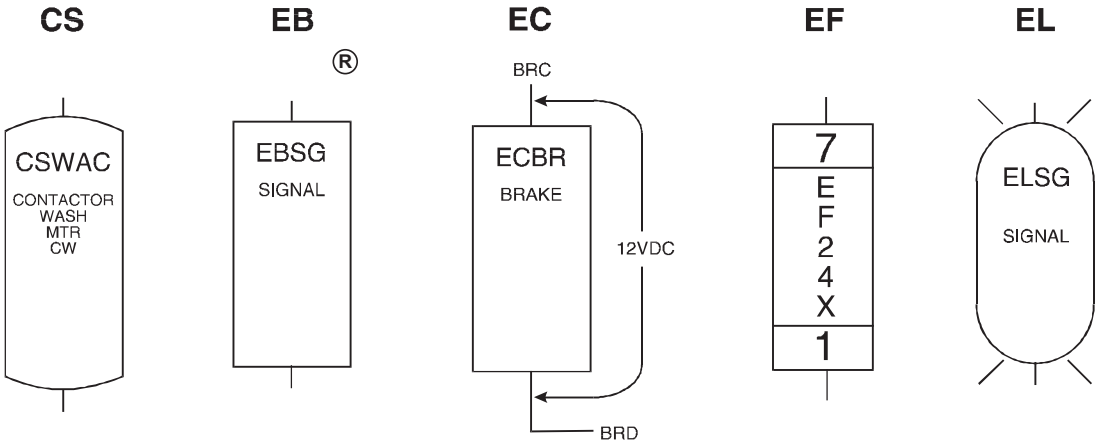
Example of One Assembly



Example of Two Separate Assemblies

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).



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).

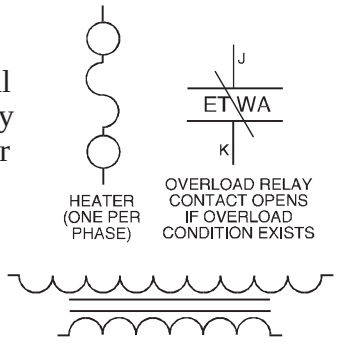
EF=Electric Fuse A fuse is an over-current safety device with a circuit opening fusible member which is heated and severed by the passage of over-current through it.

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 (altemating 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.

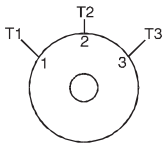
ET=Thermal Overload A safety device designed to protect a motor. A thermal overload consists of an overload block, heaters, and an auxiliary contact. The auxiliary contact is normally installed in a safety (three-wire) circuit that stops power to the motor contactor coil when a motor overload occurs.



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.



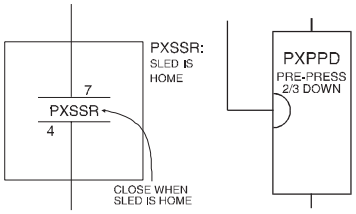
MR=Motors Electro-mechanical device that converts electrical energy into mechanical energy.

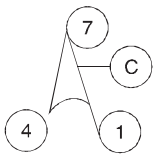
MV=Motor (Variable Speed) Inverter To vary the speed of an AC motor, the volts to frequency ratio must be kept constant. The motor will overheat if this ratio is not maintained.

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.

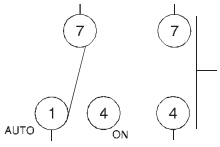
PX=Proximity Switch A device which reacts to the proximity of an target without physical contact or connection. The actuator or target causes a change in the inductance of the proximity switch which causes the switch to operate. Proximity switches can be two-wire (AC) or three-wire (DC) devices.

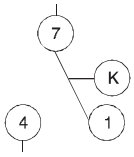




SC=Switch, Cam Operated A switch in which the electrical contacts are opened and/or closed by the mechanical action of a cam(s). Applications include 35-50 pound timer operated machines, autospot, timer reversing motor assembly, and some balancing systems.

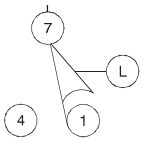
SH=Switch, Hand Operated A switch that is manually operated (e.g., *Start button, Master switch,* etc.).



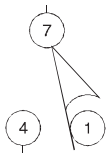


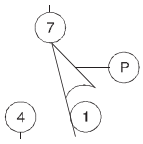
SK=Switch, Key Lock A switch that requires a key to operate . This prevents unauthorized personnel from gaining access to certain functions (e.g., the *Program Menu*).

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



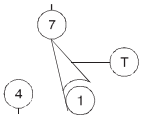
SM=Switch, Mechanically Operated A switch that is mechanically operated by a part of or the motion of the machine (e.g., door closed switch, tilt limit switches, etc.)





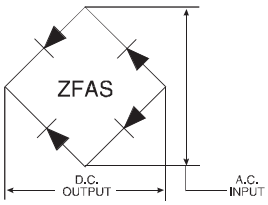
SP=Switch, Pressure Operated A switch consisting of a diaphragm that pushes against a switch actuator.

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.

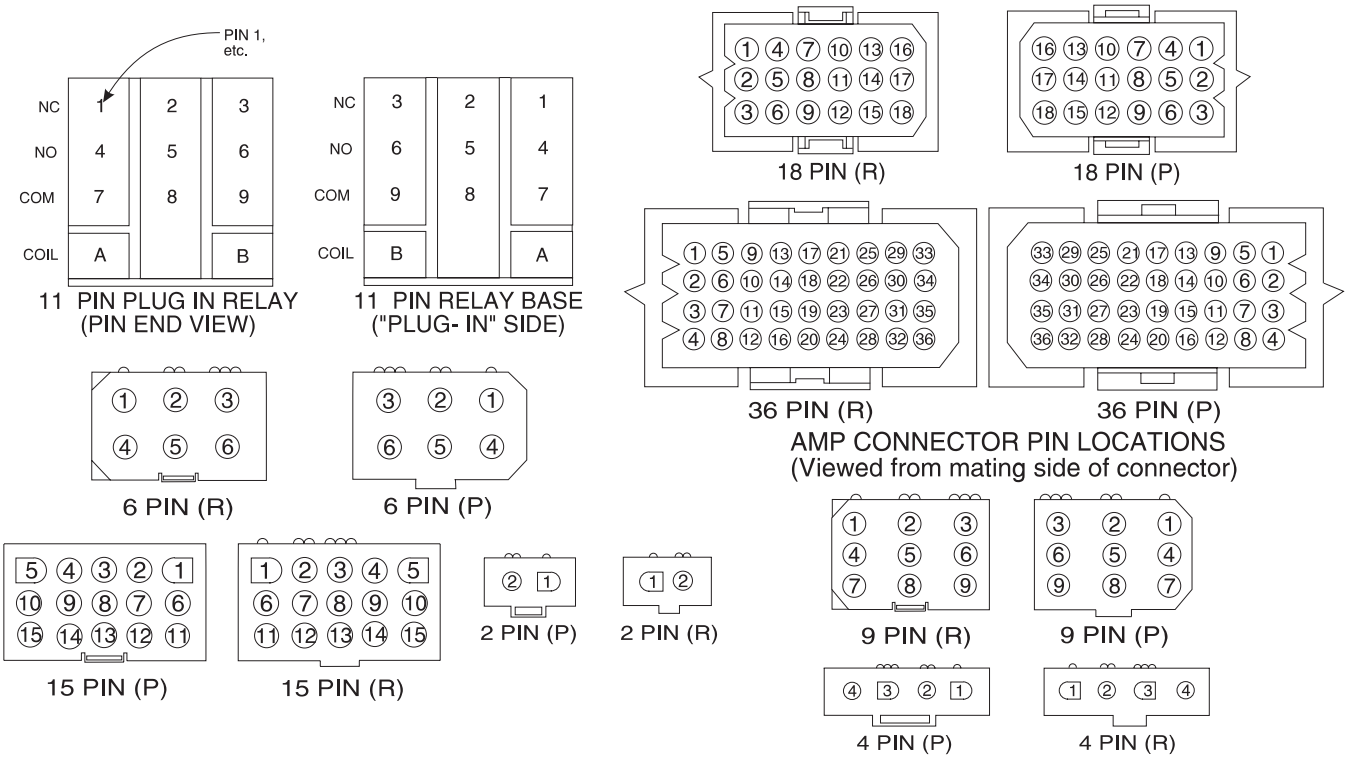


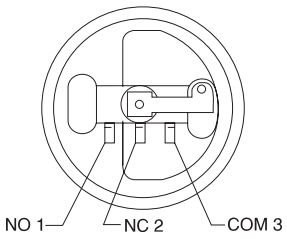
ZF=Rectifier A solid state device that converts alternating current to direct current.

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.

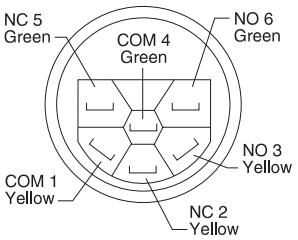
Component Terminal Numbering

NOTE: Numbers shown usually appear on the component.

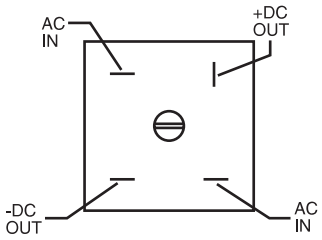




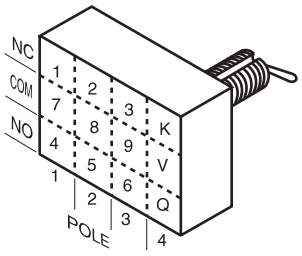
PRESSURE SWITCH



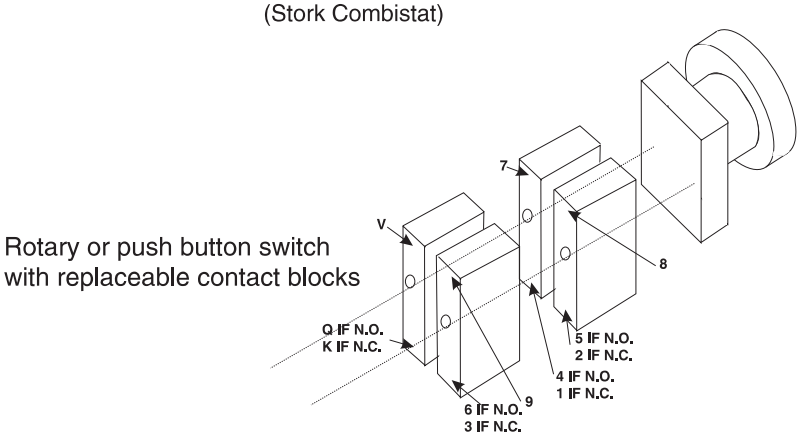
TEMPERATURE CONTROLLER (Stork Combistat)



BRIDGE RECTIFIER



TOGGLE SWITCH



Features of Milnor® Electrical Schematics

Document W6DRYGS+A shown on the next page, is part of an actual schematic for the Milnor 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 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.

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

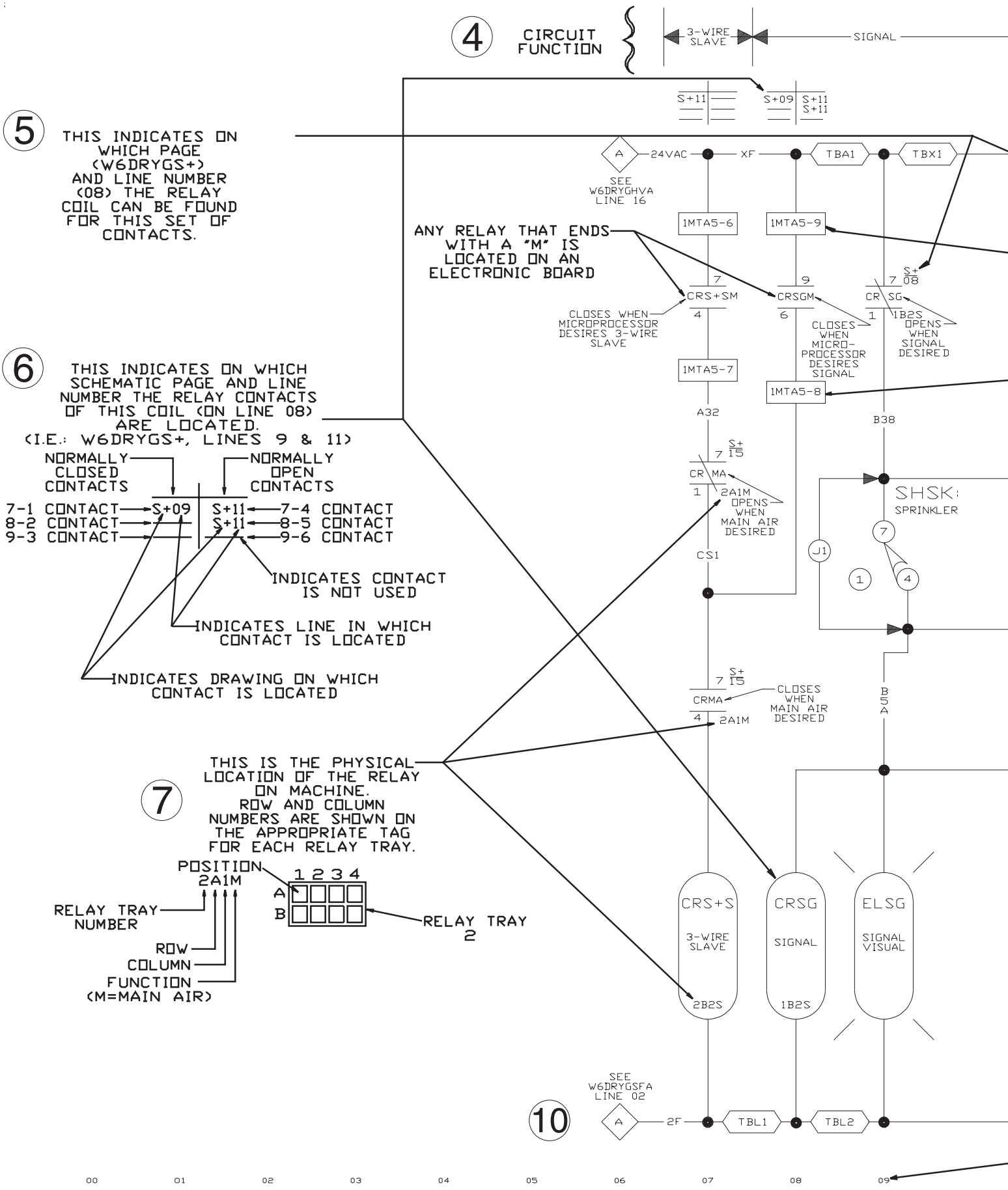
MTA41-MTA43 = digital to analog (D/A) boards

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
3-WIRE SLAVE
SIGNAL
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
NORMALLY OPEN CONTACTS
7-1 CONTACT
8-2 CONTACT
9-3 CONTACT
S+09
S+11
S+11
7-4 CONTACT
8-5 CONTACT
9-6 CONTACT
INDICATES CONTACT IS NOT USED
INDICATES LINE IN WHICH CONTACT IS LOCATED
INDICATES DRAWING ON WHICH CONTACT IS LOCATED
7
THIS IS THE PHYSICAL LOCATION OF THE RELAY ON MACHINE. ROW AND COLUMN NUMBERS ARE SHOWN ON THE APPROPRIATE TAG FOR EACH RELAY TRAY.
POSITION 2A1M
1 2 3 4
A
B
RELAY TRAY NUMBER
ROW
COLUMN
FUNCTION (M=MAIN AIR)
RELAY TRAY 2
S+11
S+09
S+11
S+11
A
24VAC
XF
TBA1
TBX1
SEE W6DRYGHVA LINE 16
ANY RELAY THAT ENDS WITH A "M" IS LOCATED ON AN ELECTRONIC BOARD
1MTA5-6
1MTA5-9
7
CRS+SM
4
9
CRSGM
6
7
S+08
CR SG
1
1B2S
CLOSES WHEN MICROPROCESSOR DESIRES 3-WIRE SLAVE
CLOSES WHEN MICRO-PROCESSOR DESIRES SIGNAL
OPENS WHEN SIGNAL DESIRED
1MTA5-7
1MTA5-8
A32
B38
7
S+15
CR MA
1
2A1M
OPENS WHEN MAIN AIR DESIRED
CS1
SHSK
SPRINKLER
J1
7
1
4
7
S+15
CRMA
4
2A1M
CLOSES WHEN MAIN AIR DESIRED
B5A
CRS+S
3-WIRE SLAVE
2B2S
CRSG
SIGNAL
1B2S
ELSG
SIGNAL VISUAL
SEE W6DRYGSFA LINE 02
10
A
2F
TBL1
TBL2
00
01
02
03
04
05
06
07
08
09

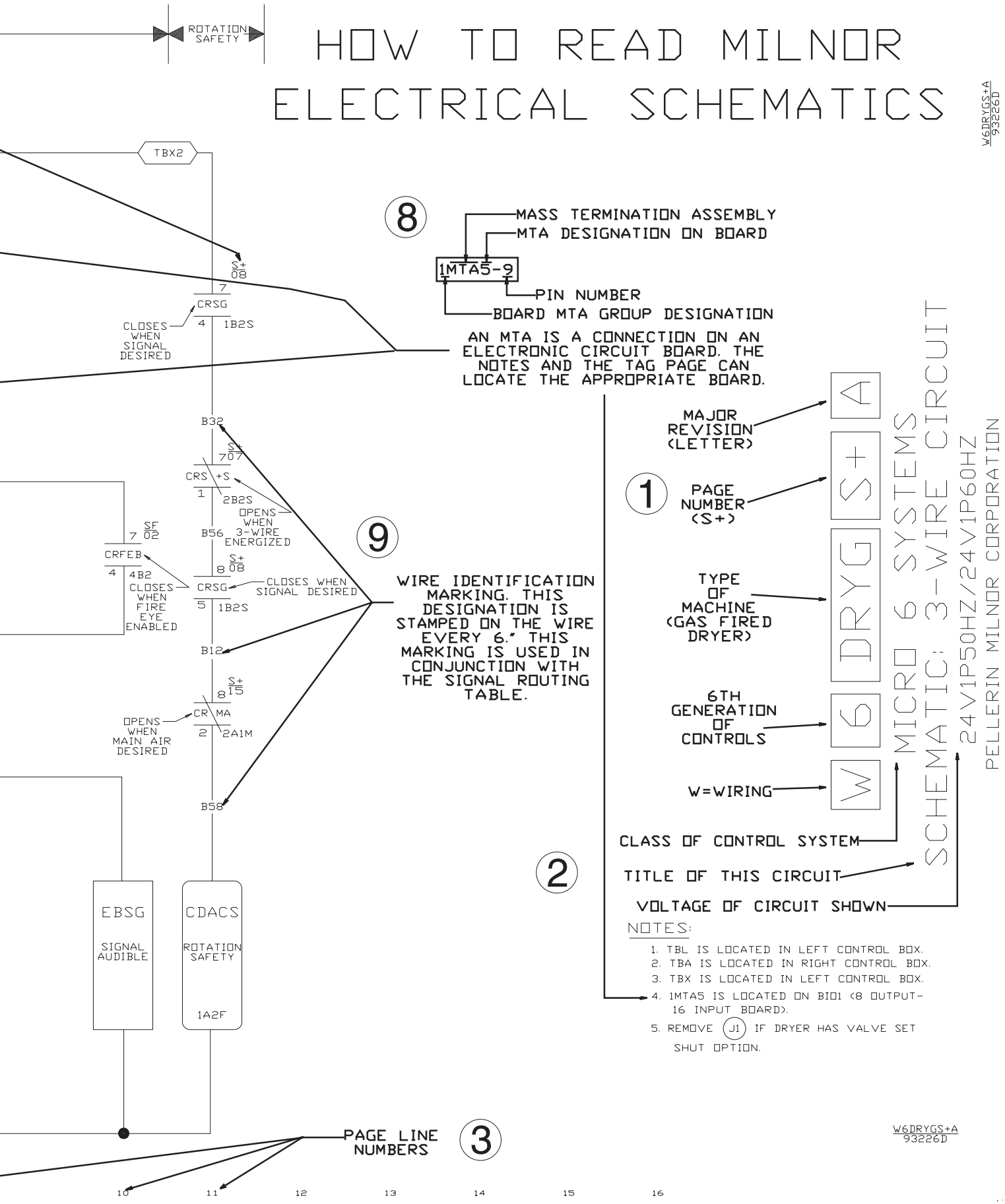
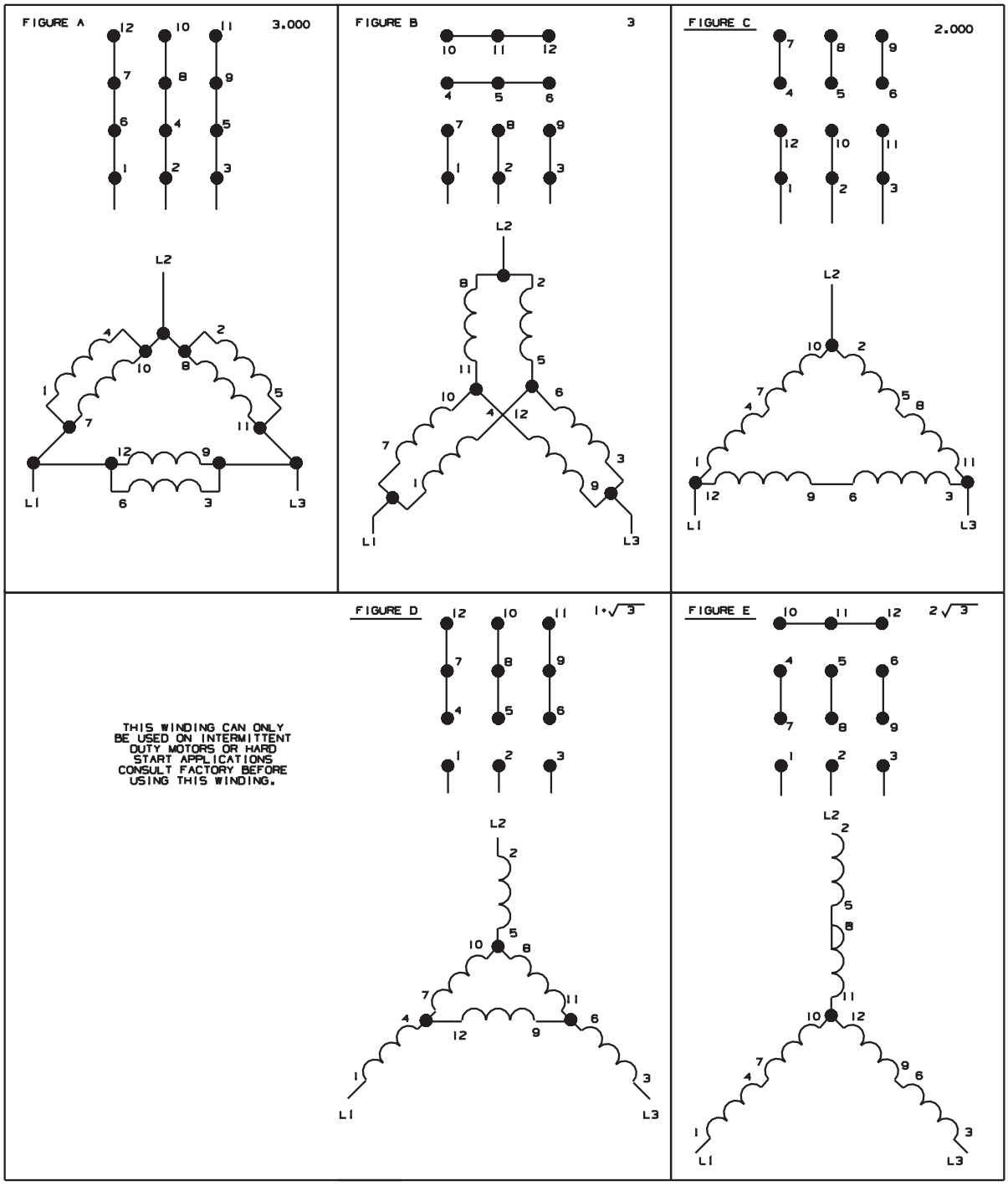

ROTATION SAFETY
HOW TO READ MILNOR ELECTRICAL SCHEMATICS
W6DRYGS+A 93226D
TBX2
8
MASS TERMINATION ASSEMBLY
MTA DESIGNATION ON BOARD
1MTA5-9
PIN NUMBER
BOARD MTA GROUP DESIGNATION
AN MTA IS A CONNECTION ON AN ELECTRONIC CIRCUIT BOARD. THE NOTES AND THE TAG PAGE CAN LOCATE THE APPROPRIATE BOARD.
S+ 08
7
CRSG
4
1B2S
CLOSES WHEN SIGNAL DESIRED
B32
S+ 07
CRS
+S
1
2B2S
OPENS WHEN 3-WIRE ENERGIZED
B56
SF 02
7
CRFEB
4
4B2
CLOSES WHEN FIRE EYE ENABLED
9
S+ 08
8
CRSG
5
1B2S
CLOSES WHEN SIGNAL DESIRED
WIRE IDENTIFICATION MARKING. THIS DESIGNATION IS STAMPED ON THE WIRE EVERY 6." THIS MARKING IS USED IN CONJUNCTION WITH THE SIGNAL ROUTING TABLE.
B12
S+ 15
8
CR
MA
2
2A1M
OPENS WHEN MAIN AIR DESIRED
B58
EBSG
SIGNAL AUDIBLE
CDACS
ROTATION SAFETY
1A2F
MAJOR REVISION (LETTER)
1
PAGE NUMBER (S+)
TYPE OF MACHINE (GAS FIRED DRYER)
6TH GENERATION OF CONTROLS
W=WIRING
W 6 DRYG S+ A
CLASS OF CONTROL SYSTEM
2
TITLE OF THIS CIRCUIT
VOLTAGE OF CIRCUIT SHOWN
MICRO 6 SYSTEMS SCHEMATIC: 3-WIRE CIRCUIT
24V1P50HZ/24V1P60HZ
PELLERIN MILNOR CORPORATION
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 BIO1 (8 OUTPUT-16 INPUT BOARD).
5. REMOVE (J1) IF DRYER HAS VALVE SET SHUT OPTION.
PAGE LINE NUMBERS
3
10
11
12
13
14
15
16
W6DRYGS+A 93226D

FIGURE	ELECTRICAL VALUES	SUFFIXES									
		B		H		M		T		U	
		50HZ	60HZ	50HZ	60HZ	50HZ	60HZ	50HZ	60HZ	50HZ	60HZ
A	1.000	208	230			200	220	220	240	200-220	208-240
B	$\sqrt{3}$				208	346	380	380		346-380	380
C	2.000	416	460	220	240	400	440	440	480	400-440	440-480
D	$1+\sqrt{3}$						600				600
E	$2\sqrt{3}$			380							



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

BMP850029

MOTOR CONNECTION DIAGRAMS

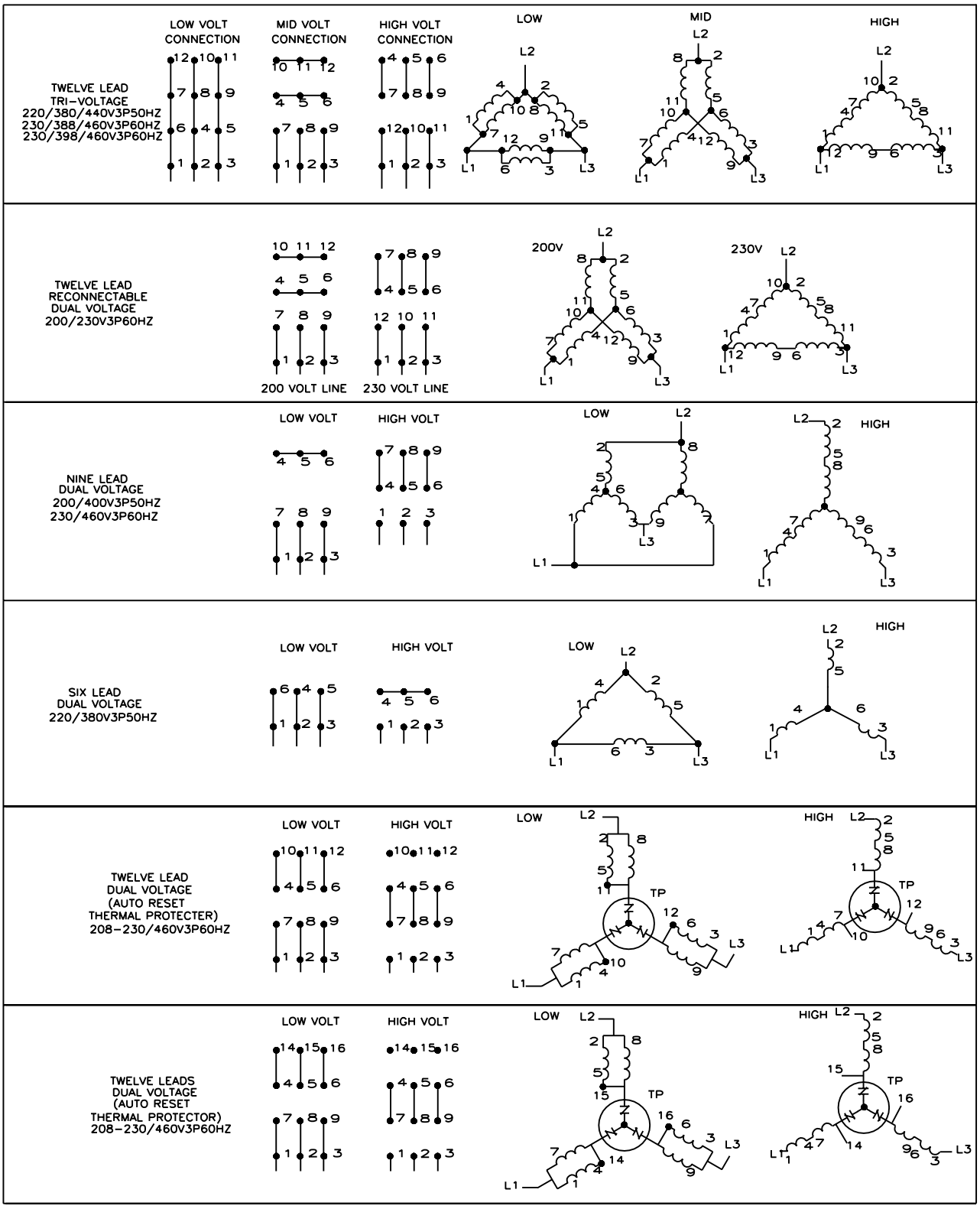
THREE PHASE SINGLE SPEED MOTORS WITH MULTIPLE VOLTAGE RATINGS

(ONLY FOR MOTOR SUFFIXES LISTED)

PELLERIN MILNOR CORPORATION

BMP850029
993628

BMP850029
993628



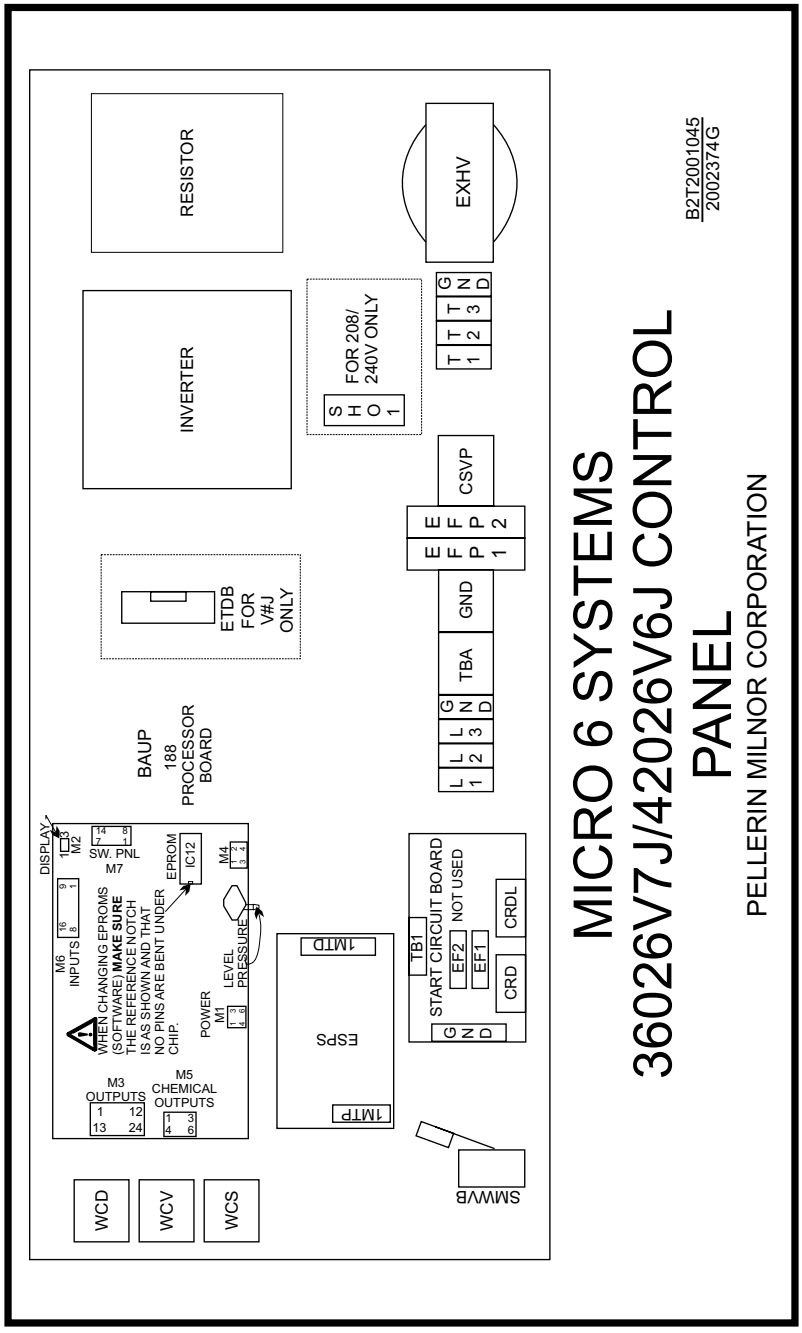
W80008

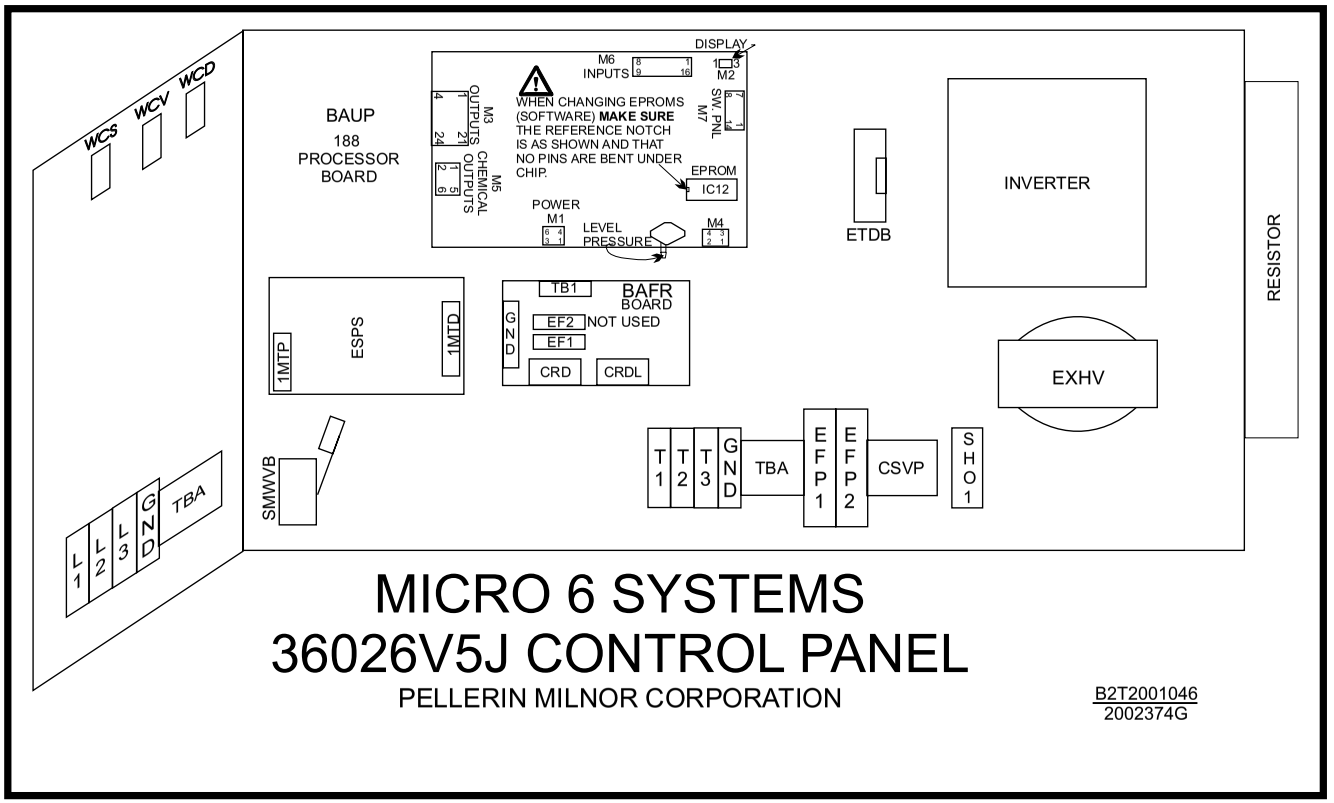
THREE PHASE
MOTOR CONNECTION DIAGRAMS
SINGLE SPEED MOTORS WITH MULTIPLE VOLTAGE RATINGS

PELLERIN MILNOR CORPORATION

W80008
2001253A

W80008
2001253A

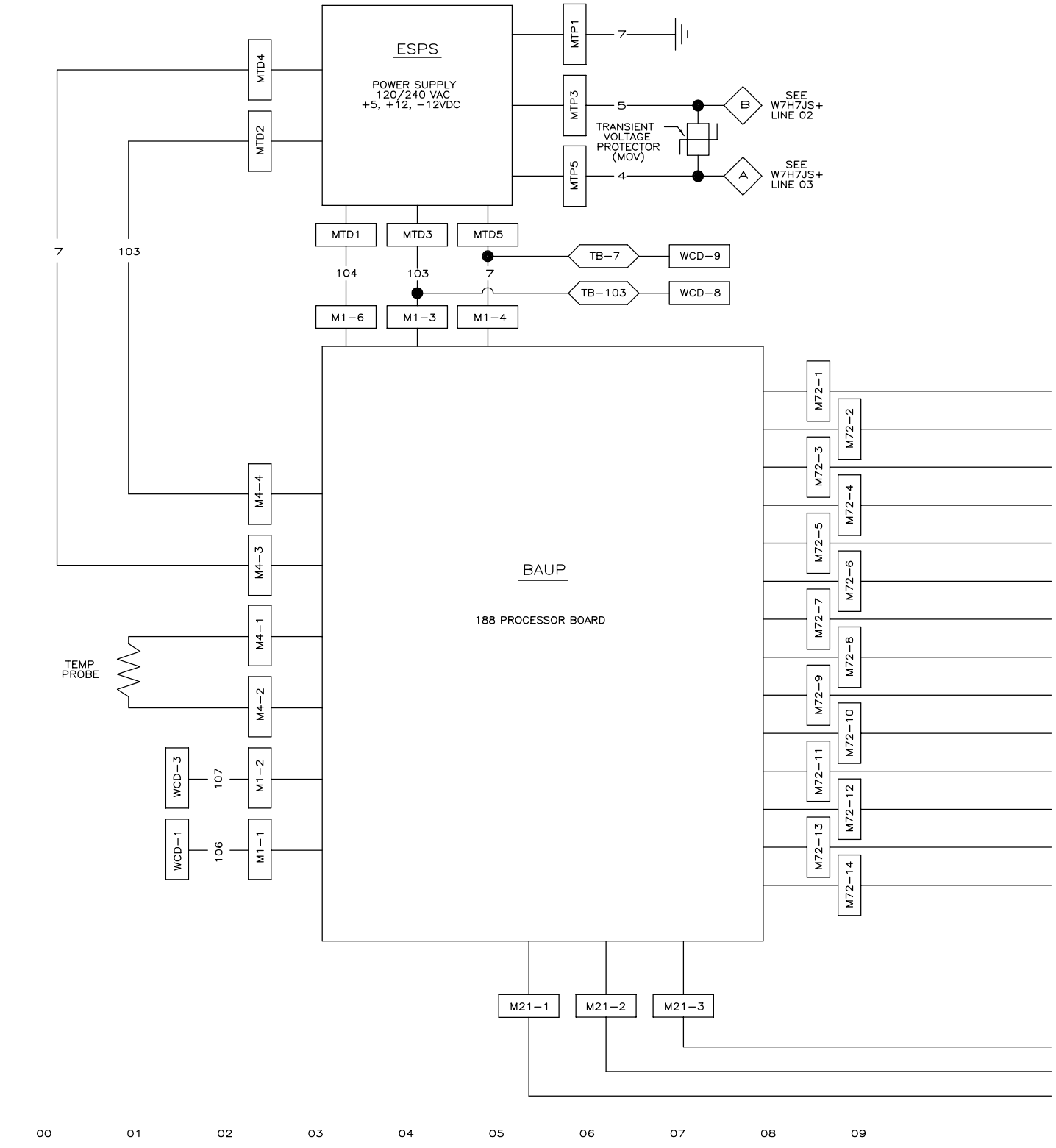

MICRO 6 SYSTEMS
36026V7J/42026V6J CONTROL
PANEL
PELLERIN MILNOR CORPORATION
B2T2001045
2002374G
RESISTOR
INVERTER
EXHV
FOR 208/
240V ONLY
SHO 1
T1 T2 T3 GND
ETDB
FOR
V#J
ONLY
BAUP
188
PROCESSOR
BOARD
L1 L2 L3 GND
TBA
GND
EFFP 1 2
CSVP
DISPLAY
M2
SW. PNL
M7
M6
INPUTS
WHEN CHANGING EPROMS
(SOFTWARE) MAKE SURE
THE REFERENCE NOTCH
IS AS SHOWN AND THAT
NO PINS ARE BENT UNDER
CHIP.
EPROM
IC12
M4
LEVEL
PRESSURE
POWER
M1
M3
OUTPUTS
M5
CHEMICAL
OUTPUTS
1MTD
ESPS
1MTP
TB1
START CIRCUIT BOARD
NOT USED
EF2
EF1
CRD
CRDL
GND
SMWVB
WCD
WCV
WCS



W7V6JTG1

36 AND 42 V#J MACHINE TAGS

PELLERIN MILNOR CORPORATION



W7V6JBW
2002234B

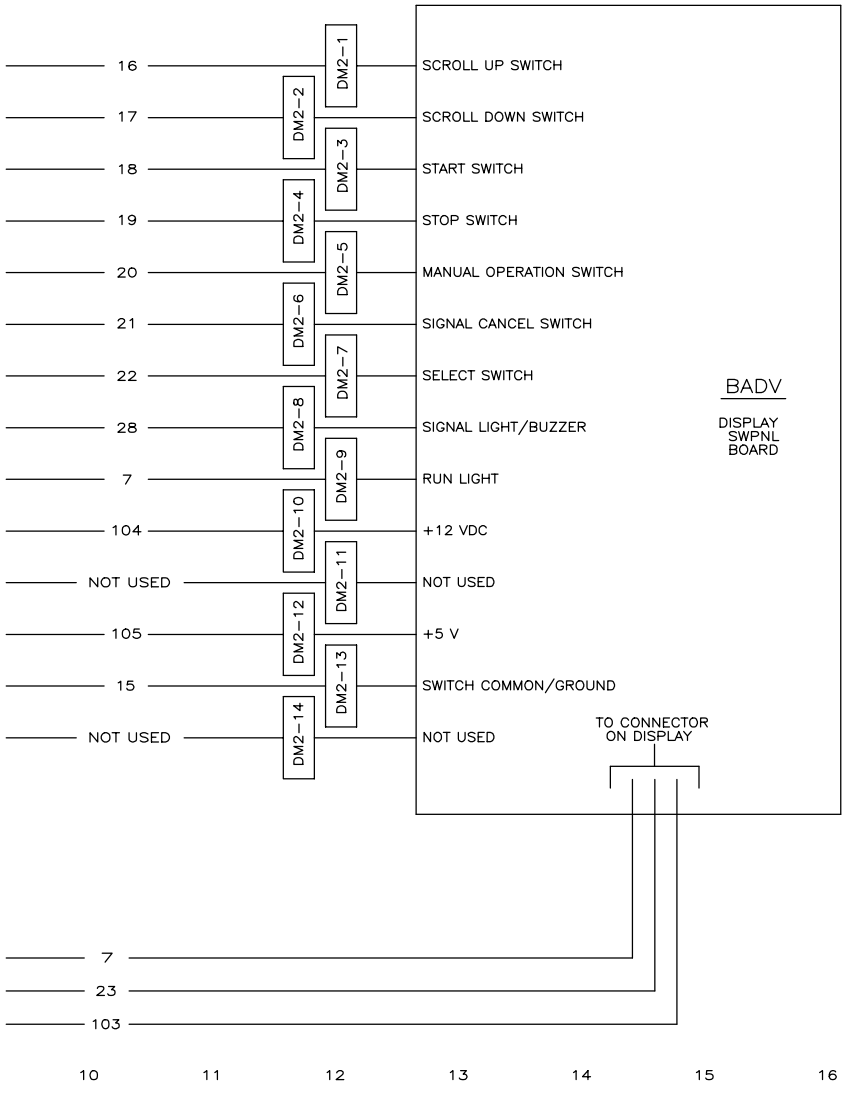
W7V6JBW
2002234B

WIRE COLOR CODE

WIRE COLOR	APPLICATION
RED	A.C. CONTROL
RED/WHITE	A.C. COMMON
BLUE –103	+5 VDC
BLUE/ORANGE –104	+12VDC
YELLOW/GREEN	GROUND
BLUE/WHITE –7	D.C. GROUND
BLUE/BLACK –105	D.C. CONTROL SIGNALS

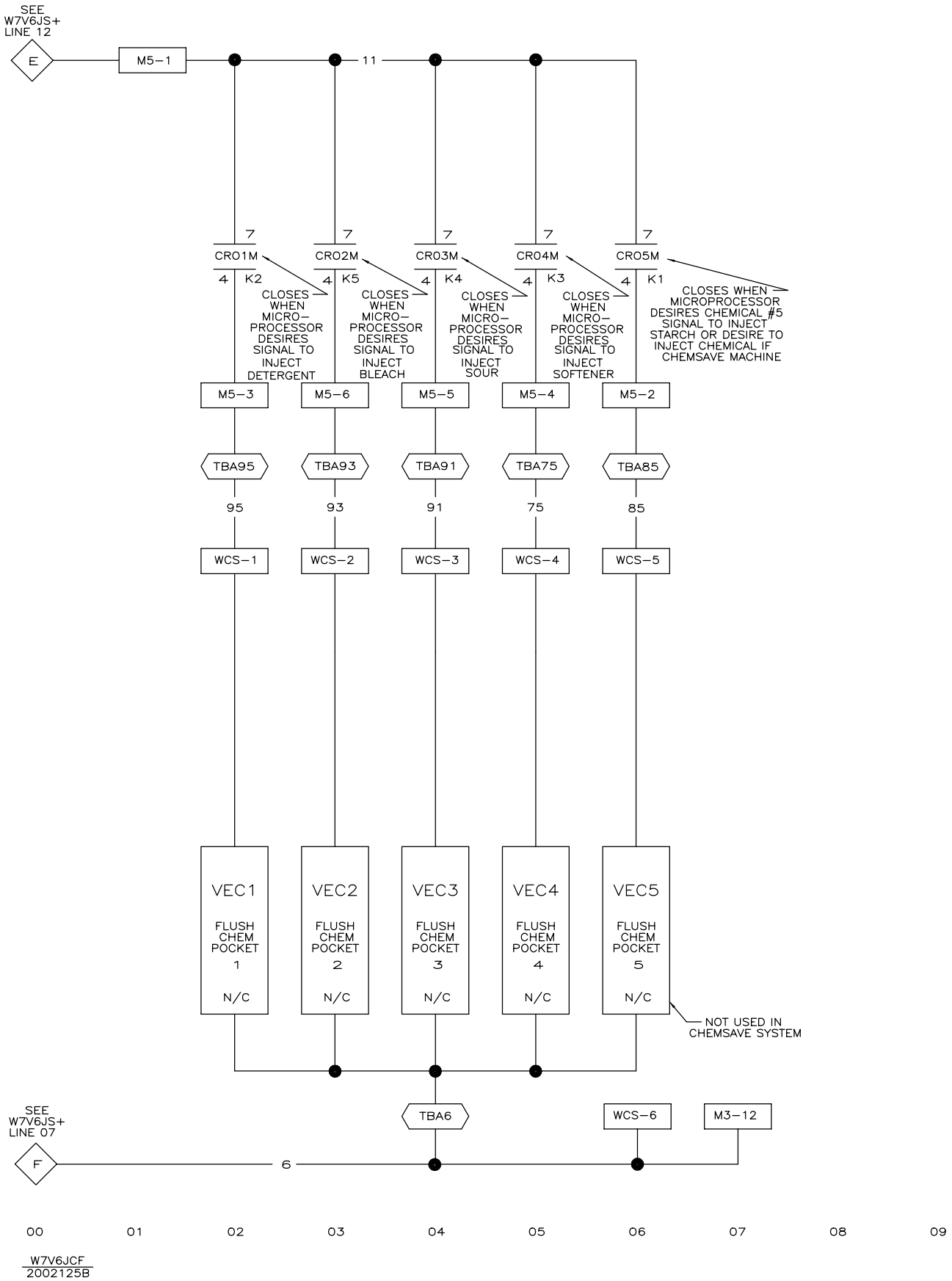
NOTES

1. M1, M2, M4, AND M72 ARE LOCATED ON BAUP 188 PROCESSOR BOARD.
2. DM1 IS LOCATED ON BADU DISPLAY SWPNL BOARD.
1. WCD IS THE DOWNLOAD CONNECTOR LOCATED ON THE SIDE OF THE SWITCH PANEL CONTROL BOX.



W7V6JBW
MICRO 7 SYSTEMS
SCHEMATIC: BOARD TO BOARD WIRING
PELLERIN MILNOR CORPORATION

W7V6JBW
2002234B

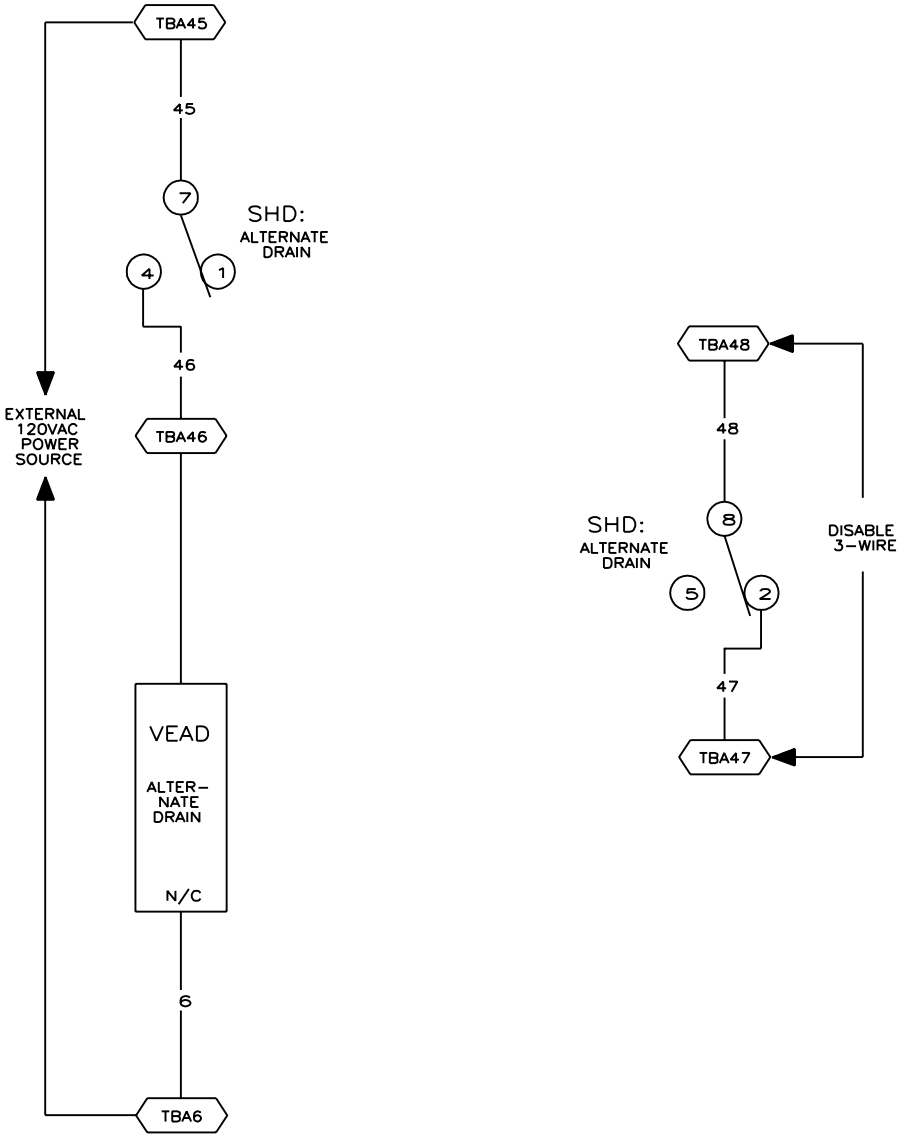

SEE W7V6JS+ LINE 12
E
M5-1
11
7
CR01M
4
K2
CLOSES WHEN MICRO-PROCESSOR DESIRES SIGNAL TO INJECT DETERGENT
CR02M
K5
CLOSES WHEN MICRO-PROCESSOR DESIRES SIGNAL TO INJECT BLEACH
CR03M
K4
CLOSES WHEN MICRO-PROCESSOR DESIRES SIGNAL TO INJECT SOUR
CR04M
K3
CLOSES WHEN MICRO-PROCESSOR DESIRES SIGNAL TO INJECT SOFTENER
CR05M
K1
CLOSES WHEN MICROPROCESSOR DESIRES CHEMICAL #5 SIGNAL TO INJECT STARCH OR DESIRE TO INJECT CHEMICAL IF CHEMSAVE MACHINE
M5-3
M5-6
M5-5
M5-4
M5-2
TBA95
TBA93
TBA91
TBA75
TBA85
95
93
91
75
85
WCS-1
WCS-2
WCS-3
WCS-4
WCS-5
VEC1
FLUSH CHEM POCKET 1
N/C
VEC2
FLUSH CHEM POCKET 2
N/C
VEC3
FLUSH CHEM POCKET 3
N/C
VEC4
FLUSH CHEM POCKET 4
N/C
VEC5
FLUSH CHEM POCKET 5
N/C
NOT USED IN CHEMSAVE SYSTEM
TBA6
WCS-6
M3-12
SEE W7V6JS+ LINE 07
F
6
00
01
02
03
04
05
06
07
08
09
W7V6JCF
2002125B

W7V6JCF

SCHEMATIC: FLUSHING SUPPLIES

110V1P50HZ/120V1P60HZ

PELLERIN MILNOR CORPORATION



00 01 02 03 04 05 06 07

W7V6JDR
2001352B

W7V6JDR

MICRO 7 SYSTEMS MARK V
SCHEMATIC: ALTERNATE DRAIN VALVE
FOR AIR OPERATED DRAINS ONLY

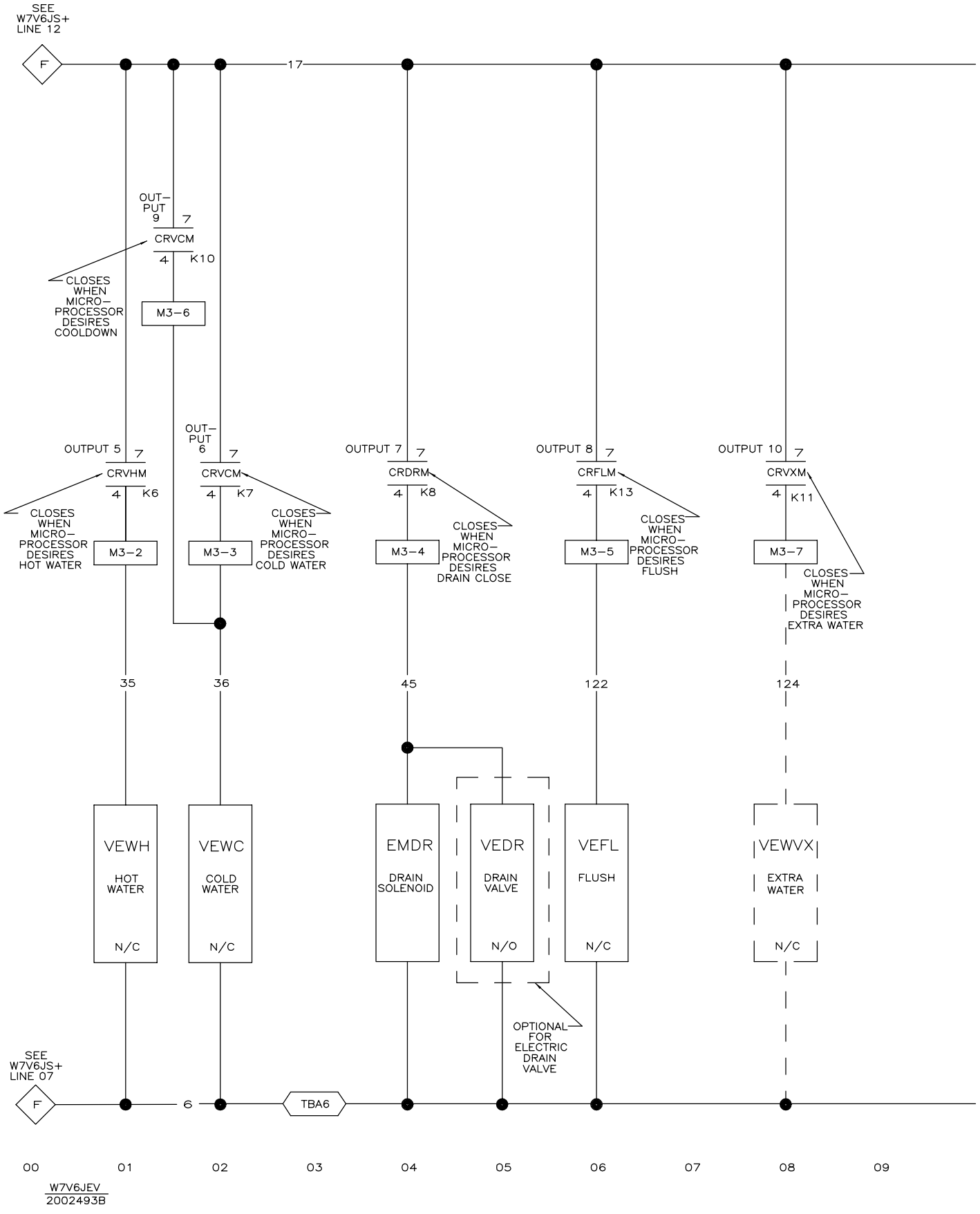
110V1P50HZ/120V1P60HZ

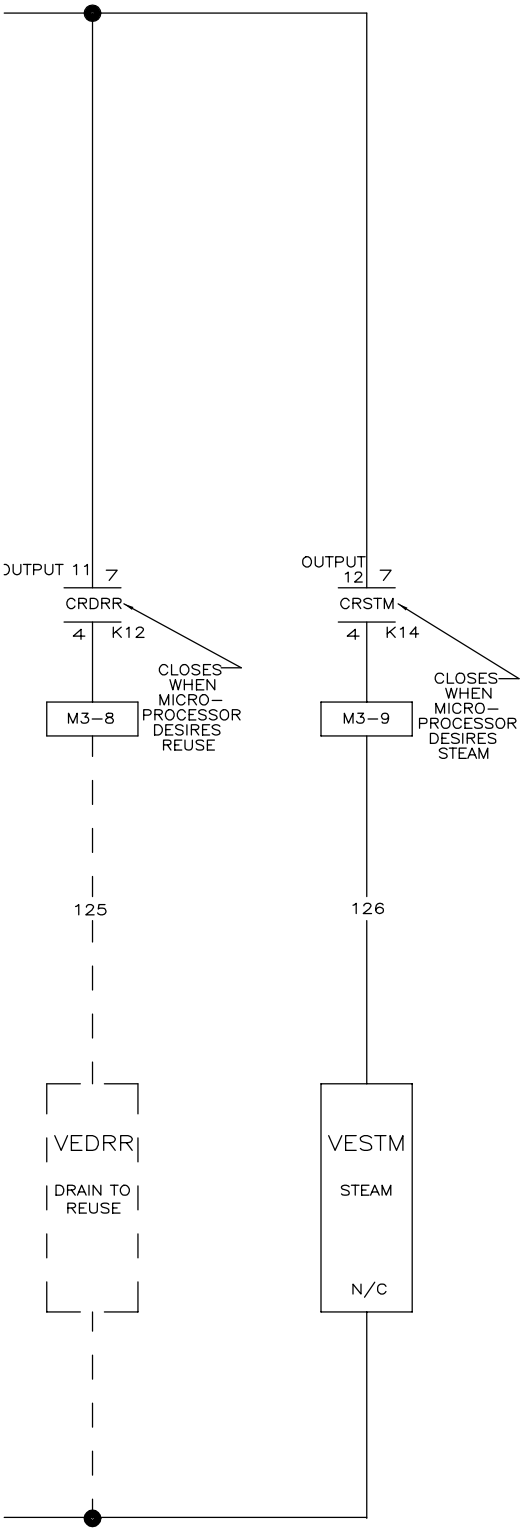
PELLERIN MILNOR CORPORATION

NOTES:
FOR NON AIR OPERATED
DRAINS SEE W7V6JEV

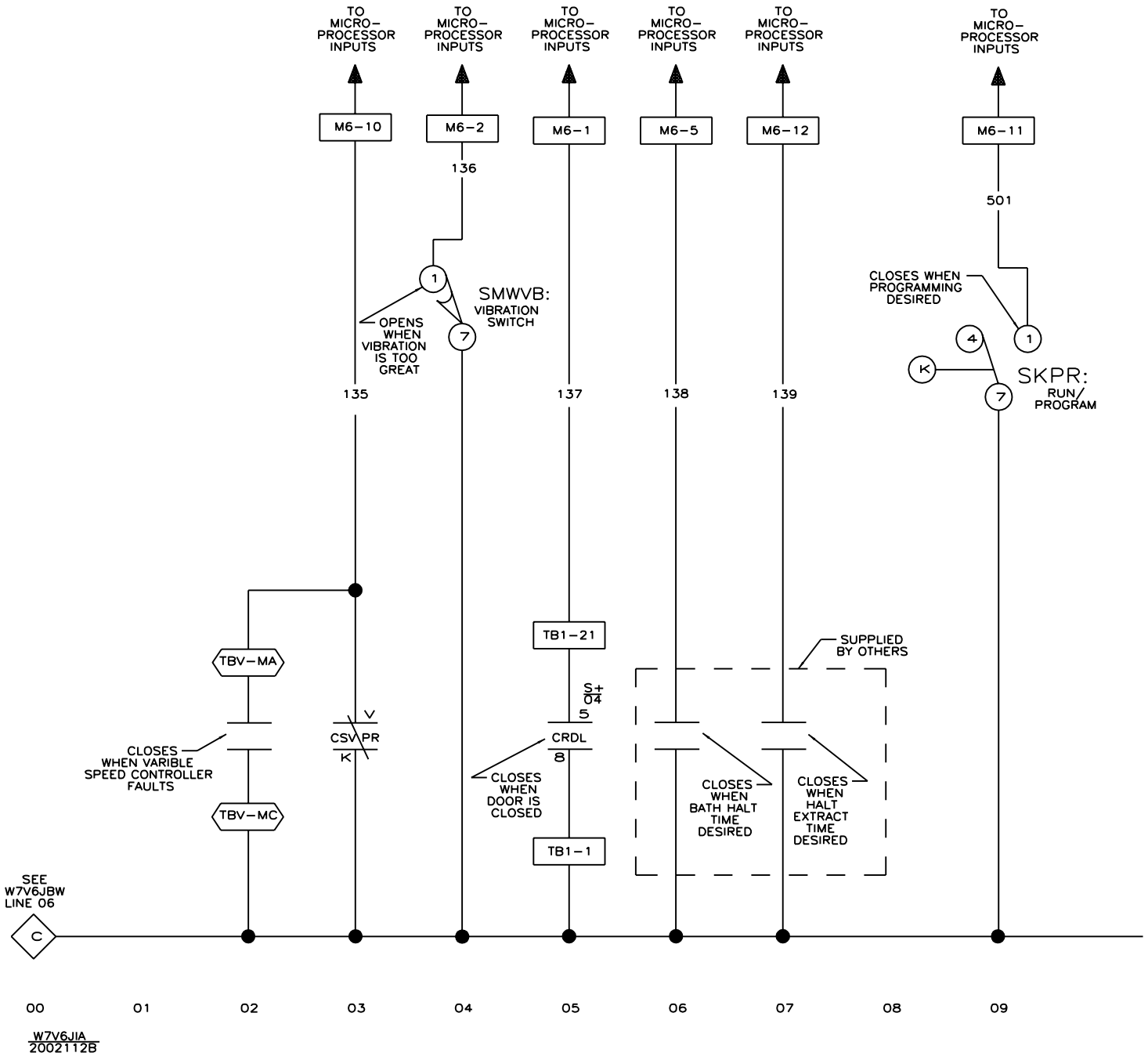
W7V6JDR
2001352B

W7V6JDR
2001352B


SEE W7V6JS+ LINE 12
F
17
OUT-PUT 9 7
CRVCM
4 K10
CLOSES WHEN MICRO-PROCESSOR DESIRES COOLDOWN
M3-6
OUTPUT 5 7
CRVHM
4 K6
CLOSES WHEN MICRO-PROCESSOR DESIRES HOT WATER
M3-2
OUT-PUT 6 7
CRVCM
4 K7
CLOSES WHEN MICRO-PROCESSOR DESIRES COLD WATER
M3-3
OUTPUT 7 7
CRDRM
4 K8
CLOSES WHEN MICRO-PROCESSOR DESIRES DRAIN CLOSE
M3-4
OUTPUT 8 7
CRFLM
4 K13
CLOSES WHEN MICRO-PROCESSOR DESIRES FLUSH
M3-5
OUTPUT 10 7
CRVXM
4 K11
CLOSES WHEN MICRO-PROCESSOR DESIRES EXTRA WATER
M3-7
35
36
45
122
124
VEWH HOT WATER N/C
VEWC COLD WATER N/C
EMDR DRAIN SOLENOID
VEDR DRAIN VALVE N/O
VEFL FLUSH N/C
VEWVX EXTRA WATER N/C
OPTIONAL FOR ELECTRIC DRAIN VALVE
SEE W7V6JS+ LINE 07
F
6
TBA6
00 01 02 03 04 05 06 07 08 09
W7V6JEV
2002493B



W7V6JEV
SCHEMATIC: ELECTRIC VALVES
110V1P50HZ/120V1P60HZ
PELLERIN MILNOR CORPORATION


TO MICRO-PROCESSOR INPUTS
M6-10
M6-2
M6-1
M6-5
M6-12
M6-11
136
501
1
7
SMWVB:
VIBRATION SWITCH
OPENS WHEN VIBRATION IS TOO GREAT
CLOSES WHEN PROGRAMMING DESIRED
4
K
SKPR:
RUN/PROGRAM
135
137
138
139
TB1-21
S+
04
5
CRDL
8
TB1-1
SUPPLIED BY OTHERS
TBV-MA
TBV-MC
CLOSES WHEN VARIBLE SPEED CONTROLLER FAULTS
V
CSV PR
K
CLOSES WHEN DOOR IS CLOSED
CLOSES WHEN BATH HALT TIME DESIRED
CLOSES WHEN HALT EXTRACT TIME DESIRED
SEE W7V6JBW LINE 06
C
00
01
02
03
04
05
06
07
08
09
W7V6JIA
2002112B

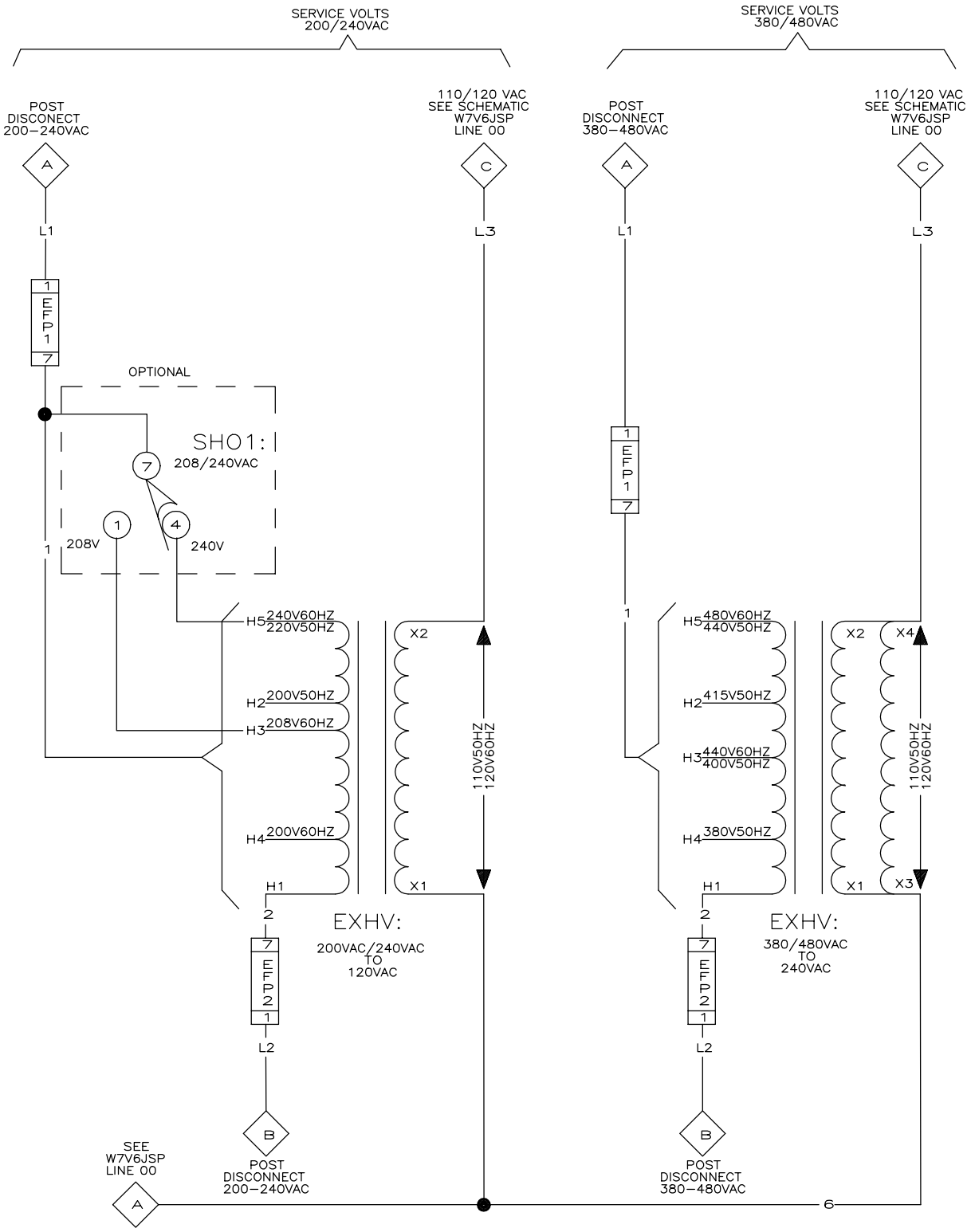
W7V6JIA

SCHEMATIC: MICROPROCESSOR INPUTS

PELLERIN MILNOR CORPORATION

NOTES

1. M6 IS LOCATED ON THE PROCESSOR BOARD.
2. TBV IS LOCATED ON VARIABLE SPEED CONTROLLER.
3. TB1 IS LOCATED ON BAFR V#J START CIRCUIT BOARD.



W7V6JLV
2002112B

W7V6JLV

MICRO 7 SYSTEMS MARK V

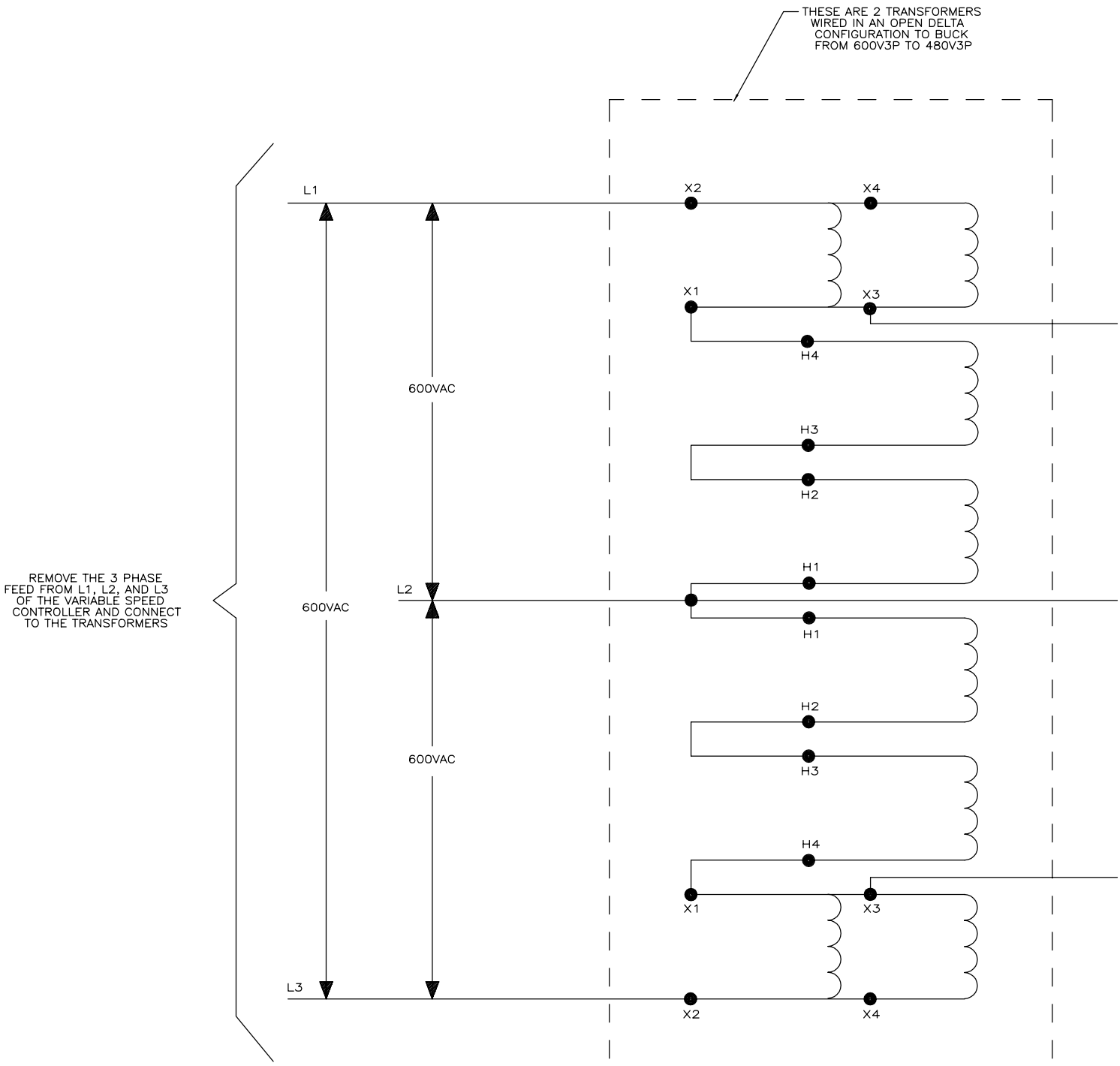
SCHEMATIC:CONTROL CIRCUIT TRANSFORMER

110V1P50HZ/120V1P60HZ

PELLERIN MILNOR CORPORATION

NOTE:
WIRE NUMBERS 601 AND 602 BECOME
L1 AND L2 ON 3602V5J MACHINES

09 10 11 12 13



00 01 02 03 04 05 06 07 08 09 10

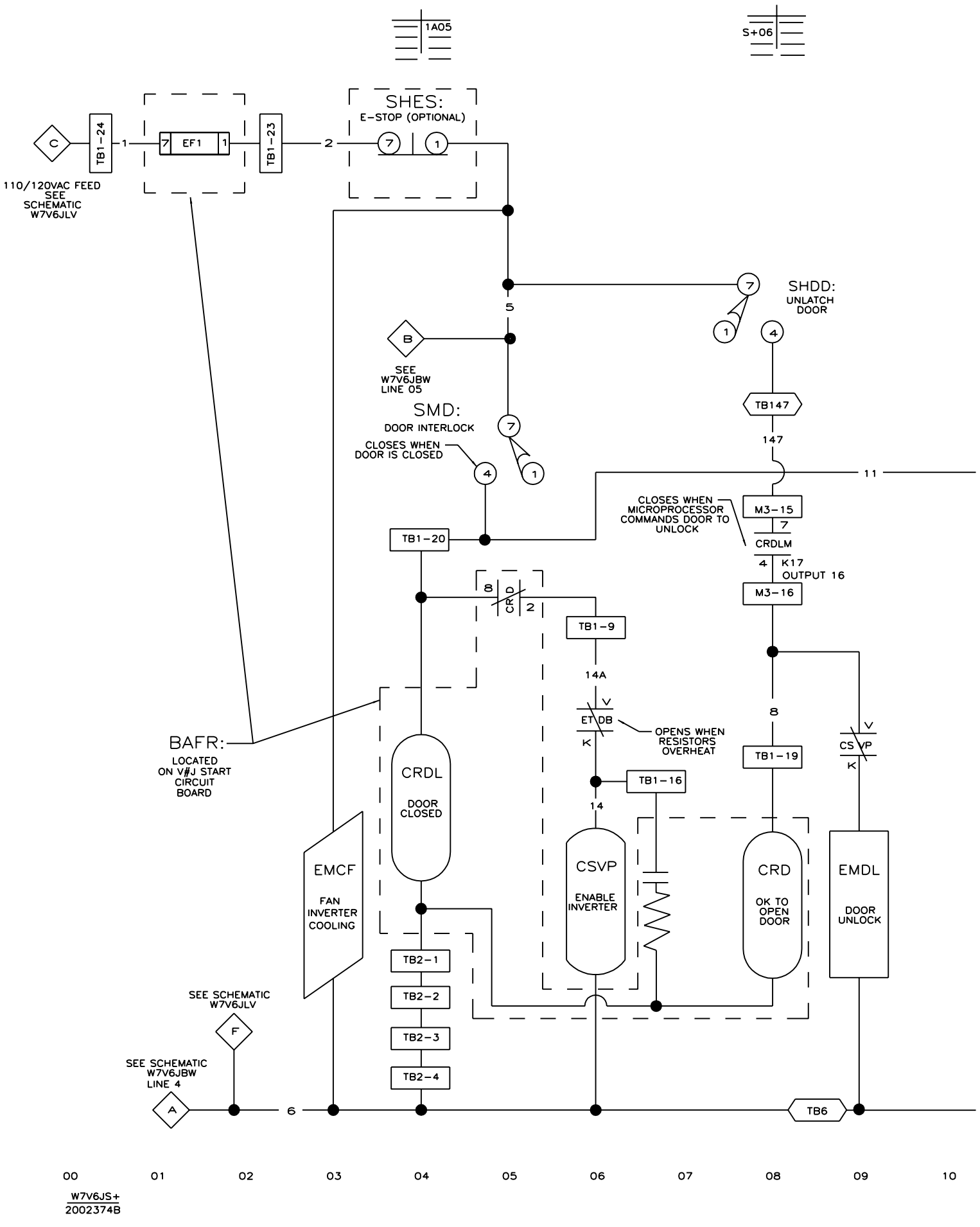
W7V6JMT6
2001352B

W7V6JMT6

MICRO 6 SYSTEMS
MARK V CONTROLS
SCHEMATIC: 600V MACHINES
600V TO 480 VOLT STEP DOWN

PELLERIN MILNOR CORPORATION

11 12 13 14 15 16 17


1A05
S+06
SHES:
E-STOP (OPTIONAL)
C
TB1-24
EF1
TB1-23
110/120VAC FEED
SEE
SCHEMATIC
W7V6JLV
SHDD:
UNLATCH
DOOR
B
SEE
W7V6JBW
LINE 05
SMD:
DOOR INTERLOCK
CLOSES WHEN
DOOR IS CLOSED
TB147
147
11
CLOSES WHEN
MICROPROCESSOR
COMMANDS DOOR TO
UNLOCK
M3-15
CRDLM
K17
OUTPUT 16
M3-16
TB1-20
CR D
TB1-9
14A
ET DB
OPENS WHEN
RESISTORS
OVERHEAT
TB1-19
CS VP
TB1-16
BAFR:
LOCATED
ON V#J START
CIRCUIT
BOARD
CRDL
DOOR
CLOSED
EMCF
FAN
INVERTER
COOLING
CSVP
ENABLE
INVERTER
CRD
OK TO
OPEN
DOOR
EMDL
DOOR
UNLOCK
TB2-1
TB2-2
TB2-3
TB2-4
SEE SCHEMATIC
W7V6JLV
F
SEE SCHEMATIC
W7V6JBW
LINE 4
A
TB6
00
01
02
03
04
05
06
07
08
09
10
W7V6JS+
2002374B

W7V6JS+

SCHEMATIC: START CIRCUIT & DOOR INTERLOCK FOR 36026V5J,V7J & 42026V6J

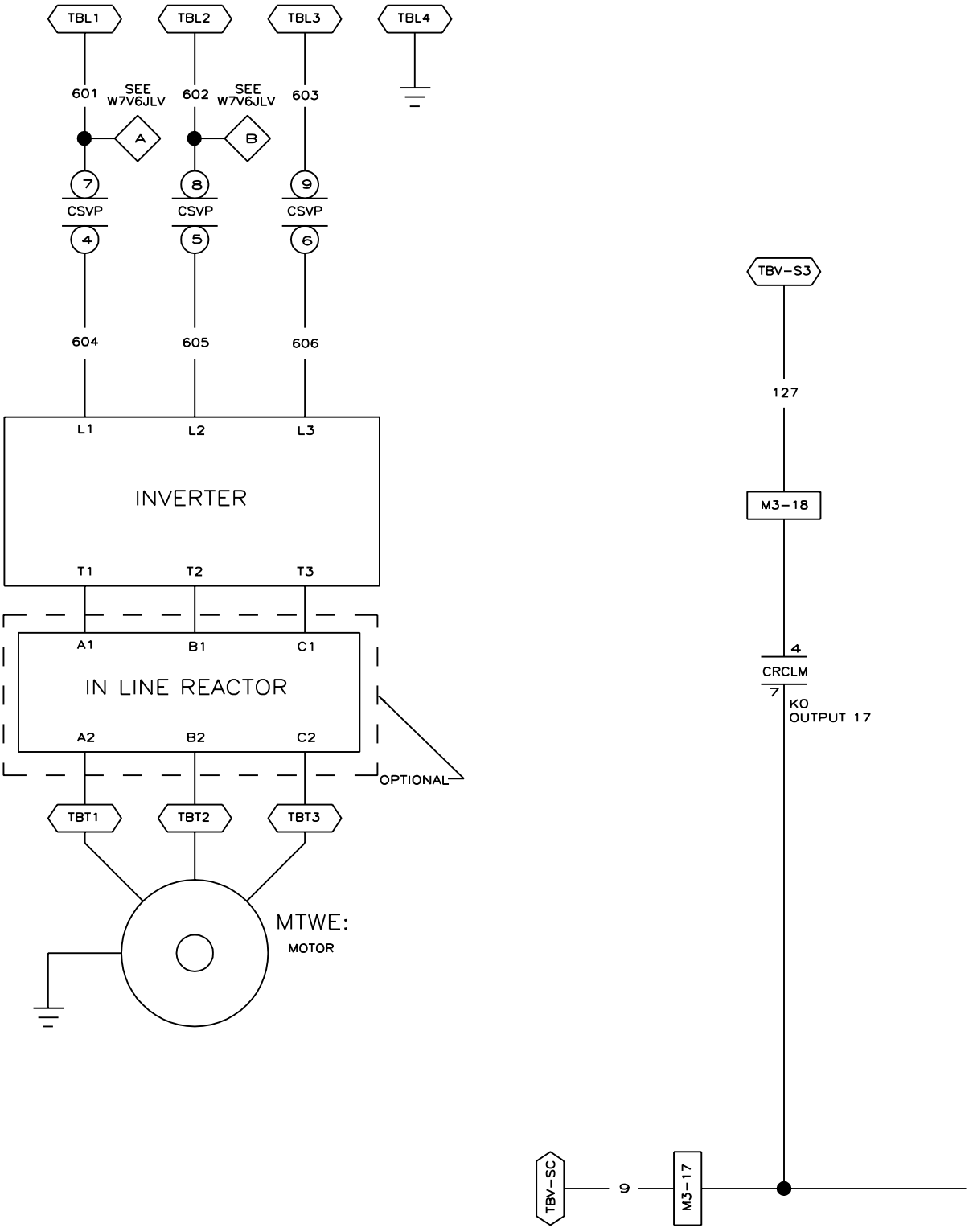
110V,1P,50HZ/120V,1P,60HZ

PELLERIN MILNOR CORPORATION

NOTES:

1. TB1 AND TB2 ARE LOCATED ON V#J START CIRCUIT BOARD.

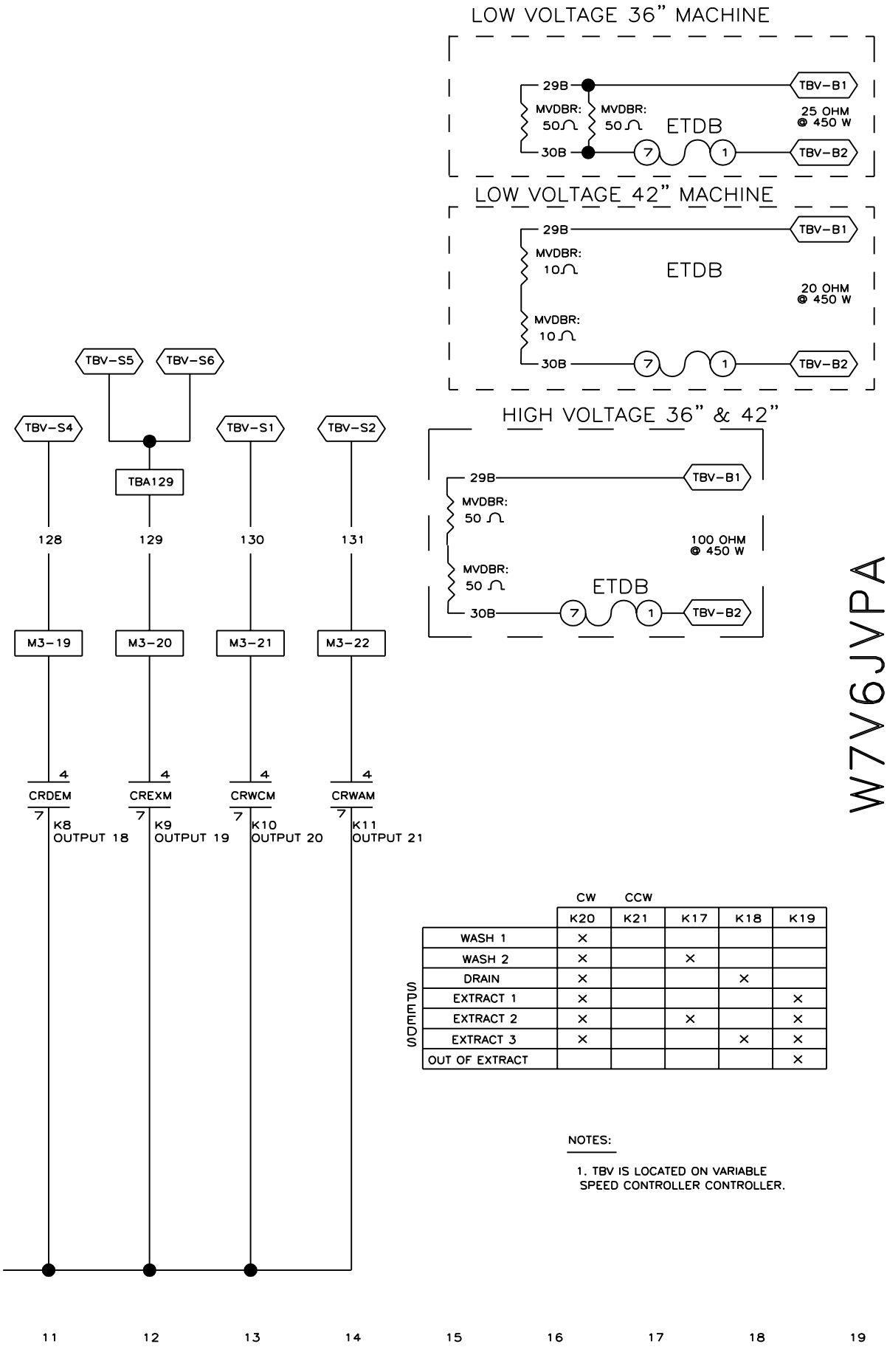
11 12 13 14 15 16



LITHO IN U.S.A.

00 01 02 03 04 05 06 07 08 09 10

W7V6JVPA
2003065B



SPEEDS	CW K20	CCW K21	K17	K18	K19
WASH 1	×				
WASH 2	×		×		
DRAIN	×			×	
EXTRACT 1	×				×
EXTRACT 2	×		×		×
EXTRACT 3	×			×	×
OUT OF EXTRACT					×

NOTES:

1. TBV IS LOCATED ON VARIABLE SPEED CONTROLLER CONTROLLER.

W7V6JVPA

MICRO 7 SYSTEMS MARK V
FOR 36 AND 42 V#J ONLY
MODIFIED FOR GPD315 INVERTER
SCHEMATIC: VARIABLE SPEED CONTROLLER

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W7V6JVPA
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