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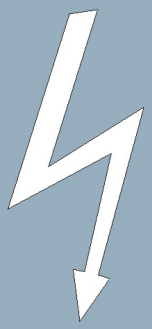
Schematic/Electrical Parts—

30015 and 30022C4E Coin Operated Washer



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

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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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30015 and 30022C4E Coin Operated Washer

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COMPONENT PARTS LIST

W7C4EPL/2002474N

COMPONENT NUMBER	FUNCTION OF THIS COMPONENT NUMBER	WHERE TO FIND THIS COMPONENT	MILNOR P/N	DESCRIPTION	LOCATION
	>>>CONTROL BOX DETAILS				
001	DETAIL-CONTROL PANEL	W7C4ETG	B2T2002037	TAG:C4E CONTROL PANEL	SEE FUNCTION
002	DETAIL-INCOMING POWER BOX	W7C4ETG	B2T2001002	**TAG:INCOMING PWR/SUPPY T5E**	SEE FUNCTION
BA	**>>PRINTED CIRCUIT BOARDS**				
BAUP	BOARD-MICROPROCESSOR	W7C4EBW	08BT128AT	BD:12OUTPUT-8INPUT COIN->TEST	CONTROL PANEL
BAUS	BOARD-SWITCHPANEL	W7C4EBW	08BTCSTAS	BD:C4E COIN STATUS->TEST	SWITCH PANEL
CR	**>>RELAY-PILOT OR CONTROL**				
CRDL	RELAY-DOOR NOT LOCKED	W7C4EBW	09C02DDD12	RELAY 12VDC 3P FINE SIL CONT	CONTROL PANEL
CRDC	RELAY-DOOR CLOSED	W7C4ES+	09C024D71	RELAY 4PDT DIFGLD 14PN 240V	CONTROL PANEL
CS	**>>CONTACTOR-MOTOR STARTER**				
CSVP	CONTACTOR-ENABLE INVERTER	W7C4ES+	09MC04C371	18A 3P CONT.NR 120V5/6 IEC	CONTROL PANEL
EC	**>>CLUTCHES-ELECTRICAL**				
ECBK	CLUTCH-BRAKE CLUTCH	W7C4ES+	54H160A	CLUTCH 12VDC MA-7+3/8A-2G	DRIVE MOTORS
EF	**>>FUSE OR FUSE HOLDER**				
EF1	FUSE-CONTROL CIRCUIT X-BUS	W7C4ELV	09FF002AMG	FUSE BK/MDX 2 AMP 250V BUSS	CONTROL PANEL
EF2	FUSE-CONTROL CIRCUIT Y-BUS	W7C4ELV	09FF002AMG	FUSE BK/MDX 2 AMP 250V BUSS	CONTROL PANEL
EM	**>>ELECTROMAGNET AND SOLENOID**				
EMDL	SOLENOID-DOOR LOCK	W7C4EEV	09K062B71	SOLENOID 240/60--220/50 = ILOC	DOOR LTCH BX
ES	**>>POWER SUPPLY-ELECTRONIC**				
ESPS	POWER SUPPLY-MICROPROCESSOR	W7C4EBW	08PSS11212	PWR SUP 12W/OUT 85-264VAC/IN	SWITCH PANEL
EX	**>>TRANSFORMERS**				
EXCL	TRANSFORMER-CLUTCH 120V TO 16V	W7C4ES+	09UB100A16	EFMR 120/240 EBR 12VDC 90WATTS	CONTROL PANEL
EXHV	TRANSFORMER-INCOMING VOLT.240VAC	W7C4ELV	MESSAGE EW	SEE EX37-1, -2, -3, OR -4 FOR VOLTAGE	CONTROL PANEL
EXHV-1	TRANSFORMER-208VAC TO 240VAC	W7C4ELV	09U249AA37	XFMR 200-240V PRI/120VSEC/250VA	CONTROL PANEL
EXHV-2	TRANSFORMER-380/480 V TO 240	W7C4ELV	09U200AAB	XFMR 380-480V/240-120V-250VA	CONTROL PANEL
EXHV-3	TRANSFORMER-600V	W7C4ELV	09U251AB37	XFMR 600VPRI/120VSC-250VA-3%REG	CONTROL PANEL
MR	**>>MOTORS**				
MTWE	MOTOR-BASKET DRIVE	W7C4EVPB	39G553AATD	3HP4P OLSW 380/480 5/6 DBLSHFT	BELOW SHELL
MV	**>>>INVERTERS**				
MVINV	INVERTER--BASKET DRIVE	W7C4EVPB	09MV020G7	INVERTER 2HP 8A 230V (GPD305)	CONTROL PANEL
SK	**>>SWITCH-KEYLOCK**				
SKAT	SWITCH-ATTENDENT	W7C4EIA	09N127C	KEYSW SPST 7A120VAC SCREW TERM	SWITCH PANEL
SH	**>>SWITCH-HAND**				

COMPONENT PARTS LIST

W7C4EPL/2002474N

COMPONENT NUMBER	FUNCTION OF THIS COMPONENT NUMBER	WHERE TO FIND THIS COMPONENT	MILNOR P/N	DESCRIPTION	LOCATION
SH01	SWITCH-VOLTAGE SELECTOR	W7SC4ELV	09N050	TOGSW SPDT NO OFF 10A250V	CONTROL PANEL
SM	**>>SWITCH-MECHANICAL OPERATED**				
SMD	SWITCH-DOOR INTERLOCK	W7C4ES+	09R014A	MINI-SW SPDT STAKON #V15G1C26K	DOOR LTCH BX
SMVB	SWITCH-VIBRATION	W7C4EIA	09R020	SWITCH NC VIBR#WZ-2RW84429-P52	CONTROL PANEL
SP	**>>SWITCH-PRESSURE OPERATED**				
SPLL	PRESSURE SW-LOW WATER LEVEL	W7C4EIA	09N086A	PRESS SWITCH EATON #738-761	CONTROL PANEL
PX	**>>PROX-SWITCH**				
PXCC	SWITCH-COIN COUNT	W7C4EIA	38C084	REJECTOR F77.1-W2004-I4	COIN ACCEPTOR
PXDL	SWITCH=DOOR UNLOCKED	W7C4EBW	09RPS03RDS	3MM SENSING RECTANGULAR SHLD	DOOR LTCH BX
VE	**>>VALVE-ELECTRIC OPERATED**				
VEDR	VALVE-DRAIN	W7C4EEV	96D350A71	DRINVAL 3"N/O MTRDR240V 50/60C	REAR CONSOLE
VEWC	VALVE-HOT WATER	W7C4EEV	96P053C71	3/4"INLET 3/4"HOSEOUT 220V	REAR CONSOLE
VEWH	VALVE-HOT WATER	W7C4EEV	96P053C71	3/4"INLET 3/4"HOSEOUT 220V	REAR CONSOLE
VEC1	VALVE-CHEM POCKET 1	W7C4ECF	N/A	PROVIDED BY OTHERS	
VEC2	VALVE-CHEM POCKET 2	W7C4ECF	N/A	PROVIDED BY OTHERS	
VEC3	VALVE-CHEM POCKET 3	W7C4ECF	N/A	PROVIDED BY OTHERS	
ZF	**RECTIFIER**				
ZFBK	RECTIFIER-BRAKE	W7C4ES+	09A020EBR	RECTIFIER (EBR) 15A/600PIV	CONTROL PANEL
ZFBKS	RECITIFIER-BRAKE SAFETY	W7C4ES+	09A020EBR	RECTIFIER (EBR) 15A/600PIV	CONTROL PANEL

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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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BMP720097
92732A

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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72332A

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

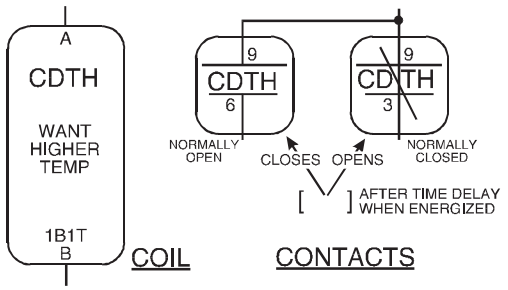
The ***component item numbers*** consist of up to six characters and appear as part of a component's symbol on the schematic. The first two characters indicate the general class of component and the remaining characters are a mnemonic for the function. For example, CD is the code for all time delay relays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

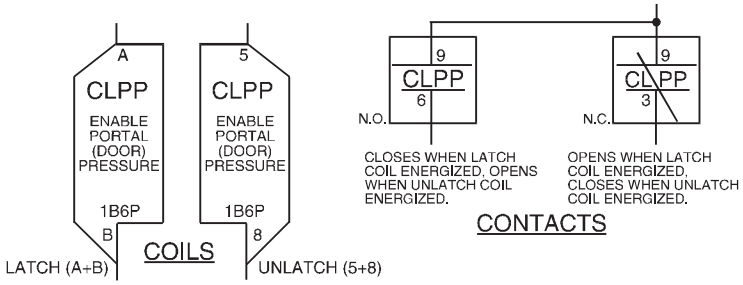
The following are descriptions of the electrical components used in Milnor® machines. Descriptions are in alphabetical order of the component class code (two character prefix).

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).

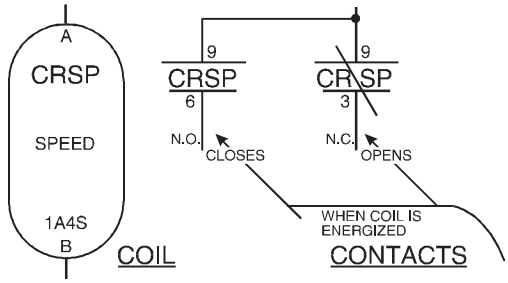
CD=Control, Time Delay Relay A relay whose contacts switch only after a fixed or adjustable delay, once voltage has been applied to its coil. The contacts switch back to normal (de-energized state) immediately when the voltage is removed.

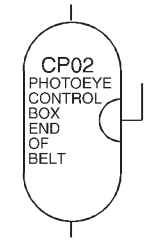




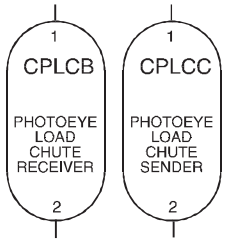
CL=Control, Latch Relay A relay which latches in an energized or set position when operated by one coil (the *latch/set coil*). The relay stays latched, even though coil voltage is removed. The relay releases or unlatches when voltage is applied to a second coil, (the *unlatch/reset coil*).

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.





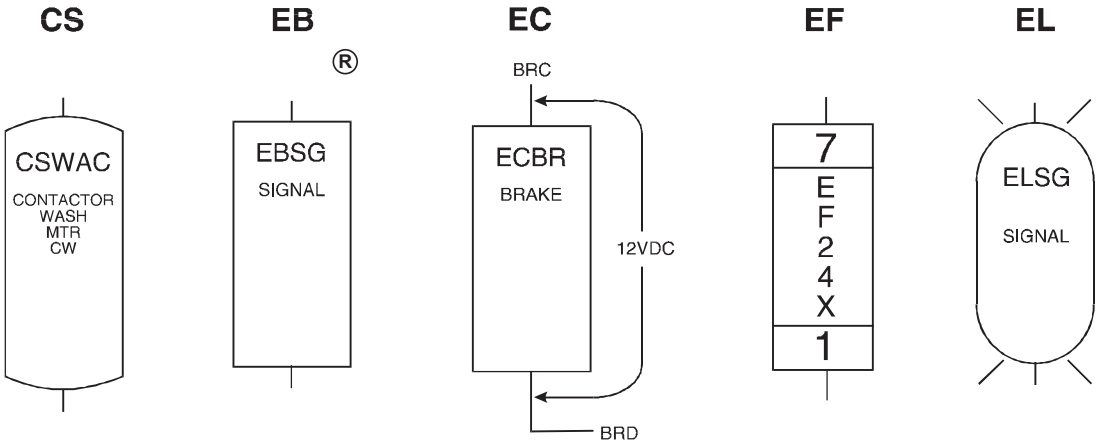
Example of One Assembly



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).

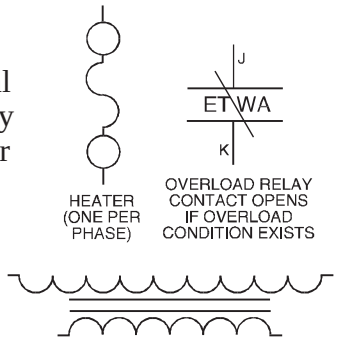
EF=Electric Fuse A fuse is an over-current safety device with a circuit opening fusible member which is heated and severed by the passage of over-current through it.

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.

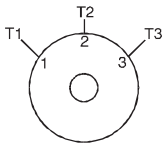
ET=Thermal Overload A safety device designed to protect a motor. A thermal overload consists of an overload block, heaters, and an auxiliary contact. The auxiliary contact is normally installed in a safety (three-wire) circuit that stops power to the motor contactor coil when a motor overload occurs.



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.



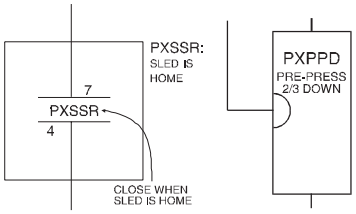
MR=Motors Electro-mechanical device that converts electrical energy into mechanical energy.

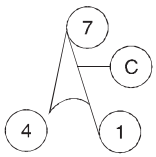
MV=Motor (Variable Speed) Inverter To vary the speed of an AC motor, the volts to frequency ratio must be kept constant. The motor will overheat if this ratio is not maintained.

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.

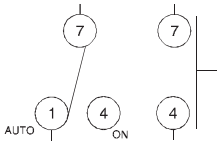
PX=Proximity Switch A device which reacts to the proximity of an target without physical contact or connection. The actuator or target causes a change in the inductance of the proximity switch which causes the switch to operate. Proximity switches can be two-wire (AC) or three-wire (DC) devices.

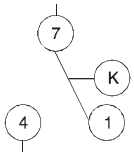




SC=Switch, Cam Operated A switch in which the electrical contacts are opened and/or closed by the mechanical action of a cam(s). Applications include 35-50 pound timer operated machines, autospot, timer reversing motor assembly, and some balancing systems.

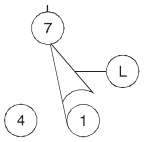
SH=Switch, Hand Operated A switch that is manually operated (e.g., *Start button, Master switch,* etc.).



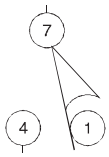


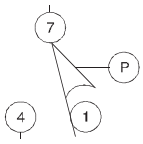
SK=Switch, Key Lock A switch that requires a key to operate . This prevents unauthorized personnel from gaining access to certain functions (e.g., the *Program Menu*).

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



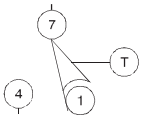
SM=Switch, Mechanically Operated A switch that is mechanically operated by a part of or the motion of the machine (e.g., door closed switch, tilt limit switches, etc.)





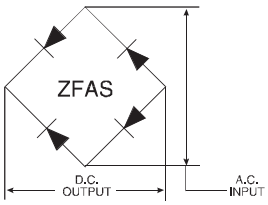
SP=Switch, Pressure Operated A switch consisting of a diaphragm that pushes against a switch actuator.

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.

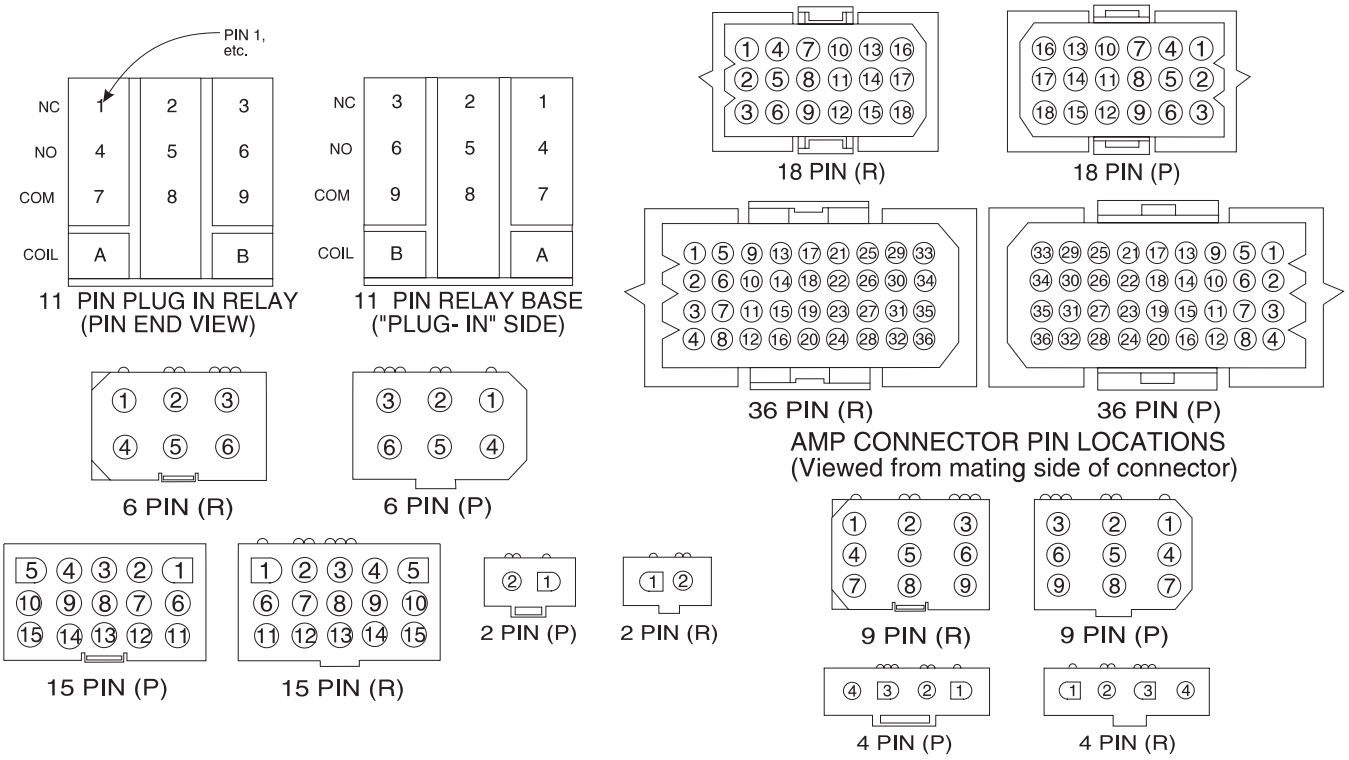


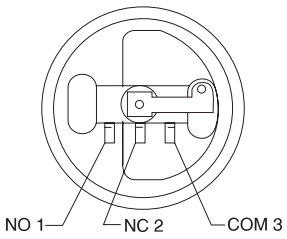
ZF=Rectifier A solid state device that converts alternating current to direct current.

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.

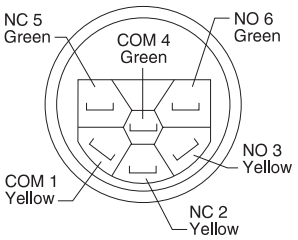
Component Terminal Numbering

NOTE: Numbers shown usually appear on the component.

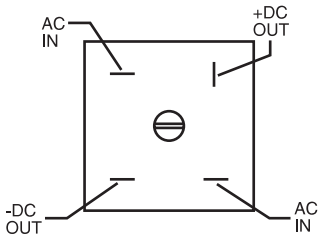




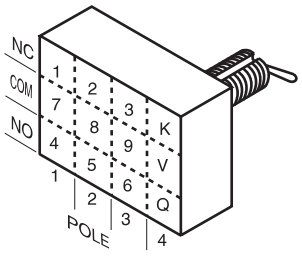
PRESSURE SWITCH



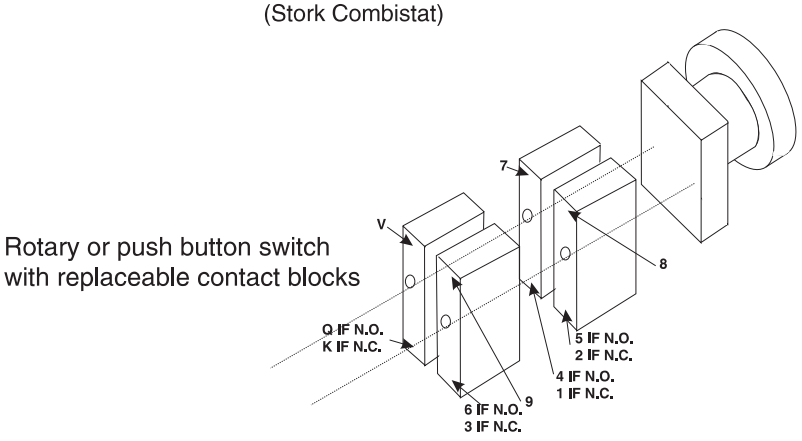
TEMPERATURE CONTROLLER (Stork Combistat)



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

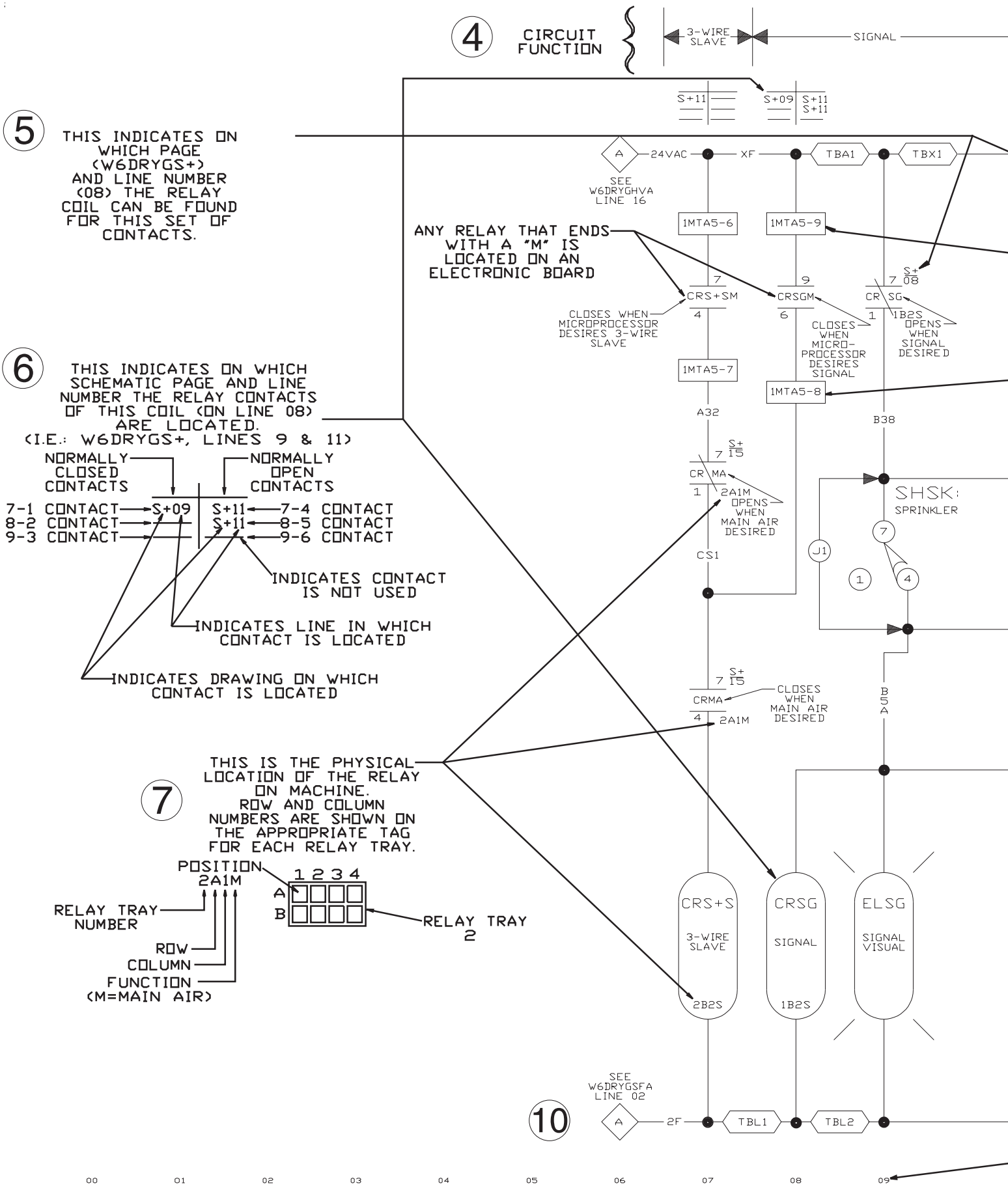
MTA41-MTA43 = digital to analog (D/A) boards

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

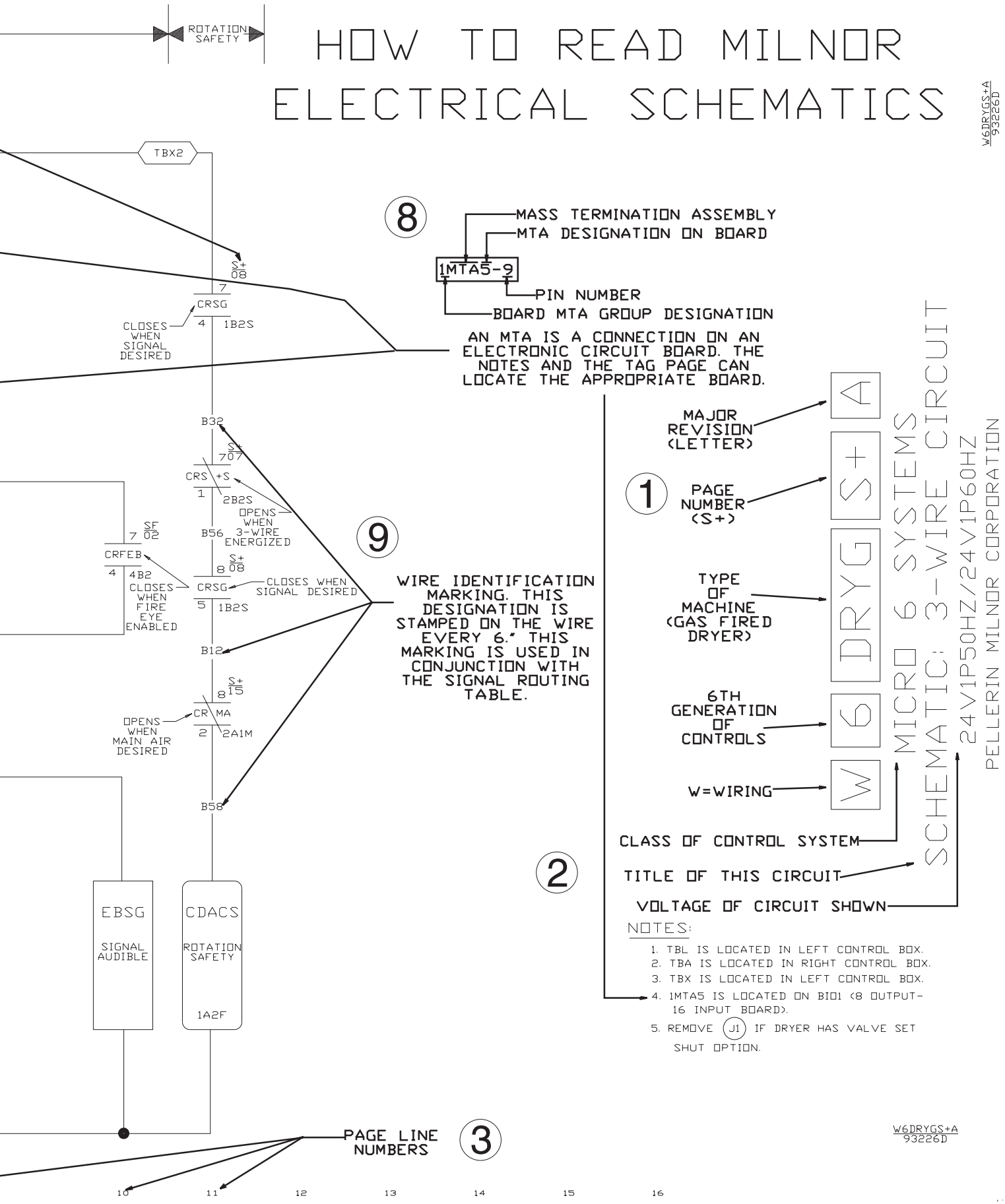
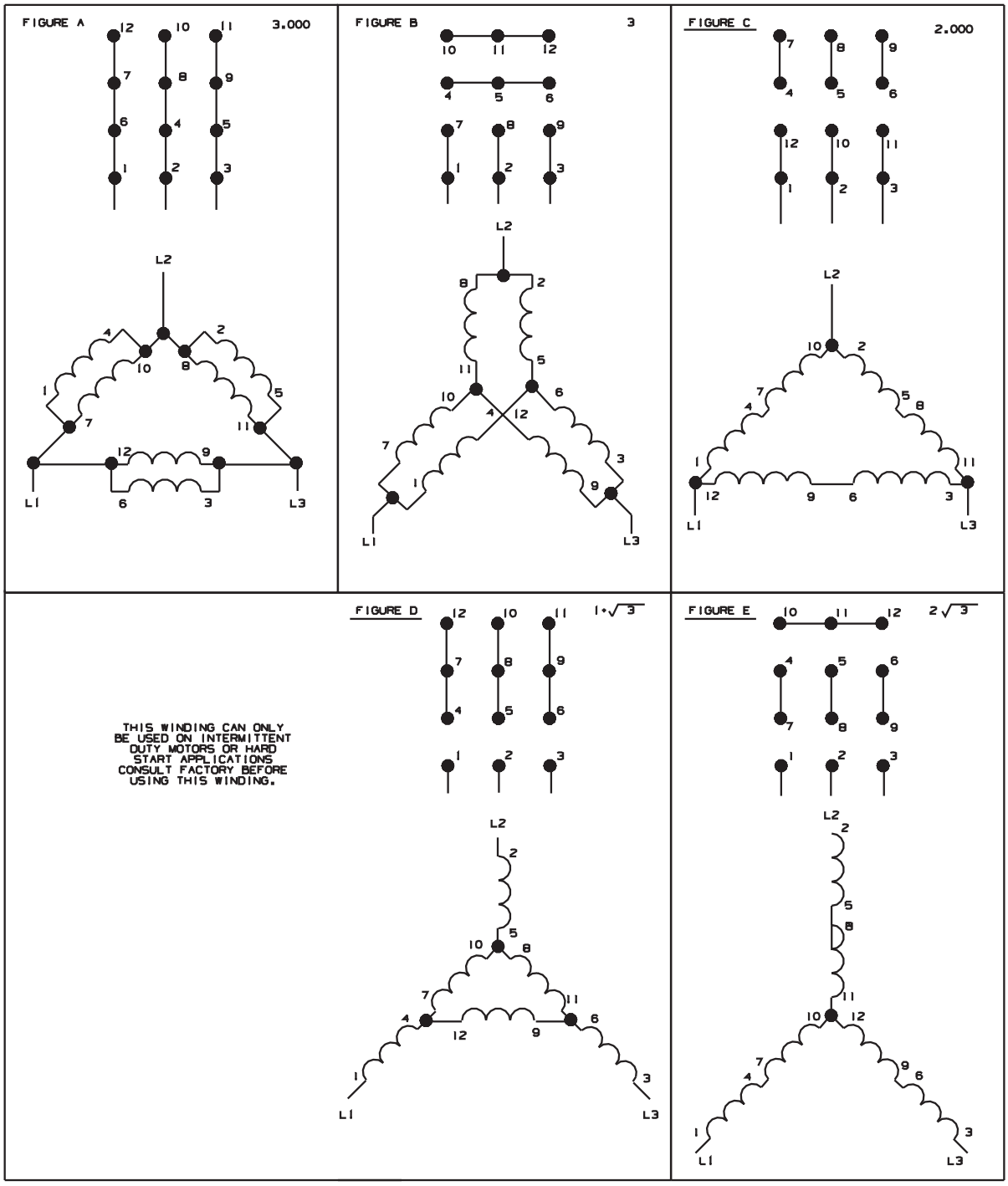

ROTATION SAFETY
HOW TO READ MILNOR ELECTRICAL SCHEMATICS
W6DRYGS+A 93226D
TBX2
8
MASS TERMINATION ASSEMBLY
MTA DESIGNATION ON BOARD
1MTA5-9
PIN NUMBER
BOARD MTA GROUP DESIGNATION
AN MTA IS A CONNECTION ON AN ELECTRONIC CIRCUIT BOARD. THE NOTES AND THE TAG PAGE CAN LOCATE THE APPROPRIATE BOARD.
S+ 08
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

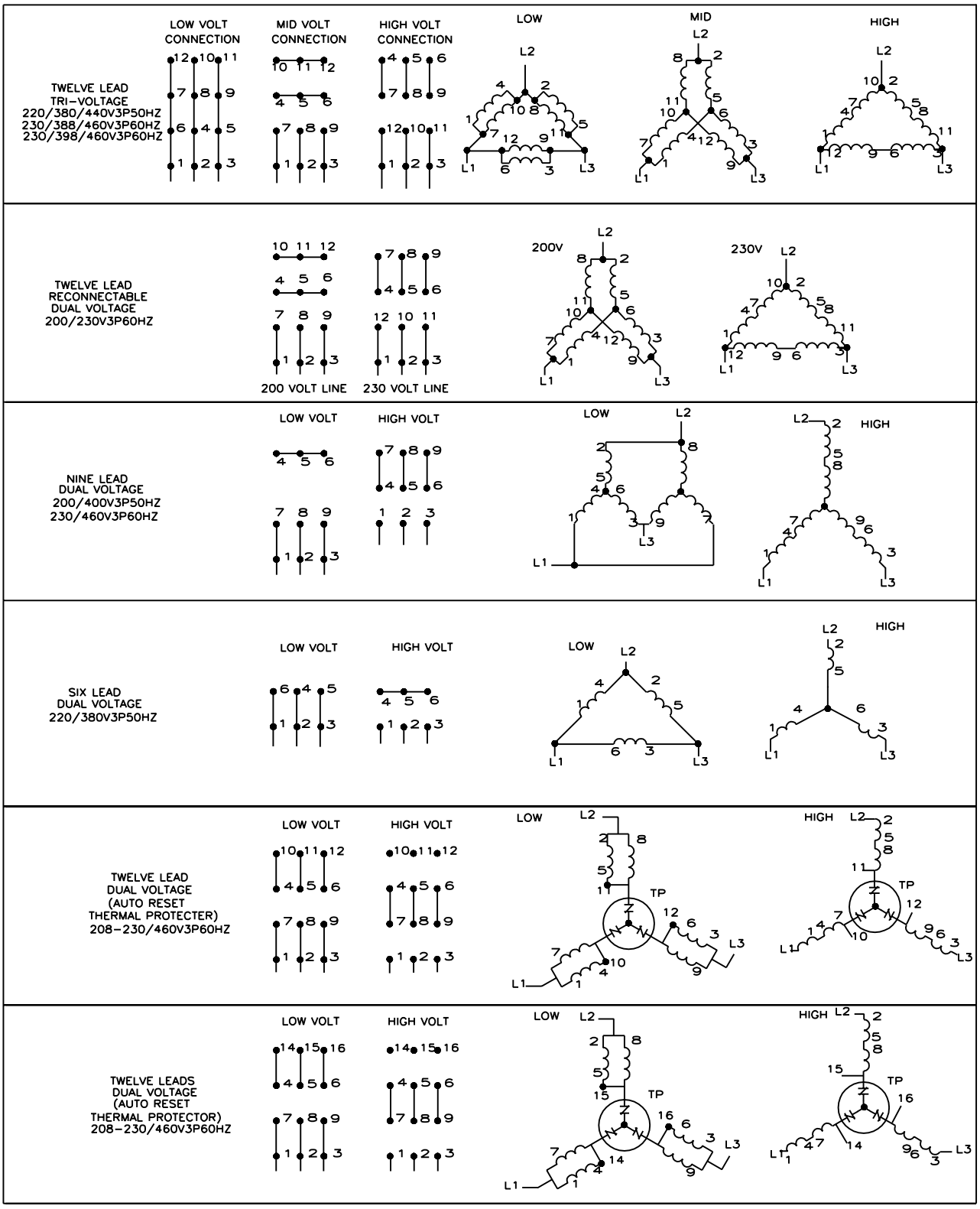
THREE PHASE SINGLE SPEED MOTORS WITH MULTIPLE VOLTAGE RATINGS

(ONLY FOR MOTOR SUFFIXES LISTED)

PELLERIN MILNOR CORPORATION

BMP850029
993628

BMP850029
993628



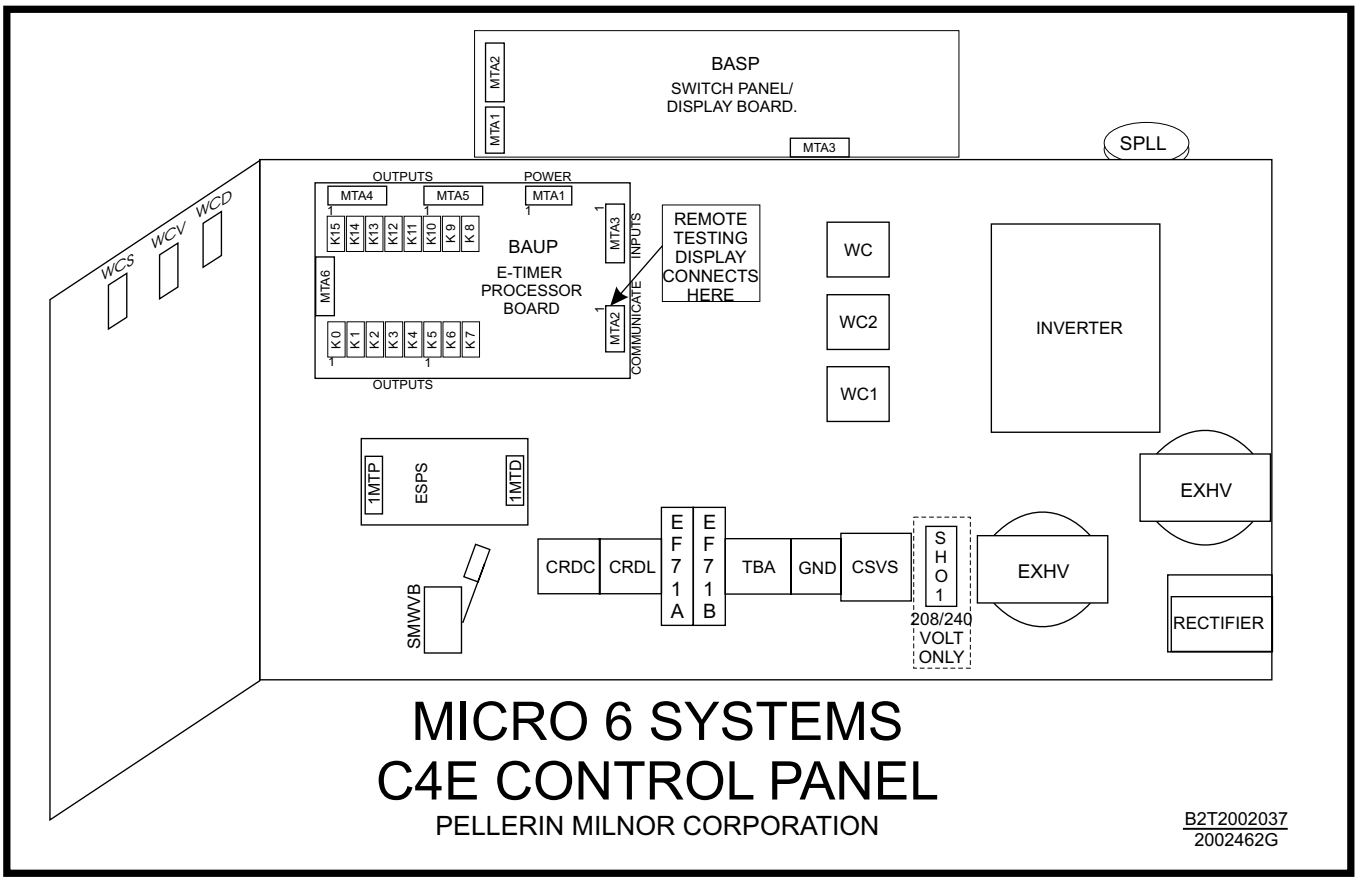
W80008

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

PELLERIN MILNOR CORPORATION

W80008
2001253A

W80008
2001253A



MICRO 6 SYSTEMS
C4E CONTROL PANEL

PELLERIN MILNOR CORPORATION

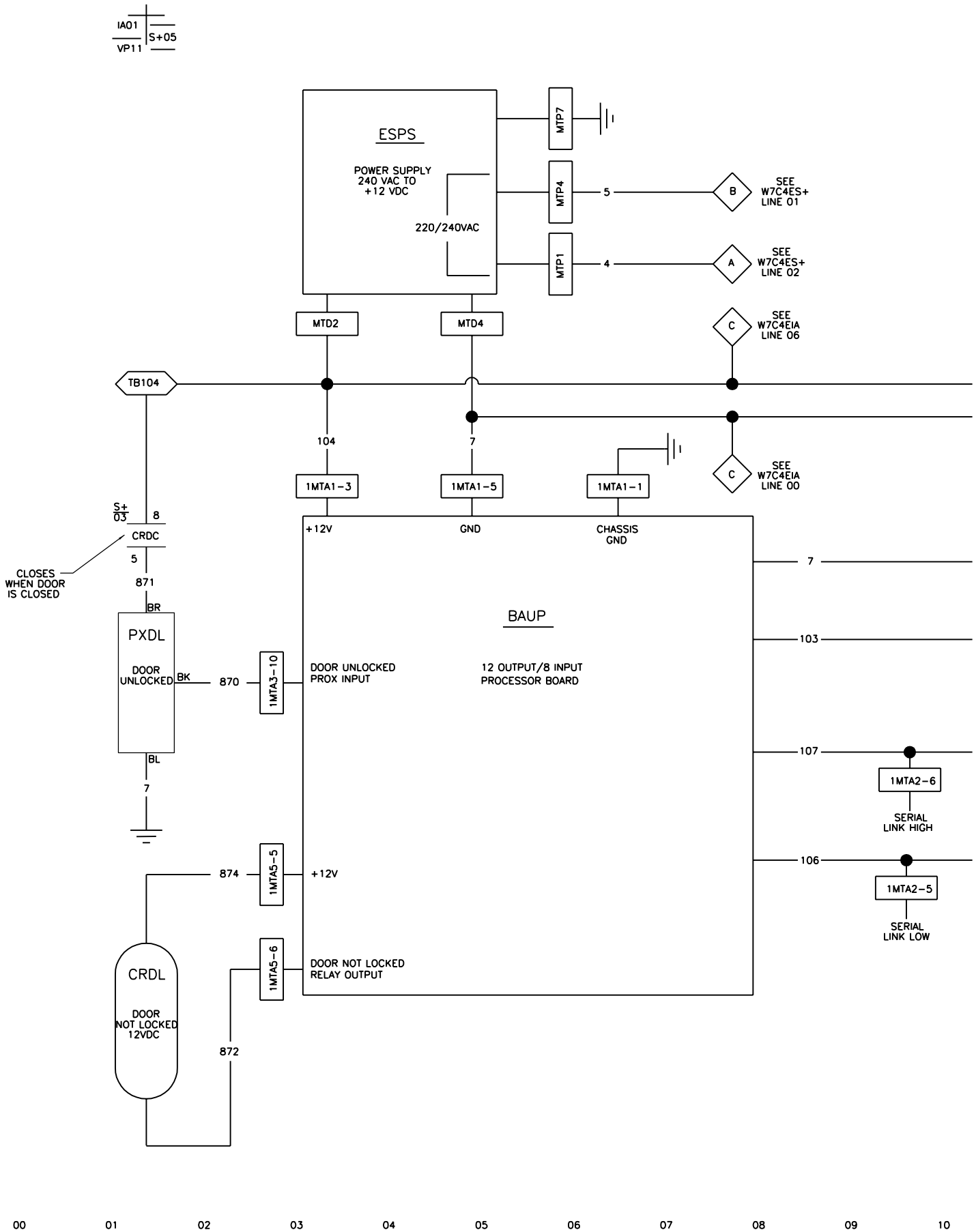
B2T2002037
2002462G

W7C4ETG
2002474B

W7C4ETG

MICRO 6 SYSTEMS
C4E
CONTROL BOX LAYOUTS

PELLERIN MILNOR CORPORATION



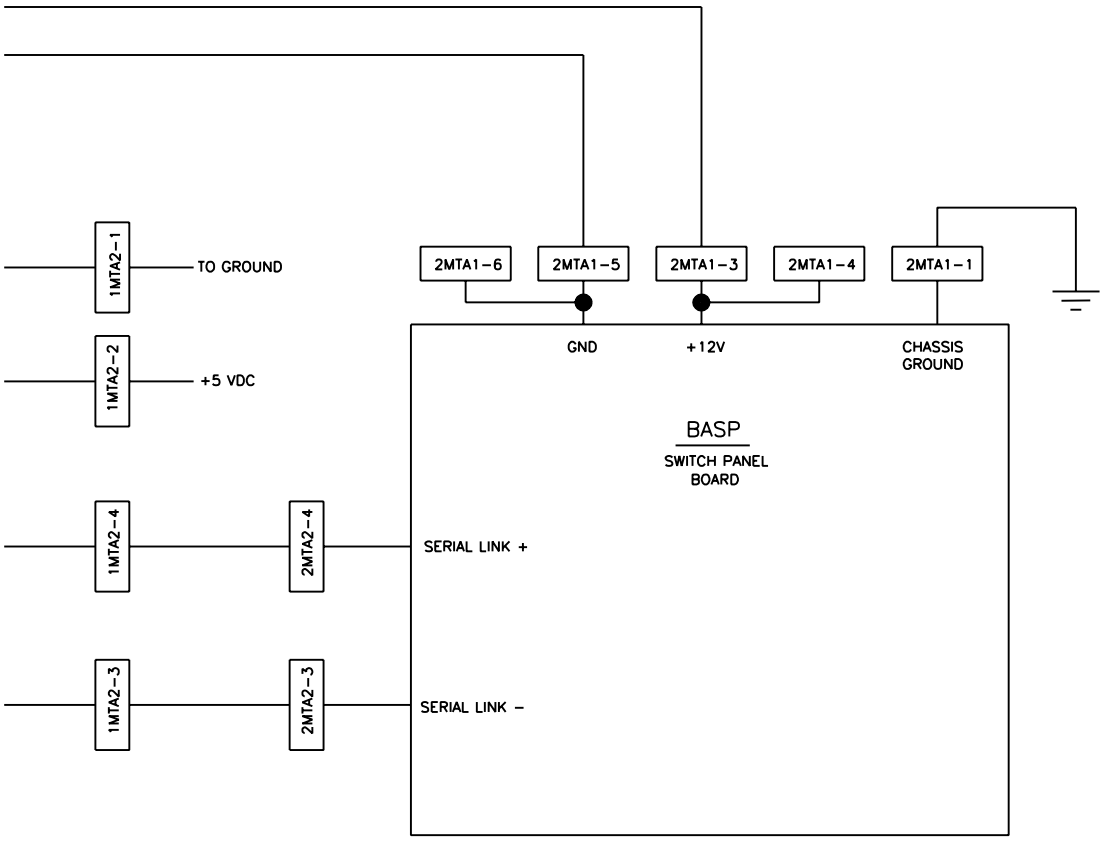
W7C4EBW
2002502B

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

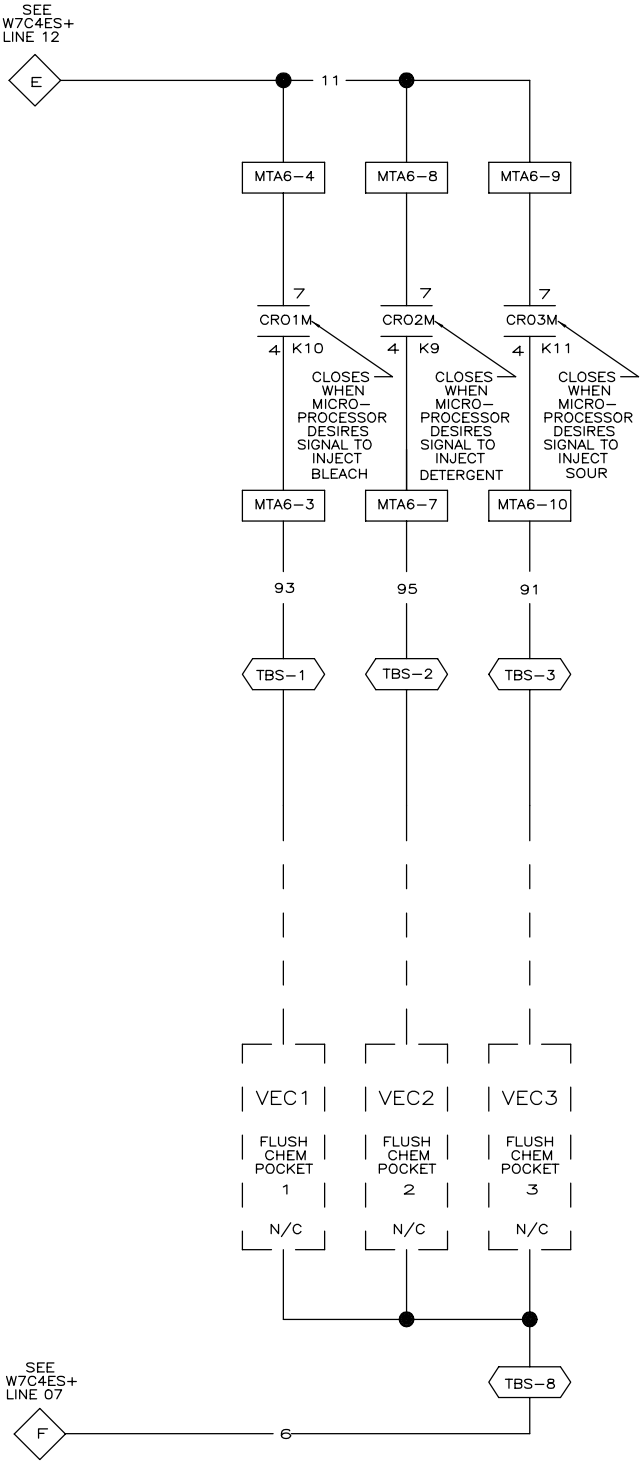
NOTES

1. 1MTA1, 1MTA2, 1MTA3 AND 1MTA5 LOCATED ON BAUP PROCESSOR BOARD.
2. 2MTA1 AND 2MTA2 ARE LOCATED ON BASP SWITCHPANEL BOARD.



W7C4EBW
MICRO 7 SYSTEMS
SCHEMATIC: BOARD TO BOARD WIRING
PELLERIN MILNOR CORPORATION

11 12 13 14 15 16 17 18 19



00 01 02 03 04 05 06 07 08

W7C4ECF
2002474B

LITHO IN U.S.A.

W7C4ECF

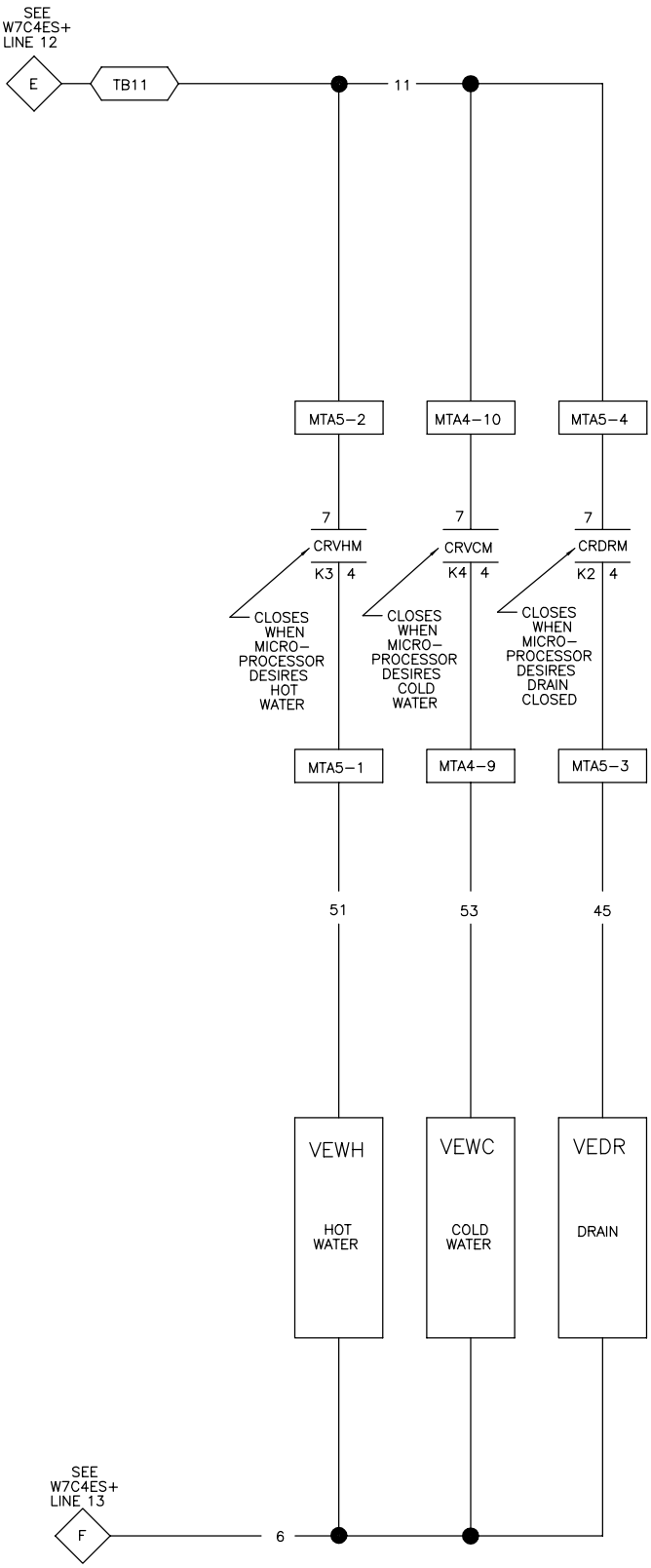
SCHEMATIC: FLUSHING SUPPLIES

220V1P50HZ/240V1P60HZ

PELLERIN MILNOR CORPORATION

NOTES:

1. MTA–6 IS LOCATED ON THE PROCESSOR BOARD.
2. TBS IS LOCATED NEAR THE REAR ACCESS PANEL NEXT TO THE INCOMING POWER CONNECTIONS.



00 01 02 03 04 05 06 07 08 09

W7C4EEV
2002474B

W7C4EEV

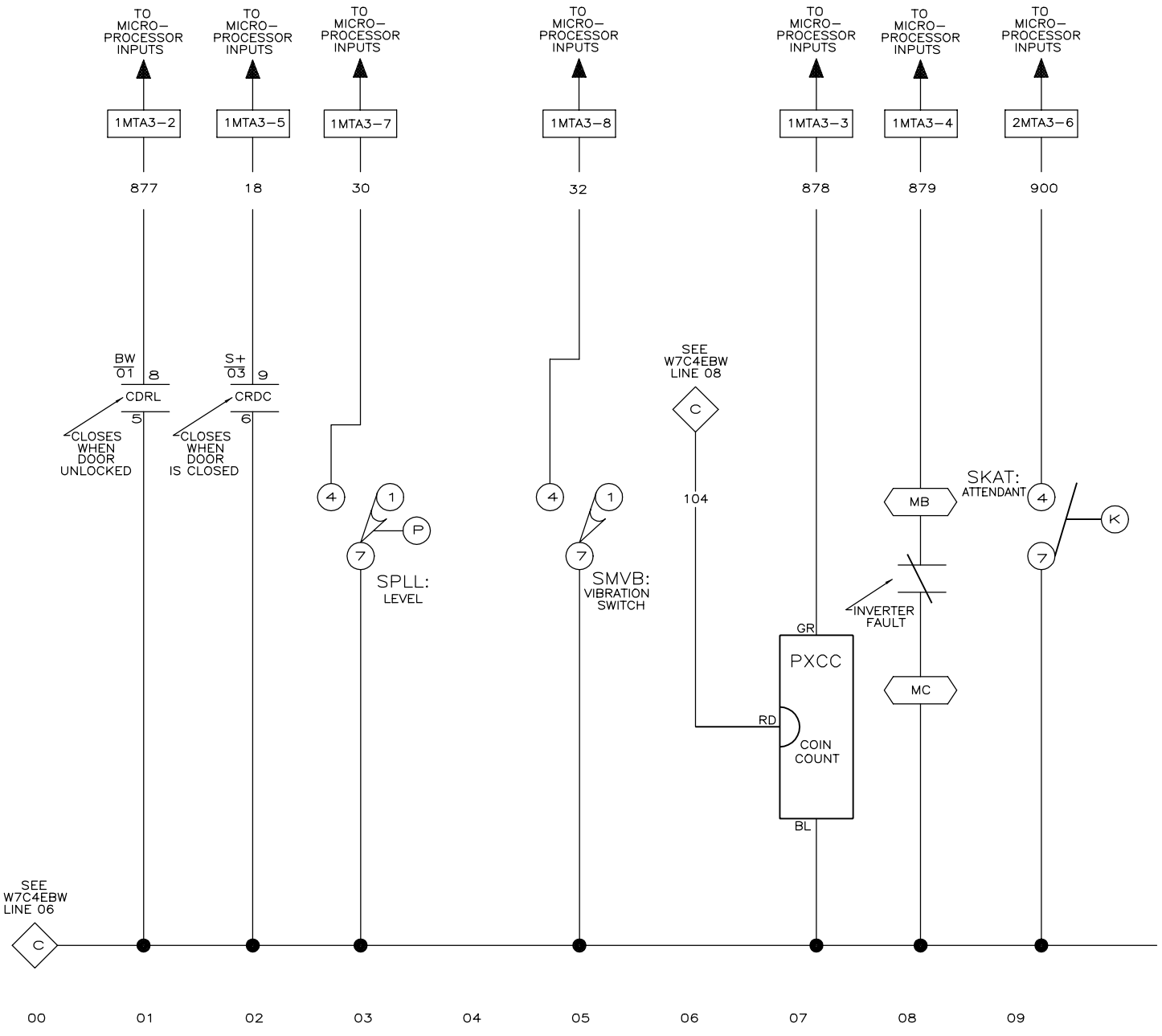
SCHEMATIC: ELECTRIC VALVES
220V1P50HZ/240V1P60HZ

PELLERIN MILNOR CORPORATION

NOTE

1. MTA4, 5, & 7 ARE LOCATED ON THE DISPLAY BOARD.

10 11 12 13 14 15 16



W7C4EIA
2002474B

NOTES

COMPONENT LOCATED WITHIN DOTTED LINES ARE ON SWITCH PANEL BOARDS.

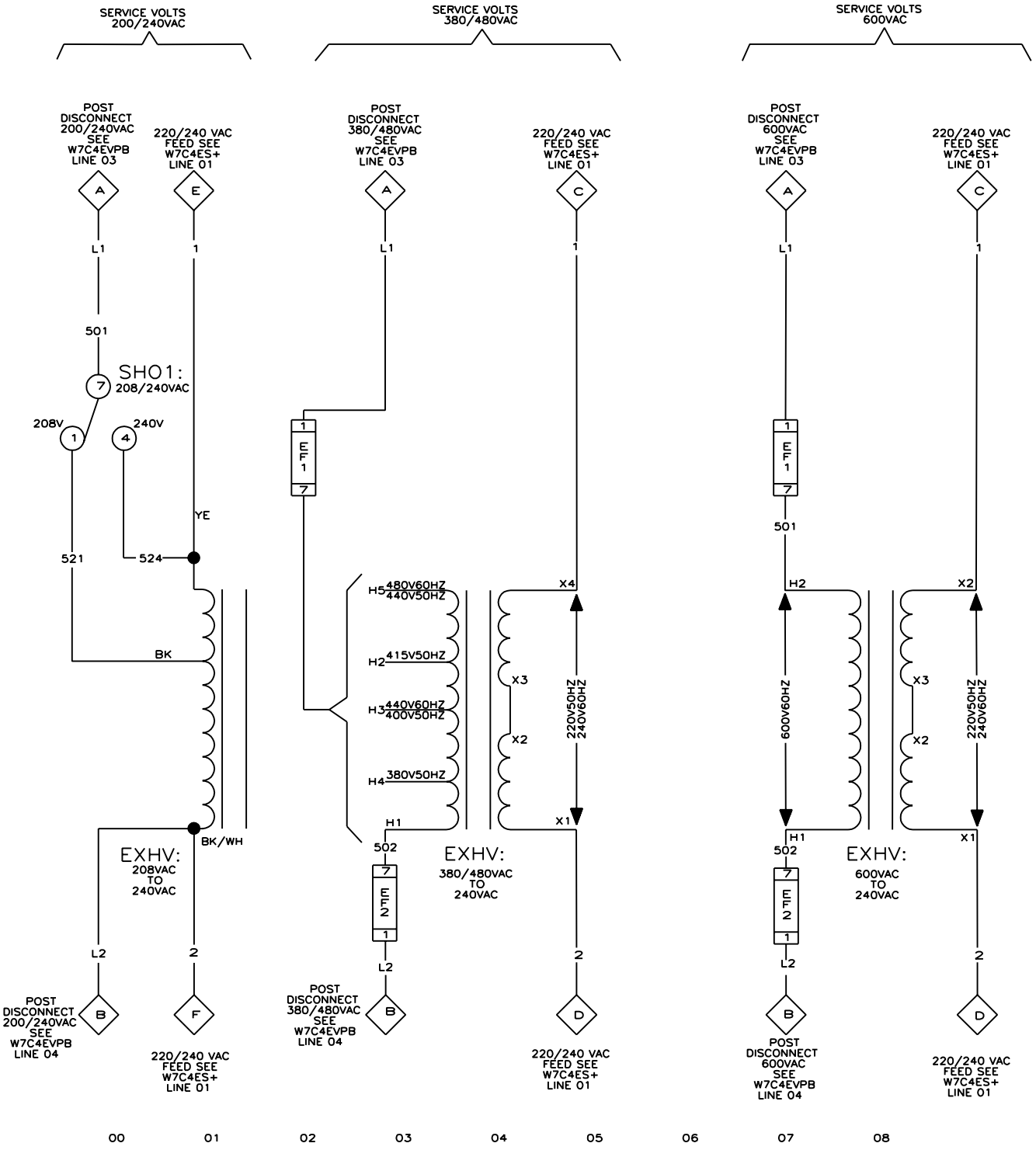
W7C4EIA

SCHEMATIC: MICROPROCESSOR INPUTS

PELLERIN MILNOR CORPORATION

NOTES

1. MTA–3 AND 7 ARE LOCATED ON THE PROCESSOR BOARD.
2. MB AND MC ARE LOCATED ON INVERTER.



W7C4ELV
2002474B

W7C4ELV

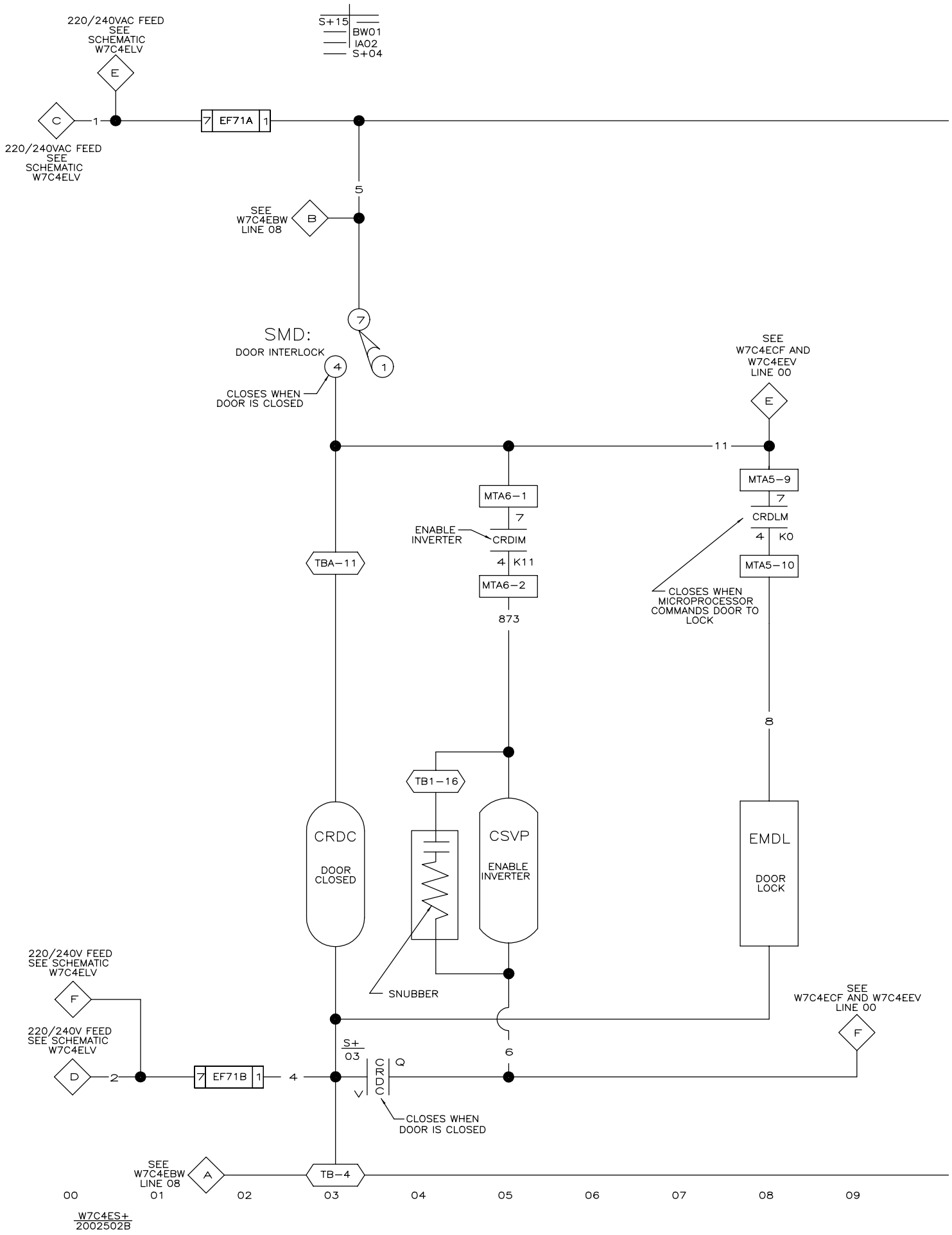
SCHEMATIC: CONTROL CIRCUIT TRANSFORMER 220V1P50HZ/240V1P60HZ

PELLERIN MILNOR CORPORATION

W7C4ELV
2002474B

09 10 11 12 13

W7C4ELV
2002474B

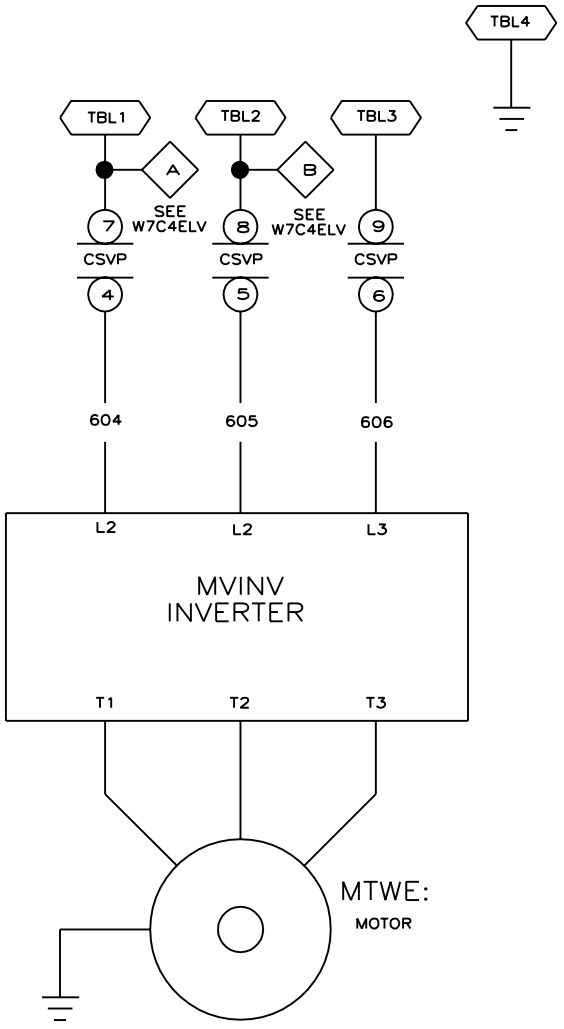

220/240VAC FEED SEE SCHEMATIC W7C4ELV
E
C
1
220/240VAC FEED SEE SCHEMATIC W7C4ELV
7 EF71A 1
S+15
BW01
IA02
S+04
5
SEE W7C4EBW LINE 08
B
7
1
SMD:
DOOR INTERLOCK
4
CLOSES WHEN DOOR IS CLOSED
SEE W7C4ECF AND W7C4EEV LINE 00
E
11
MTA6–1
7
ENABLE INVERTER
CRDIM
4 K11
MTA6–2
873
TBA–11
MTA5–9
7
CRDLM
4 K0
MTA5–10
CLOSES WHEN MICROPROCESSOR COMMANDS DOOR TO LOCK
8
TB1–16
CRDC
DOOR CLOSED
CSVP
ENABLE INVERTER
EMDL
DOOR LOCK
SNUBBER
220/240V FEED SEE SCHEMATIC W7C4ELV
F
220/240V FEED SEE SCHEMATIC W7C4ELV
D
2
7 EF71B 1
4
S+
03
CRDC
V
Q
6
CLOSES WHEN DOOR IS CLOSED
SEE W7C4ECF AND W7C4EEV LINE 00
F
SEE W7C4EBW LINE 08
A
TB–4
00
01
02
03
04
05
06
07
08
09
W7C4ES+
2002502B

W7C4ES+

SCHEMATIC: START CIRCUIT & DOOR INTERLOCK FOR 30015 AND 30022C4E

220V,1P,50HZ/240V,1P,60HZ

PELLERIN MILNOR CORPORATION



SC — SC

LITHO IN U.S.A.

00 01 02 03 04 05 06 07 08 09 10

W7C4EVPA
2002502B

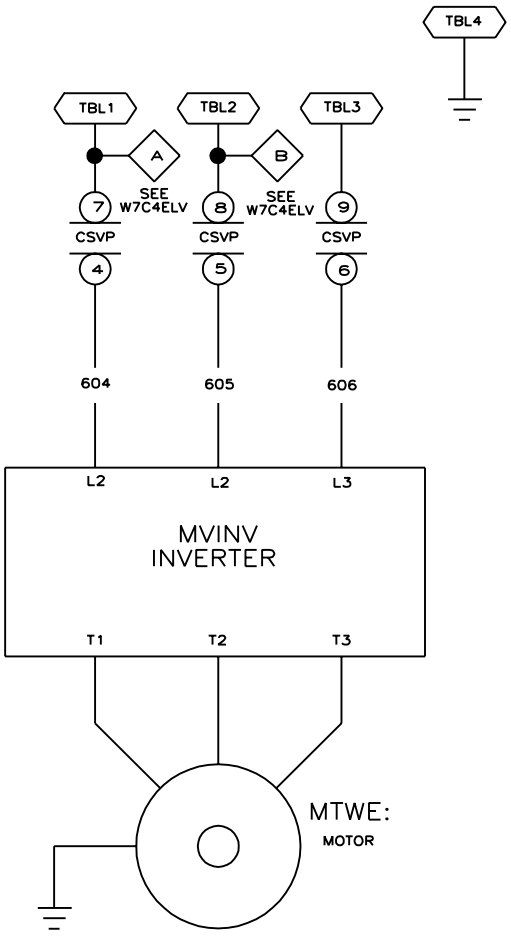
SOLENOIDS	CW K5	CCW K6	K1	K7
WASH	X			
DRAIN	X		X	
EXTRACT	X			X

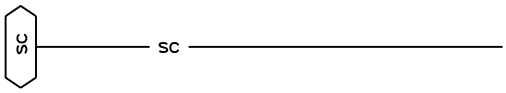
W7C4EVPA

SCHEMATIC: VARIABLE SPEED CONTROLLER 3022 SINGLE PHASE ONLY (GPD315)

PELLERIN MILNOR CORPORATION

NOTES
MTA4 & MTA5 ARE LOCATED ON THE PROCESSOR BOARD.



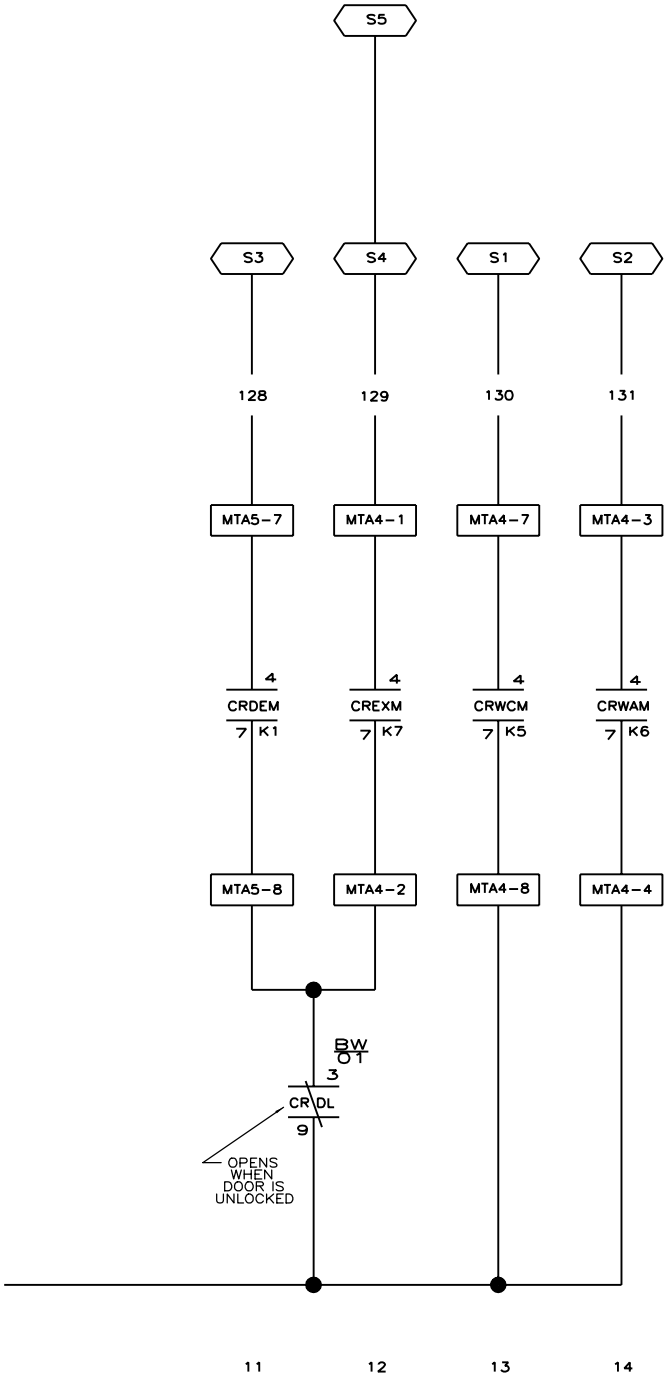


LITHO IN U.S.A.

00 01 02 03 04 05 06 07 08 09 10

W7C4EVPB
2002502B

SOLENOIDS	CW K5	CCW K6	K1	K7
WASH	X			
DRAIN	X		X	
EXTRACT	X			X



NOTES
MTA4 & MTA5 ARE LOCATED ON THE PROCESSOR BOARD.

W7C4EVPB
SCHEMATIC: VARIABLE SPEED CONTROLLER 3015 & 3022 3 PHASE 3015 SINGLE PHASE. (GPD305)

PELLERIN MILNOR CORPORATION