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Schematic/Electrical Parts

30022 & 36026X8R

42026 & 42032X7R

MILTOUCH-EX (TM) CONTROLS

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

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

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ME6HX8R1AE/25314A

COMPONENT PARTS LIST

W6X8RSPL/2025314N

COMPONENT NUMBER	FUNCTION OF THIS COMPONENT NUMBER	WHERE TO FIND THIS COMPONENT	MILNOR P/N	DESCRIPTION	LOCATION
	>>>COMPONENT LOCATIONS				
001	DETAIL-36/42 CONTROL BOX	W6X8RSTG1	B2T2014008	TAG:36/42 CONTROL BOX	CONTROL BOX
002	DETAIL-CONTROL BOARDS INPUTS/OUTPUTS	W6X8RSTG1	B2T2014013	TAG:MIILTOUCH-EX INPUTS/OUTPUTS	CONTROL BOX
003	DETAIL-POWER SUPPLY SETTINGS	W6X8RSTG1	B2T2014012	TAG:MILTOUCH-EX POWER SUPPLIES	CONTROL BOX
AC	**>>>ACCELORMETER**				
ACBA	ACCELEROMETER- EXACT EXTRACT	W6X8RSEC	EACCLRM3	ASSY:ACCEL O-5V DC OP STAPH 42	MOTOR RAIL
BA	**>>>PRINTED CIRCUIT BOARDS**				
BAD-1	BOARD-ANALOG TO DIGITAL CONVERTER	W6X8RSBW	08BSADCT	BD: SERIAL A-D CONVERT->TEST	CONTROL BOX
BAFR<11/20	BOARD FUSE/RELAY	W6X8RSS+	08BHFRCT	BD-T/V/X START CIRCUIT->TEST	CONTROL BOX
BAFR>11/20	BOARD FUSE/RELAY	W6X8RSS+	08BHFRDT	BD-T/V/X START CIRCUIT->TEST	CONTROL BOX
BAS	BOARD-16 SNUBBER CIRCUITS	W6X8RSCF	08BNCMBT	COIN MACHINE SNUBBER->TESTED	CONROL BOX
BAS	BOARD-16 SNUBBER CIRCUITS	W6X8RSEV	08BNCMBT	COIN MACHINE SNUBBER->TESTED	CONROL BOX
BAS	BOARD-16 SNUBBER CIRCUITS	W6X8RSS+	08BNCMBT	COIN MACHINE SNUBBER->TESTED	CONROL BOX
BAS	BOARD-16 SNUBBER CIRCUITS	W6X8RSS+A	08BNCMBT	COIN MACHINE SNUBBER->TESTED	CONROL BOX
BBAD-1	BOARD-ACCELEROMETER EXACT EXTRACT	W6X8RSEC	08BSBADCTE	SERIAL BALANCE A-D BD EXTACTOR-TEST	CONTROL BOX
BDA-1	BOARD-DIGITAL TO ANALOG CONVERTER	W6X8RSBW	08BSDACHT	BD:HI-RES SERIAL D-A->TEST	CONTROL BOX
BIO-1	BOARD-8OUTPUT/16INPUT #1	W6X8RSBW	08BS816CHT	BD 8OUT-16IN HIGH SPD->TEST	CONTROL BOX
BIO-2	BOARD-8OUTPUT/16INPUT #2	W6X8RSBW	08BS816CHT	BD 8OUT-16IN HIGH SPD->TEST	CONTROL BOX
BLB	BOARD-LEVEL TRANSDUCER	W6X8RSBW	08BNLTT	LEVEL TRANSDUCER BD->TEST	CONTROL BOX
BMTH	BOARD-6 CHANNEL MOTHER	W6X8RSBW	08BS3MTHAT	SERIAL 3 CARD MOTHER BD->TEST	CONTROL BOX
BO24-1	BOARD-24 OUTPUT #1	W6X8RSBW	08BSO24AT	BD:SERIAL 24 OUTPUT->TEST	CONTROL BOX
BO24-2	BOARD-24 OUTPUT #2	W6X8RSBW	08BSO24AT	BD:SERIAL 24 OUTPUT->TEST	CONTROL BOX
BPB < 2/5/16	BOARD-ARM9 PROCESSOR+TOUCHSCREEN	W6X8RSBW	08BHA9D3ET	ASSY: ARM9 PROC+OPTREX DSP>REVE-TEST	PROCESSOR BX
BPB > 2/5/16	BOARD-ARM9 PROCESSOR+TOUCHSCREEN	W6X8RSBW	08BHA9E3GT	ASSY: ARM9 PROC+OPTREX DSP>REVG-TEST	PROCESSOR BX
BSP	BOARD-SPEED SENSING	W6X8RSBW	08BNDSRAT	BD DRY SAFETY ROTATION->TEST	CONTROL BOX
CD	**>>>RELAY-DELAY**				
CDSD	DELAY-SAMPLE DOOR	W6X8RSDS	08TF090A71	ELECT ADJ RELAY 1-90 230V 60C	CONTROL BOX
CL	**>>>RELAY-LATCH**				
CLA <3-25	LATCH-DOOR SEAL	W6X8RSS+A	09CL2C-C71	RELAY-LATCH DPDT 240V 2-COIL	CONTROL BOX
CLA	LATCH-DOOR SEAL	W6X8RSS+A	09CL2C-D71	RELAY-LATCH DPDT 240V 2-COIL	CONTROL BOX
CP	**>>>PHOTOEYE**				
CPSP	PHOTOEYE-SPEED	W6X8RSBW	09RPE013	SENSOR E-Z BEAM DC	MAIN PULLEY
CR	**>>>RELAY-PILOT OR CONTROL**				

COMPONENT PARTS LIST

COMPONENT NUMBER	FUNCTION OF THIS COMPONENT NUMBER	WHERE TO FIND THIS COMPONENT	MILNOR P/N	DESCRIPTION	LOCATION
CRC01	RELAY-INTERPRET #1	W6X8RSCP	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	INTERPRET BOX
CRC02	RELAY-INTERPRET #2	W6X8RSCP	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	INTERPRET BOX
CRC03	RELAY-INTERPRET #3	W6X8RSCP	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	INTERPRET BOX
CRC04	RELAY-INTERPRET #4	W6X8RSCP	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	INTERPRET BOX
CRC05	RELAY-INTERPRET #5	W6X8RSCP	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	INTERPRET BOX
CRC06	RELAY-INTERPRET #6	W6X8RSCP	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	INTERPRET BOX
CRC07	RELAY-INTERPRET #7	W6X8RSCP	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	INTERPRET BOX
CRC08	RELAY-INTERPRET #8	W6X8RSCP	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	INTERPRET BOX
CRC09	RELAY-INTERPRET #9	W6X8RSCP	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	INTERPRET BOX
CRC10	RELAY-INTERPRET #10	W6X8RSCP	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	INTERPRET BOX
CRC11	RELAY-INTERPRET #11	W6X8RSCP	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	INTERPRET BOX
CRC12	RELAY-INTERPRET #12	W6X8RSCP	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	INTERPRET BOX
CRC13	RELAY-INTERPRET #13	W6X8RSCP	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	INTERPRET BOX
CRC14	RELAY-INTERPRET #14	W6X8RSCP	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	INTERPRET BOX
CRC15	RELAY-INTERPRET #15	W6X8RSCP	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	INTERPRET BOX
CRD	RELAY-OK TO OPEN DOOR	W6X8RSS+	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	BAFR BOARD
CRD	RELAY-DOOR UNLATCH	W6X8RSS+A	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	CONTROL BOX
CRDL	RELAY-DOOR CLOSED AND LOCKED	W6X8RSS+	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	BAFR BOARD
CRE	RELAY-OK TO LOCK DOOR	W6X8RSS+	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	BAFR BOARD
CRS+	RELAY-START 3-WIRE	W6X8RSS+	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	CONTROL BOX
CRS+	RELAY-START 3-WIRE	W6X8RSS+A	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	CONTROL BOX
CRSAD	RELAY-DISABLE DOOR	W6X8RSDS	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	CONTROL BOX
CRSAE	RELAY-SAMPLE DESIRED	W6X8RSDS	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	CONTROL BOX
CRSDR	RELAY-SAMPLE DOOR RELEASE	W6X8RSDS	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	CONTROL BOX
CRSG	RELAY-SIGNAL (OPITONAL FLASHING LIGHT)	W6X8RSS+	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	CONTROL BOX
CRSG	RELAY-SIGNAL (OPITONAL FLASHING LIGHT)	W6X8RSS+A	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	CONTROL BOX
CS	**>>>CONTACTOR-MOTOR STARTER**				
CSR	CONTACTOR-RECIRCULATE	W6X8RSEV	09MC04E371	32A 3P CONT.NR 240V5/6 IEC	CONTROL BOX
CSVS	CONTACTOR-INVERTER 3022X8	W6X8RSS+	09MC08C371	16A 3P MCS CONT NR 240V5/6	CONTROL BOX
CSVS	CONTACTOR-INVERTER 36X8, 42X7	W6X8RSS+A	09MC08G371	37A 3P MCS CONT NR 240V5/6	CONTROL BOX
EB	**>>>BUZZER OR AUDIBLE SIGNAL**				
EBSG	BUZZER-SIGNAL AUDIBLE	W6X8RSS+	09H016	BUZZ. 230V W/6-32 CTR+6" LEADS	SWITCH PANEL
EBSG	BUZZER-SIGNAL AUDIBLE	W6X8RSS+A	09H016	BUZZ. 230V W/6-32 CTR+6" LEADS	SWITCH PANEL

COMPONENT PARTS LIST

COMPONENT NUMBER	FUNCTION OF THIS COMPONENT NUMBER	WHERE TO FIND THIS COMPONENT	MILNOR P/N	DESCRIPTION	LOCATION
EF	**>>>FUSE OR FUSE HOLDER**				
EF01	FUSE-CONTROL CIRCUIT	W6X8RSLV	09FF006AMA	FUSE BK/ABC 6 AMP 250V BUSS	CONTROL BOX
EF02	FUSE-CONTROL CIRCUIT	W6X8RSLV	09FF006AMA	FUSE BK/ABC 6 AMP 250V BUSS	CONTROL BOX
EF1	FUSE-PRIMARY INCOMING VOLTAGE	W6X8RSLV	09FF005AWN	BUSE BUSS KTK 5AMP 600V=HPS HOLDER	CONTROL BOX
EF2	FUSE-PRIMARY INCOMING VOLTAGE	W6X8RSLV	09FF005AWN	BUSE BUSS KTK 5AMP 600V=HPS HOLDER	CONTROL BOX
EF	**>>FLASHING LIGHT**				
EFSG	FLASHING LIGHT-LED	W6X8RSFS	09H025V12	BEACON ROTARY AMBER LED 12VDC	SWITCH PANEL
EL	**>>>LIGHT-PILOT OR INDICATOR**				
ELSAO	LIGHT-OK TO OPEN SAMPLE DOOR	W6X8RSDS	09J060WH71	LAMP 1/2" WHITE 240VAC TABS	SAMPLE SWPNL
ELSDR	LIGHT-SAMPLE DESIRED	W6X8RSDS	09J060A71	LAMP 1/2" AMB 250V IDI 1051QC3	SAMPLE SWPNL
ELSES	LIGHT-ILLUMINATED EMERGENCY STOP	W6X8RSS+A	09N507E	ESTOP SWITCH HEAD RED CLEAR	SWITCH PANEL
ELSG	LIGHT-SIGNAL VISUAL	W6X8RSS+	09J060A71	LAMP 1/2" AMB 250V IDI 1051QC3	SWITCH PANEL
ELSG	LIGHT-SIGNAL VISUAL	W6X8RSS+A	09J060A71	LAMP 1/2" AMB 250V IDI 1051QC3	SWITCH PANEL
EM	**>>>ELECTROMAGNET AND SOLENOID**				
EMDL	SOLENOID-DOOR LATCH	W6X8RSS+	09K063C24	DOOR LOCK SOLENOID 24V	DOOR LATCH
EMDL	SOLENOID-DOOR LATCH	W6X8RSS+A	09K062A71	SOLENOID 240/60--220/50 = ILOC	DOOR LATCH
EMHR	METER-RUN TIME	W6X8RSFS	38C203	HOUR METER 3.8IN 3 HOLE MTG 230V/60C	CONTROL BOX
ES	**>>>POWER SUPPLY-ELECTRONIC**				
ESPS	POWER SUPPLY-CARD CAGE	W6X8RSBW	08PSS3401T	40 WATT POWER SUPPLY TESTED	CONTROL BOX
ESPS2	POWER SUPPLY-PROCESSOR	W6X8RSBW	08PSS2401T	PWR SUPPLY 40WATT 120/240V TO 12V TEST	CONTROL BOX
ET	**>>>THERMAL OVERLOAD DEVICES**				
ETDB	OVERLOAD-DYNAMIC BRAKE	W6X8RSS+	09F024A	OL RELAY 1P SZ1 SQD #9065-C01	CONTROL BOX
ETDB	OVERLOAD-DYNAMIC BRAKE	W6X8RSS+A	09F024A	OL RELAY 1P SZ1 SQD #9065-C01	CONTROL BOX
ETR	OVERLOAD-RECIRCULATION MOTOR	W6X8RSS+	09FTD0016T	E1 PLUS OL RELAY 1.0-5.0A	CONTROL BOX
ETR	OVERLOAD-RECIRCULATION MOTOR	W6X8RSS+A	09FTD0016T	E1 PLUS OL RELAY 1.0-5.0A	CONTROL BOX
ETVS	OVERLOAD LOAD-VARIABLE SPD	W6X8RSS+	09FTD0037T	E1 PLUS OL RELAY 3.2-16A	CONTROL BOX
ETVS	OVERLOAD- INVERTER 36X8R, 42X7R	W6X8RSS+A	09FTD0121T	E1 PLUS OL RELAY 9-45A	CONTROL BOX
EX	**>>>TRANSFORMERS**				
EX37	TRANSFORMER-INCOMING VOLT.120VAC	W6X8RSLV	MESSAGE EW	SEE EX37-1, OR -2 FOR VOLTAGE	CONTROL BOX
EX37-1	TRANSFORMER-208 TO 240V	W6X8RSLV	98CMCR0902	AUTOXFMR 208V-230V 250VA	CONTROL BOX
EX37-2	TRANSFORMER-380/480 TO 240VAC	W6X8RSLV	09UA025AAB	XFMR 380-480PRI/120-240SEC250V	CONTROL BOX
MT	**>>>MOTORS**				
MTD	MOTOR-DRIVE	W6X8RSS+	MESSAGE SO	SEE SPECIFIC COMPONENT+NAMEPLATE	MACHINE

COMPONENT PARTS LIST

COMPONENT NUMBER	FUNCTION OF THIS COMPONENT NUMBER	WHERE TO FIND THIS COMPONENT	MILNOR P/N	DESCRIPTION	LOCATION
MTD	MOTOR-DRIVE	W6X8RSS+A	MESSAGE SO	SEE SPECIFIC COMPONENT+NAMEPLATE	MACHINE
MTLF	FILTER-INVERTER/MOTOR POWER	W6X8RSS+	09MVFILTR1	INCOMING POWER FILTER CAP	CONTROL BOX
MTLF	FILTER-INVERTER/MOTOR POWER	W6X8RSS+A	09MVFILTR1	INCOMING POWER FILTER CAP	CONTROL BOX
MTR	MOTOR-RECIRCULATION	W6X8RSS+	MESSAGE SO	SEE SPECIFIC COMPONENT+NAMEPLATE	MACHINE
MTR	MOTOR-RECIRCULATION	W6X8RSS+A	MESSAGE SO	SEE SPECIFIC COMPONENT+NAMEPLATE	MACHINE
MTVS	FAN-INVERTER COOLING	W6X8RSS+	13AF235A71	FAN 235CFM 230V 50/60	BACK C-BOX
MTVS	FAN-INVERTER COOLING	W6X8RSS+A	13AF235A71	FAN 235CFM 230V 50/60	BACK C-BOX
MV	**>>>MOTOR POWER INVERTERS**				
MVDBR	RESISTOR-DYNAMIC BRAKE	W6X8RSS+	09MV100RES	RESISTOR 100 OHM 225WATT ADJ	BELOW C-BX
MVDBR	RESISTOR-DYNAMIC BRAKE	W6X8RSS+A	09MV100RES	RESISTOR 100 OHM 225WATT ADJ	BELOW C-BX
MVFLT	INV FILTER-DRIVE	W6X8RSS+	09MVFILTR1	INCOMING POWER FILTER CAP	CONTROL BOX
MVFLT	INV FILTER-DRIVE	W6X8RSS+A	09MVFILTR1	INCOMING POWER FILTER CAP	CONTROL BOX
MVINR-H	INV IN LINE REACTOR 380-480V 3022 MODEL	W6X8RSS+	09MX100A96	REACTOR 10HP 460V 16A	CONTROL BOX
MVINR-H	INV IN LINE REACTOR 280-4800V 36/42 MODELS	W6X8RSS+A	09MX250A96	REACTOR 25HP 460V 35A	CONTROL BOX
MVINR-L	INV IN LINE REACTOR 200-240V 3022 MODEL	W6X8RSS+	09MX100A74	REACTOR 25HP 230V 35A	CONTROL BOX
MVINR-L	INV IN LINE REACTOR 200-240V 36/42 MODELS	W6X8RSS+A	09MX200A74	REACTOR 20HP 230V 55A	CONTROL BOX
MVINV-H	INVERTER-3022X8R 380-600 V	W6X8RSS+	09MWB00996	V1000 INVERTER 9.2AMP 460V	CONTROL BOX
MVINV-H	INVERTER-36" X8R 380-600 VOLTS	W6X8RSS+A	09MWB01896	V1000 INVERTER 18AMP 460V	CONTROL BOX
MVINV-H	INVERTER-42" X7R 380-600 VOLTS	W6X8RSS+A	09MWA02496	F7 INVERTER 24 AMP	CONTROL BOX
MVINV-L	INVERTER-3022X8R 200-240V	W6X8RSS+	09MWB01774	V1000 INVERTER 17.5AMP 230V	CONTROL BOX
MVINV-L	INVERTER-36" X8R 200-240VOLTS	W6X8RSS+A	09MWB03374	V1000 INVERTER 33AMP 230V	CONTROL BOX
MVINV-L	INVERTER-42" X7R 200-240VOLTS	W6X8RSS+A	09MWA04574	F7 INVERTER 45 AMP	CONTROL BOX
PS	**>>POWER SUPPLY-ELECTRONIC**				
PSFL	POWER SUPPLY-FLASHING LIGHT (OPTIONAL)	W6X8RSFS	08PSS3401T	40 WATT POWER SUPPLY TESTED	CONTROL BOX
RS	**>>RESISTORS**				
RS01	RESISTOR 16OHM 25W	W6X8RSBW	ECEUMTRES	LOAD RESISTOR ASSY MILTOUCH EX	LOW VOLT BOX
SH	**>>>SWITCH-HAND OPERATED**				
SH01	SWITCH-208-240V SELECT	W6X8RSLV	09N050	TOGSW SPDT NO OFF 10A 250V	CONTROL BOX
SHDOH	SWITCH-OPEN DOOR	W6X8RSI1A	09N405PB12	SWASS PB BLUE 1NO/2NC	SWITCH PANEL
SHDOH	SWITCH-DOOR OPEN	W6X8RSS+	09N405PB12	SWASS PB BLUE 1NO/2NC	SWITCH PANEL
SHDOH	SWITCH-DOOR OPEN	W6X8RSS+A	09N405PB12	SWASS PB BLUE 1NO/2NC	SWITCH PANEL
SHSAD	SWITCH-SAMPLE DESIRED	W6X8RSDS	09N400CBNO	CONTACT BLK ONLY 1-NO SQD#ZB2BE101	SAMPLE SWPL
SHSAR	SWITCH--SAMPLE DOOR RESET	W6X8RSDS	09N400CBNC	CONTACT BLK ONLY 1-NC SQD#ZB2BE102	SAMPLE SWPL

COMPONENT PARTS LIST

COMPONENT NUMBER	FUNCTION OF THIS COMPONENT NUMBER	WHERE TO FIND THIS COMPONENT	MILNOR P/N	DESCRIPTION	LOCATION
SHSMA	SWITCH-MASTER	W6X8RSS+	09N405M210	SWASS M2W 1NO	SWITCH PANEL
SHSMA	SWITCH-MASTER	W6X8RSS+A	09N405M210	SWASS M2W 1NO	SWITCH PANEL
SHSOE	SWITCH-EMERGENCY STOP	W6X8RSS+	09N505	SW ASSY EMER STOP	SWITCH PANEL
SHSOE	SWITCH-EMERGENCY STOP (OPTION)	W6X8RSS+	09N507G	ESTOP LIGHT ONLY 240VAC NEEDS 09N507F	SWITCH PANEL
SHSOE	SWITCH-EMERGENCY STOP	W6X8RSS+A	09N505	SW ASSY EMER STOP	SWITCH PANEL
SHSOE	SWITCH-EMERGENCY STOP (OPTION)	W6X8RSS+A	09N507G	ESTOP LIGHT ONLY 240VAC NEEDS 09N507F	SWITCH PANEL
SM	**>>>SWITCH-MECHANICAL OPERATED**				
SMDE	SWITCH-SECONDARY DOOR CLOSED	W6X8RSS+A	09RM01212S	CAPSW 12' 180DEG ROLLER SILVER	SHELL FRONT
SMEB	SWITCH-EXCURSION	W6X8RSI1A	09R008A	MICSW SPDT BZE6-2RN183	UNDER SHELL
SMPLL	SWITCH-DOOR CLOSED	W6X8RSS+	09R014A	MINI-SW SPDT STAKON #V15G1C26	DOOR LATCH
SMPLL	SWITCH-DOOR CLOSED	W6X8RSS+A	09R012	MICSW SPDT PAINTED BZE6-RN 01	DOOR LATCH
SMSDC	SWITCH-SAMPLE DOOR	W6X8RSDS	09RM01212S	CAPSW 12' 180DEG ROLLER SILVER	SAMPLE DOOR
SMWVB	SWITCH-VIBRATION	W6X8RSS+	09R020	SWITCH NC VIBR#WZ-2RW84429-P52	CONTROL BOX
SMWVB	SWITCH-VIBRATION	W6X8RSS+A	09R020	SWITCH NC VIBR#WZ-2RW84429-P52	CONTROL BOX
SP	**>>>SWITCH-PRESSURE OPERATED**				
SPA	PRESSURE SW-AIR PRESSURE AVAILABLE	W6X8RSS+A	09N082A	PRESSW NASON CLOSE @ 62 LB.	CONTROL BOX
SPD	PRESSURE SW-LEVEL OK TO OPEN DOOR	W6X8RSS+A	09N082B10	PRESSW NASON CLOSE @ 10 LB	CONTROL BOX
VE	**>>>VALVE-ELECTRIC OPERATED**				
VEC01	VALVE-CHEMICAL #1 FLUSH	W6X8RSCF	96P013B71	3/4" 2WAY PLASTIC VALVE 240V60C	SUPPLY INJEC
VEC02	VALVE-CHEMICAL #2 FLUSH	W6X8RSCF	96P013B71	3/4" 2WAY PLASTIC VALVE 240V60C	SUPPLY INJEC
VEC03	VALVE-CHEMICAL #3 FLUSH	W6X8RSCF	96P013B71	3/4" 2WAY PLASTIC VALVE 240V60C	SUPPLY INJEC
VEC04	VALVE-CHEMICAL #4 FLUSH	W6X8RSCF	96P013B71	3/4" 2WAY PLASTIC VALVE 240V60C	SUPPLY INJEC
VEC05	VALVE-CHEMICAL #5 FLUSH	W6X8RSCF	96P013B71	3/4" 2WAY PLASTIC VALVE 240V60C	SUPPLY INJEC
VEC06	VALVE-CHEMICAL #6 FLUSH	W6X8RSCX		SUPPLIED BY OTHERS	
VEC07	VALVE-CHEMICAL #7 FLUSH	W6X8RSCX		SUPPLIED BY OTHERS	
VEC08	VALVE-CHEMICAL #8 FLUSH	W6X8RSCX		SUPPLIED BY OTHERS	
VEC09	VALVE-CHEMICAL #9 FLUSH	W6X8RSCX		SUPPLIED BY OTHERS	
VEC10	VALVE-CHEMICAL #10 FLUSH	W6X8RSCX		SUPPLIED BY OTHERS	
VEC11	VALVE-CHEMICAL #11 FLUSH	W6X8RSCX		SUPPLIED BY OTHERS	
VEC12	VALVE-CHEMICAL #12 FLUSH	W6X8RSCX		SUPPLIED BY OTHERS	
VEC13	VALVE-CHEMICAL #13 FLUSH	W6X8RSCX		SUPPLIED BY OTHERS	
VEC14	VALVE-CHEMICAL #14 FLUSH	W6X8RSCX		SUPPLIED BY OTHERS	
VEC15	VALVE-CHEMICAL #15 FLUSH	W6X8RSCX		SUPPLIED BY OTHERS	

COMPONENT PARTS LIST

COMPONENT NUMBER	FUNCTION OF THIS COMPONENT NUMBER	WHERE TO FIND THIS COMPONENT	MILNOR P/N	DESCRIPTION	LOCATION
VEDL	VALVE-DOOR UNLATCH 36+42	W6X8RSS+A	96R301B71	1/8" AIR PILOT 3W NC 240V	VALVE BOX
VEDRR	VALVE-REUSE DRAIN	W6X8RSEV	96R301B71	1/8" AIRPILOT 3W NC 240V 50/60	AIR VALVE BX
VEDRS	VALVE-DRAIN	W6X8RSEV	96D350A71	DRN VAL 3"MTRDR 240V 50/60C	REAR OF MACH
VEFL	VALVE-FLUSH	W6X8RSCF	96P056A71	3/4" NC 230V 50/60 W/LEADS BURK	SUPPLY INJEC
VEPPO	VALVE-DOOR SEAL 36&42	W6X8RSS+A	96R302B71	1/8" AIR PILOT 3W NO 240V 50/60	AIR VALVE BX
VESDL	VALVE-SAMPLE DOOR LATCH	W6X8RSDS	96R301B71	1/8" AIR PILOT 3W NC 240V 50/60	AIR VALVE BX
VESTM	VALVE-STEAM 30"	W6X8RSEV	96TDC2BA71	1/2" N/C 2WAY 240V 50/60C STEAM	INLET PIPE
VESTM	VALVE-STEAM 36" & 42"	W6X8RSEV	96P040A71	3/4" STEAM VALVE 240V 50/60C 150PSI	REAR RT LEG
VEWC	VALVE-COLD WATER 30"	W6X8RSEV	96P057A71	1/2" NPT X 1/2" ORIFICE 240V 5/6	REAR OF MACH
VEWC	VALVE-COLD WATER 36"	W6X8RSEV	96P056A71	3/4" NC 230V 50/60 W/LEADS BURK	REAR RT LEG
VEWC	VALVE-COLD WATER 42"	W6X8RSEV	96P152A71	1+1/4" NC 240V W/LEADS BURK	REAR RT LEG
VEWH	VALVE-HOT WATER 30"	W6X8RSEV	96P057A71	1/2" NPT X 1/2" ORIFICE 240V 5/6	REAR OF MACH
VEWH	VALVE-HOT WATER 36"	W6X8RSEV	96P056A71	3/4" NC 230V 50/60 W/LEADS BURK	REAR RT LEG
VEWH	VALVE-HOT WATER 42"	W6X8RSEV	96P152A71	1+1/4" NC 240V W/LEADS BURK	REAR RT LEG
VEWVX	VALVE-EXTRA WATER 30022	W6X8RSEV	96P057A71	1/2" NPT X 1/2" ORIFICE 240V 5/6	REAR OF MACH
VEWVX	VALVE-EXTRA WATER 36026	W6X8RSEV	96P056A71	3/4" NC 230V 50/60 W/LEADS BURK	REAR OF MACH
VEWVX	VALVE-EXTRA WATER 42026 & 42032	W6X8RSEV	96P152A71	1+1/4" NC 240V W/LEADS BURK	REAR 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 (unless the time period is specifically extended for certain parts pursuant to a specific MILNOR published extended warranty) from our factory with no operating hour limitation. This warranty is contingent upon the equipment being installed, operated and serviced as specified in the operating manual supplied with the equipment, and operated under normal conditions by competent operators.

Providing we receive written notification of a warranted defect within 30 days of its discovery, we will—at our option—repair or replace the defective part or parts, EX Factory (labor and freight specifically NOT included). We retain the right to require inspection of the parts claimed defective in our factory prior to repairing or replacing same. We will not be responsible, or in any way liable, for unauthorized repairs or service to our equipment, and this warranty shall be void if the equipment is tampered with, modified, or abused, used for purposes not intended in the design and construction of the machine, or is altered in any way without MILNOR's written consent.

Parts damaged by exposure to weather, to aggressive water, or to chemical attack are not covered by this warranty. For parts which require routine replacement due to normal wear—such as gaskets, contact points, brake and clutch linings, belts, hoses, and similar parts—the warranty time period is 90 days.

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

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BIUUUD19 (Published) Book specs- Dates: 20081231 / 20081231 / 20081231 Lang: ENG01 Applic: UUU

How to Get the Necessary Repair Components

This document uses Simplified Technical English.
Learn more at http://www.asd-ste100.org.

You can get components to repair your machine from the approved supplier where you got this machine. Your supplier will usually have the necessary components in stock. You can also get components from the Milnor® factory.

Tell the supplier the machine model and serial number and this data for each necessary component:

- The component number from this manual
- The component name if known
- The necessary quantity
- The necessary transportation requirements
- If the component is an electrical component, give the schematic number if known.
- If the component is a motor or an electrical control, give the nameplate data from the used component.

To write to the Milnor factory:

Pellerin Milnor Corporation
Post Office Box 400
Kenner, LA 70063-0400
UNITED STATES

Telephone: 504-467-2787
Fax: 504-469-9777
Email: parts@milnor.com

— End of BIUUUD19 —

BIUUUK01 (Published) Book specs- Dates: 20130308 / 20130308 / 20130308 Lang: ENG01 Applic: PCR UUU

How to Use Milnor® Electrical Schematic Diagrams

Milnor® electrical schematic manuals contain a table of contents/component list and a set of schematic drawings. These documents are cross referenced and must be used together.

The table of contents/components list shows, for every component on every schematic in the manual, the component item number (explained in detail below), statement of function, parent schematic number, part number, description and electric box location. In older manuals, two component lists are provided: List 1 sorts the components by function, and List 2 by type of component. Newer schematic manuals include only the list sorted by component number.

The schematic drawings use symbols for each electromechanical component, and indicate the function of each. Integrated circuits are not shown, but the function of each microprocessor input and output is stated. Certain electrical components not pertinent to circuit logic, such as wire connectors, are not represented on the schematic.

Most machines require several schematics to describe the complete control system and all the options available on the included models. In most manuals there are some schematic pages that don't apply to your specific machine because certain options and configurations are mutually exclusive or are not necessary in all markets. You may find it helpful to mark or remove such pages. A schematic page that only applies to a subset of machines will normally state, in the title, which models and/or options it covers. Compare this with the nameplate on your machine and with your purchase records.

Each schematic is devoted to circuits with common functions (e.g., microprocessor inputs, motor contactors). Schematics appear in the manual in alphanumeric order.

1. Component Prefix Classifications and Descriptions

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

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

> **Note 1:** Some component class codes do not have a corresponding symbol, but are represented by a box and an accompanying note describing the component. Examples of such codes are BA (printed circuit board), ED (electronic display), and ES (electronic power supply).

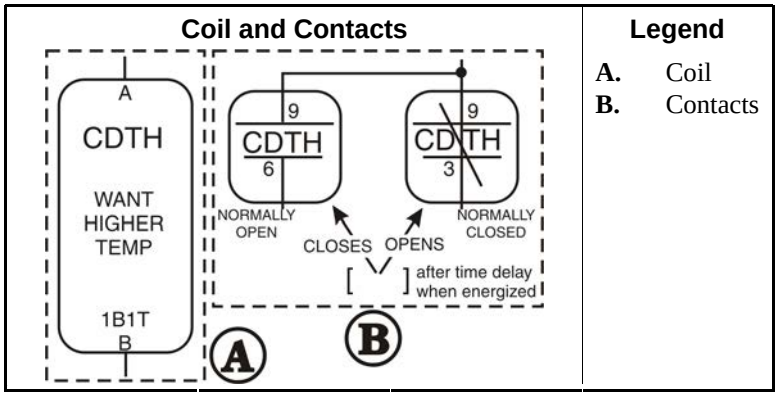
BA=Printed Circuit Board—Insulating substrate on which a thin pattern of copper conductors has been formed to connect discrete electronic components also mounted on the board.

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

Figure 1: Circuit Breaker (CB)

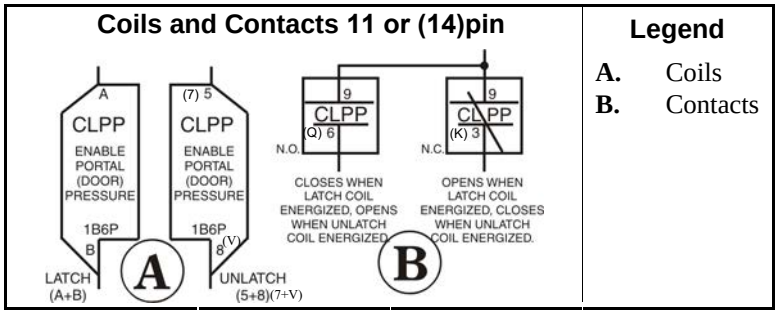
CD=Control, Time Delay Relay (Figure 2)—A relay whose contacts switch only after a fixed or adjustable delay, once voltage has been applied to its coil. The contacts switch back to normal (de-energized state) immediately when the voltage is removed.

Figure 2: Time Delay Relay (CD)



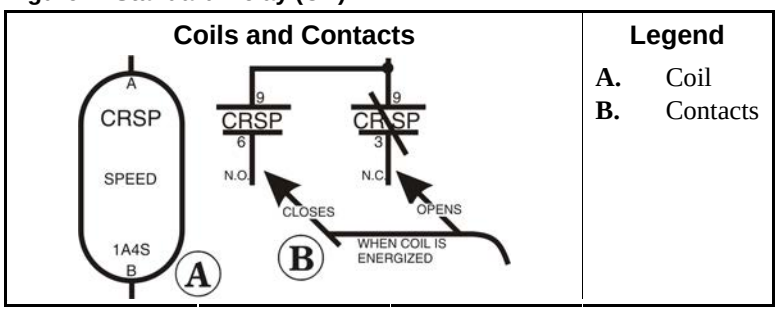
CL=Control, Latch Relay (Figure 3)—A relay which latches in an energized or set position when operated by one coil (the latch/set coil). The relay stays latched even though coil voltage is removed. The relay releases or unlatches when voltage is applied to a second coil (the unlatch/reset coil).

Figure 3: Latch Relay (CL)



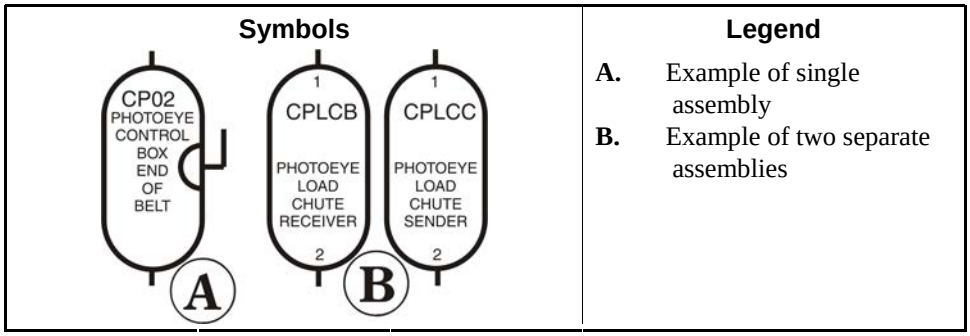
CR=Control, Relay (Figure 4)—A relay whose contacts switch immediately when voltage is applied to its coil and revert to normal when the voltage is removed.

Figure 4: Standard Relay (CR)



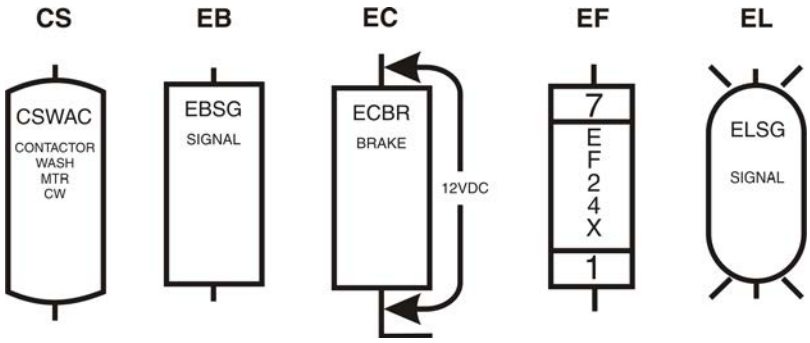
CP=Control, Photo-Eye (Figure 5)—Photo-eyes sense the presence of an object without direct physical contact. Photo-eyes consist of a transmitter, receiver, and output module. These components may be housed in one assembly with the transmitter bouncing light off of a reflector to the receiver, or these components can be housed in two separate assemblies with the transmitter pointed directly at the receiver. The photo-eye can be set to turn on its output either when the light beam becomes blocked (dark operate) or when it becomes un-blocked (light operate).

Figure 5: Photo-eye (CP)



CS=Control, Contactor/Motor Starter (Figure 6)—A relay capable of handling heavier electrical loads, usually a motor.

Figure 6: Other Control Symbols



EB=Electric Buzzer (Figure 6)—An audible signaling device.

EC=Electric Clutch (Figure 6)—A clutch consists of a coil and a rotor. The rotor has two separate rotating plates. These plates are free to rotate independent of each other until the coil is energized. Once energized the two plates turn as one.

ED=Electronic Display—A visual presentation of data, such as an LCD (liquid crystal display), LED (light emitting diode) display, or VFD (vacuum florescent display).

EF=Electric Fuse (Figure 6)—A fuse is an over-current safety device with a circuit opening fusible member which is heated and severed by the passage of over-current through it.

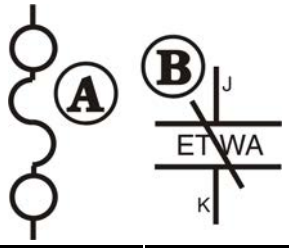
EL=Electric Light (Figure 6)—Indicator lights may be either incandescent or fluorescent.

EM=Electro Magnet Solenoid—A device consisting of a core surrounded by a wire coil through which an electric current is passed. While current is flowing, iron is attracted to the core (e.g., a pinch tube drain valve solenoid).

ES=Electronic Power Supply—A device that converts AC (alternating current) to filtered and regulated DC (direct current). The input voltage to the power supply is usually 120 or 240 VAC. The output is +5, +12, and -12 VDC.

ET=Thermal Overload (Figure 7)—A safety device designed to protect a motor. A thermal overload consists of an overload block, heaters, and an auxiliary contact. The auxiliary contact is normally installed in a safety (three-wire) circuit that stops power to the motor contactor coil when a motor overload occurs.

Figure 7: Thermal Overload (ET)

Schematic Symbol	Legend
	**A.** Heater (one per phase) **B.** Overload relay; contacts open if overload condition exists

EX=Electrical Transformer (Figure 8)—A device that transfers electrical energy from one isolated circuit to another, often raising or lowering the voltage in the process.

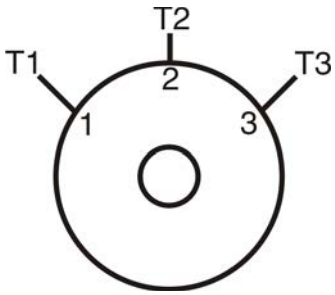
KB=Keyboard—Device similar to a typewriter for making entries to a computer.

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

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

Figure 8: Transformer (EX)

Figure 9: Electric Motor (MR)

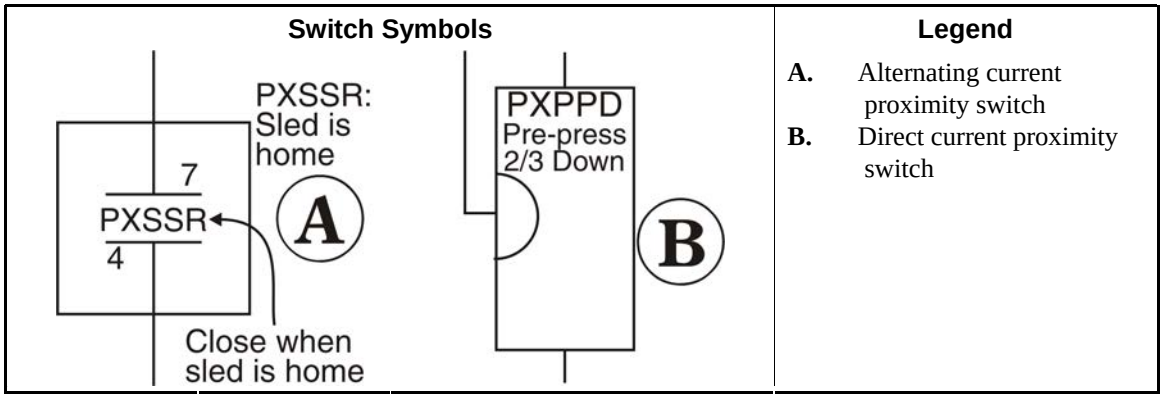


MV=Motor (Variable Speed) Inverter—To vary the speed of an AC motor, the volts to frequency ratio must be kept constant. The motor will overheat if this ratio is not maintained. The motor variable speed inverter converts three phase AC to DC. The inverter then uses this DC voltage to generate AC at the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

Note 2: Switch symbols used in the schematics and described below always depict the switch in its un-actuated state.

PX=Proximity Switch (Figure 10)—A device which reacts to the proximity of 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.

Figure 10: Proximity Switches (PX)



SC=Switch, Cam Operated (Figure 11)—A switch in which the electrical contacts are opened and/or closed by the mechanical action of a cam(s). Applications include 35-50 pound timer operated machines, Autospot, timer reversing motor assembly, and some balancing systems.

SH=Switch, Hand Operated (Figure 12)—A switch that is manually operated (e.g., *Start button*, *Master switch*, etc.).

Figure 11: Cam Switch (SC)

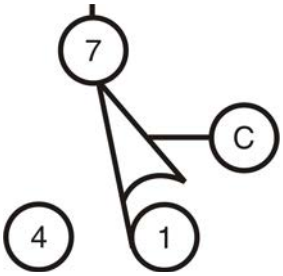
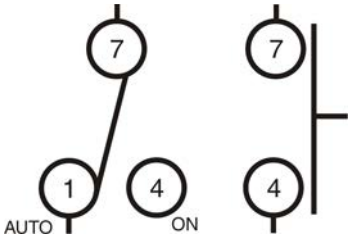


Figure 12: Hand Operated Switch (SH)



SK=Switch, Key Lock (Figure 13)—A switch that requires a key to operate. This prevents unauthorized personnel from gaining access to certain functions (e.g., the *Program menu*).

SL=Switch, Level Operated (Figure 14)—A switch connected to a float that causes the switch to open and close as the level changes.

Figure 13: Key Switch (SK)

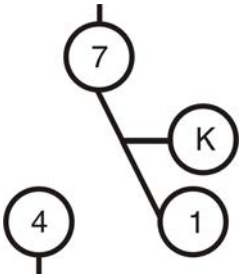
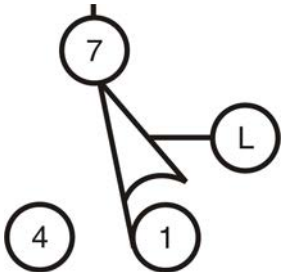


Figure 14: Level Switch (SL)



SM=Switch, Mechanically Operated (Figure 15)—A switch that is mechanically operated by a part of or the motion of the machine (e.g., door closed switch, tilt limit switches, etc.)

SP=Switch, Pressure Operated (Figure 16)—A switch in which a diaphragm presses against a switch actuator.

Figure 15: Mechanical Switch (SM)

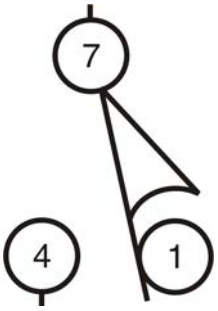
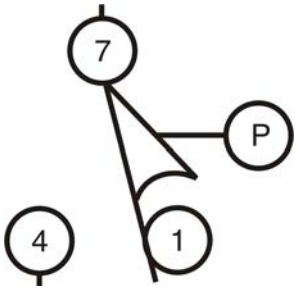


Figure 16: Pressure Switch (SP)



ST=Switch, Temperature Operated (Figure 17)—A switch that is actuated at a preset temperature (e.g., dryer safety probes) or has adjustable set points (e.g., Motometers or Combistats).

TB=Terminal Board (Figure 18)—A strip or block for attaching or terminating wires.

Figure 17: Temperature Switch (ST)

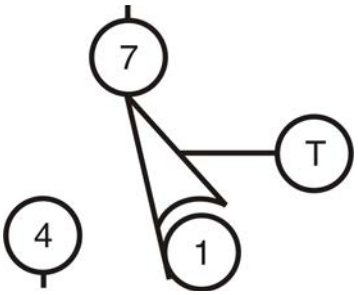
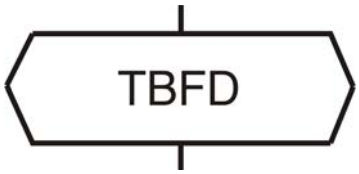


Figure 18: Terminal Board (TB)



VE=Valve, Electric Operated (Figure 19)—A valve operated by an electric coil to control the flow of fluid. The fluid can be air, water or hydraulic.

Figure 19: Electrically Operated Valve (VE)

ZF=Rectifier (Figure 20)—A solid state device that converts alternating current to direct current.

Figure 20: Bridge Rectifier (ZF)

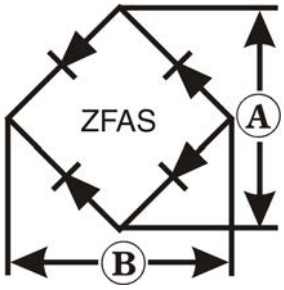
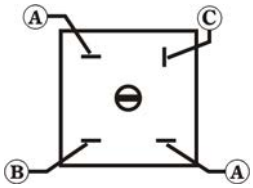
Component Symbol	Legend
	**A.** Alternating current input **B.** Direct current output

Figure 21: Bridge Rectifier

Component	Legend
	**A.** Alternating current in **B.** Negative direct current out **C.** Positive direct current out

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

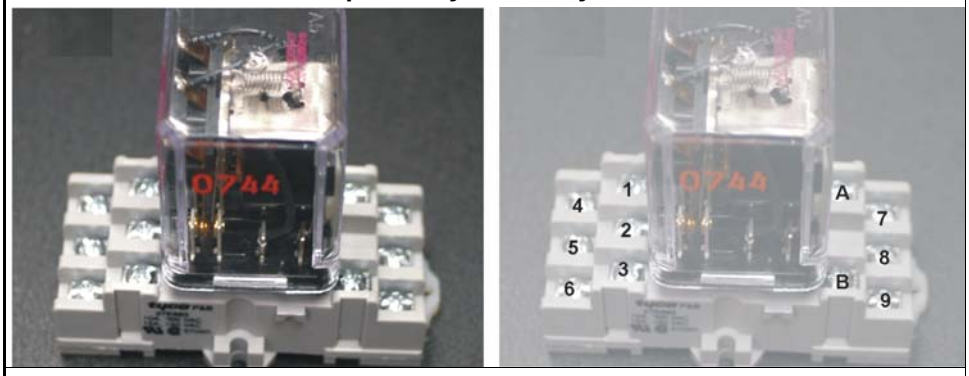
2. Component Terminal Numbering

CAUTION 1: Risk of Mis-wiring—Due to electrical component manufacturing inconsistencies, the pin numbers imprinted on components such as connectors and relay bases used on Milnor machines often do not correspond to the pin numbers shown in the schematics.

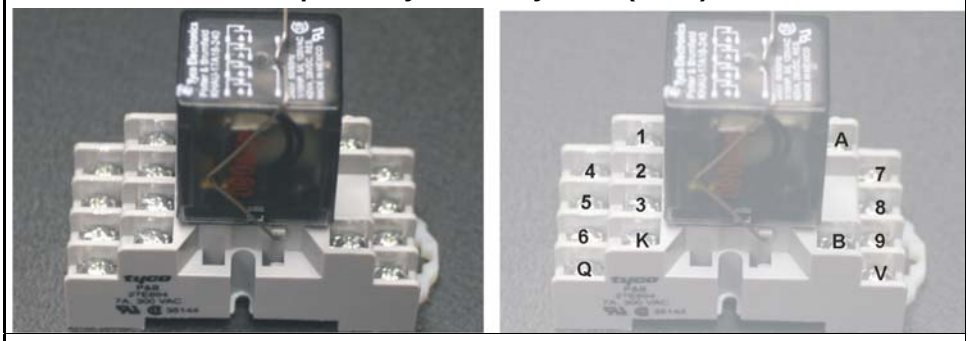
- Ignore pin numbers imprinted on in-line connectors (e.g., Molex connectors) and relay bases.
- Use the pin identification illustrations herein to identify pins on these components.

Figure 22: Plug-in Relays

11-pin Relay with Grey Base

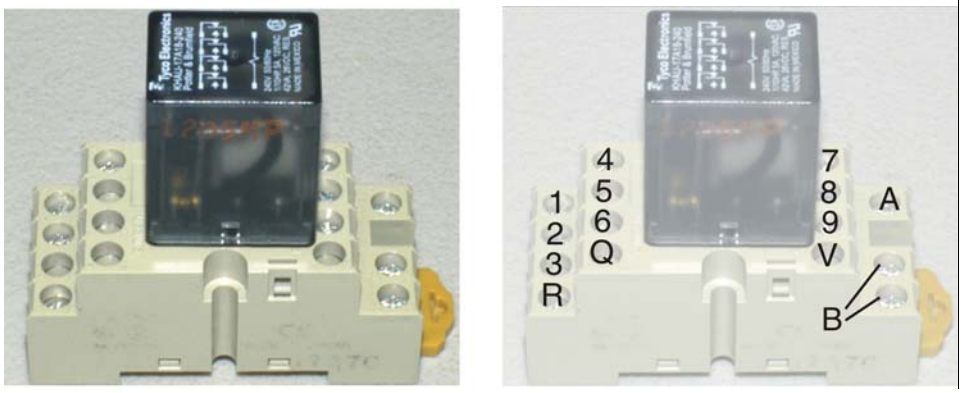


14-pin Relay with Grey Base (older)



14-pin Relay with Black Base (newer)

14-pin Relay with Beige Base (rare)



Legend

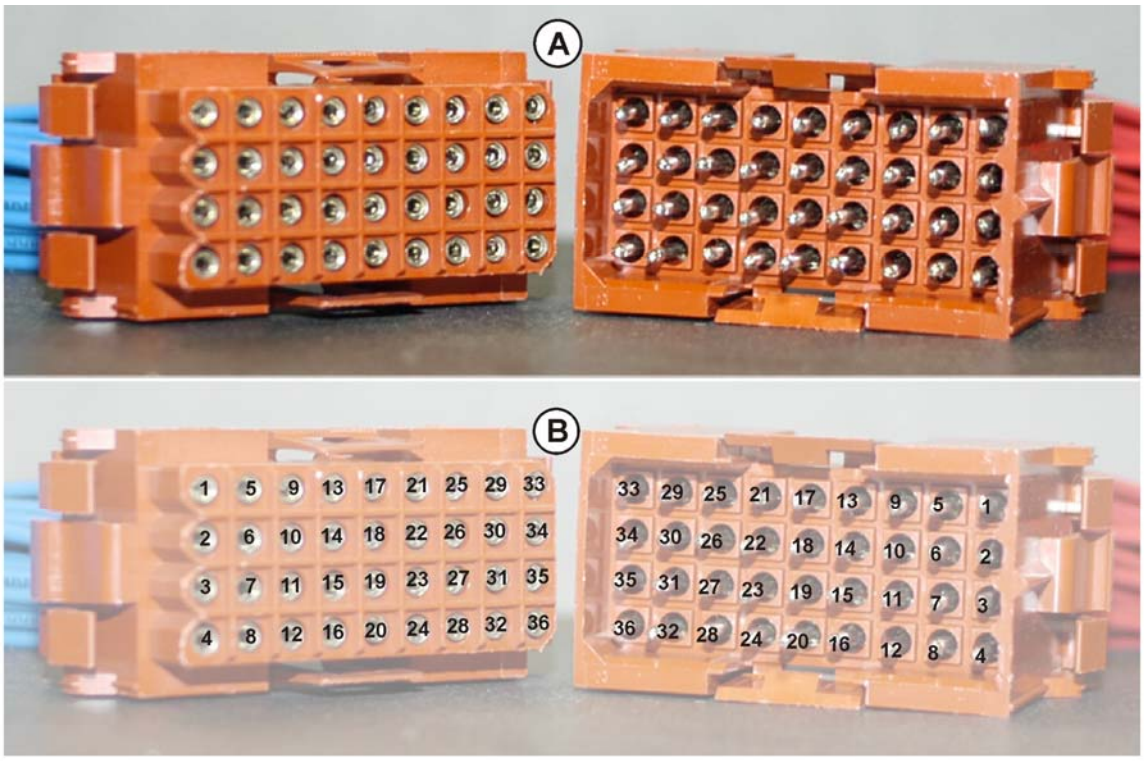
Left. View of relay and base

Right. Same view, showing pin numbers

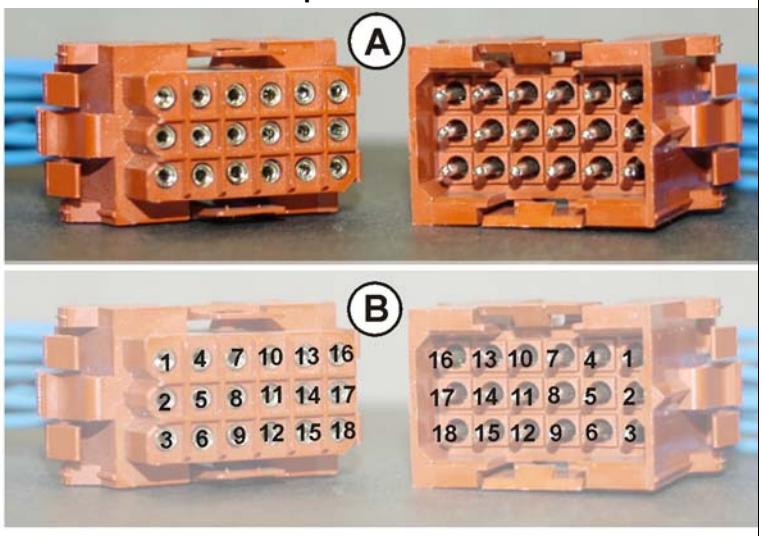
Note 3: Relay functional names ending with the letter "M" (e.g., CRxxM) are not discrete components but are a component of a printed circuit board. They are usually not individually replaceable.

Figure 23: AMP Connector Pin Locations

36-pin Connector



18-pin Connector

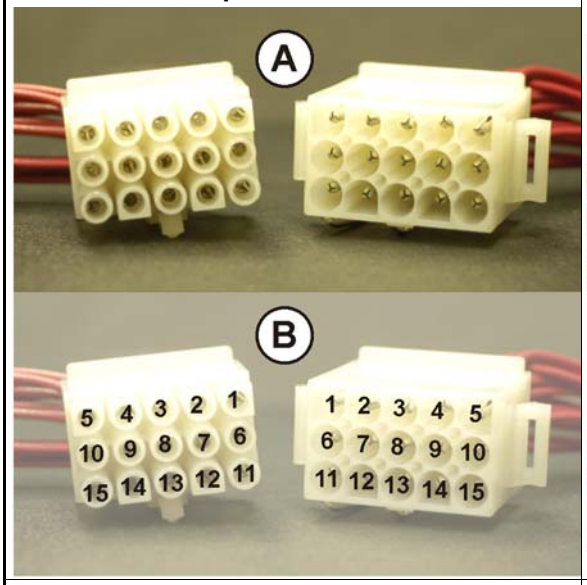


Legend

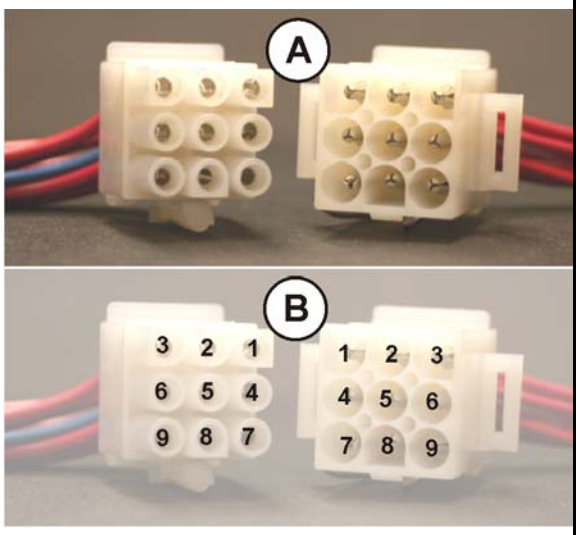
A. View of mating halves of connector
B. Same view, showing assigned pin numbers

Figure 24: Molex Connector Pin Locations

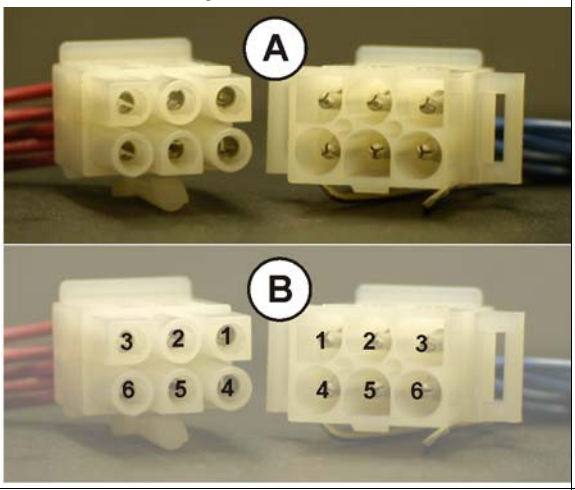
15-pin Connector



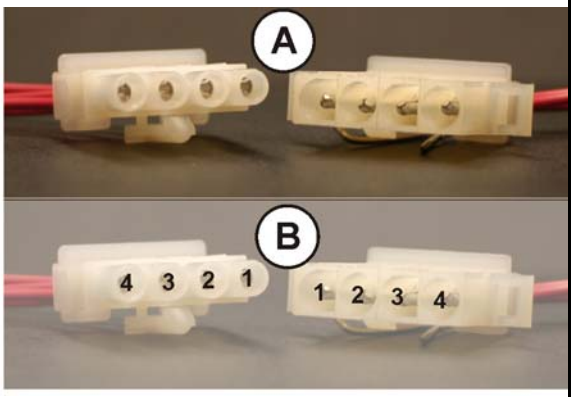
9-pin Connector



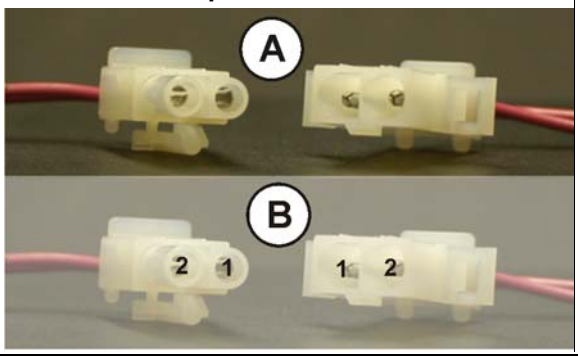
6-pin Connector



4-Pin Connector



2-pin Connector



Legend

A. View of mating halves of connector
B. Same view, showing assigned pin numbers

Figure 25: Pressure Switch

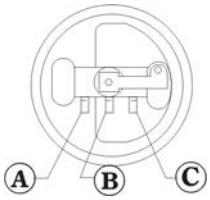
Component	Legend
	**A.** Contact 1—Normally open **B.** Contact 2—Normally closed **C.** Contact 3—Common

Figure 26: Toggle Switch

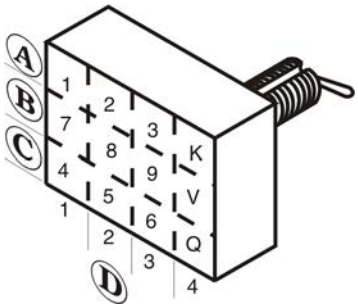
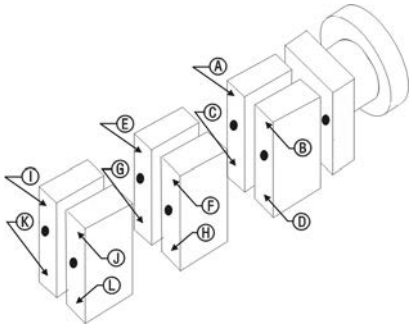
Component	Legend
	**A.** Normally closed contacts **B.** Common contacts **C.** Normally open contacts **D.** Pole

Figure 27: Switch with Replaceable Contact Blocks

Rotary or Push-button Switch Component	Legend
	**A.** Terminal 7 **B.** Terminal 8 **C.** Terminal 4 if normally open; terminal 1 if normally closed **D.** Terminal 5 if normally open; terminal 2 if normally closed **E.** Terminal V **F.** Terminal 9 **G.** Terminal Q if normally open; terminal K if normally closed **H.** Terminal 6 if normally open; terminal 3 if normally closed **I.** Terminal W **J.** Terminal X **K.** Terminal R if normally open; terminal L if normally closed **L.** Terminal S if normally open; terminal M if normally closed

3. Features of Milnor® Electrical Schematic Diagrams

Document BMP010012 (following this section) is a sample schematic, based on a schematic diagram for the Milnor® gas dryer. For the purposes of this exercise, the schematic is shown gray and explanations of the items on the schematic are shown black.

The item numbers below correspond to the circled item numbers shown on the drawing.

1. The first six characters of the drawing number (W6DRYG) indicate that this is a wiring diagram (W), identify the generation of controls (6), and identify the type of machine (DRYG=Gas Dryer). These characters appear in the drawing number of every schematic in the set.

   The characters following the first six are unique to each drawing. The two characters identified as the page number are an abbreviation for the function performed by the depicted

circuitry (S+=three-wire circuit) and establish the order in which the schematic occurs in the manual (schematics are arranged in alpha-numeric order in the manual).

Whenever circuitry changes are significant enough to warrant publishing a new schematic drawing, the new drawing number will be the same as the old except for the major revision letter (A in the example).

2. Included in the drawing title are the class of control system, the title of this circuit, and the circuit voltage.
3. Line numbers are provided along the bottom edge of the drawing. These permit service personnel in the field and at the Milnor® factory to quickly relate circuit locations when discussing troubleshooting over the phone. Page and line numbers are referenced on the drawing as explained in items five and six below.
4. Relay contacts show the page and line number on which the relay coil may be found. This is the type of cross referencing most frequently used in troubleshooting.
5. Relay coils show the page and line number on which its associated contacts are located.
6. Relay contacts and relay coils show the physical location of the relay.
7. The designation MTA applies to electronic circuit board connections. Typically, a control system will contain several different types of circuit boards and one or more boards of each type. A numerical suffix identifies the board type and a numerical prefix identifies which one of several boards of a given type is being depicted. For example, the designation 1MTA5 identifies this as the first I/O board (8 output, 16 input board) in the control system. As shown on the drawing, a pin number follows the board number, separated by a dash. Thus, 1MTA5-9 is pin 9 on this board. The numerical designations for board types vary from one control system to another. Some of the board types commonly encountered on the Mark V and Mark VI washer-extractor control and their designations are as follows:
   - MTM1-MTM8 = Mother board
   - MTA1-MTA5 = 8 output, 16 input (8/16) boards
   - MTA11-MTA14 = 24 output boards
   - MTA30-MTA40 = processor boards
   - MTA41-MTA43 = digital to analog (D/A) boards
   - MTA51-MTA55 = analog to digital (A/D) boards
   - MTA81-MTA85 = balance A-D board

   The complete listing of the boards utilized in a given control system can be found in the component list for that system.
8. Wire numbers, as described earlier in this section, are shown at appropriate locations on the schematic drawing.
9. Where diamond symbols appear at the end of a conductor, these are match points for continuing the schematic on another drawing. The page and line number that continues the circuit is printed adjacent to the diamond symbol. Where more than one match point appears on the referenced page, match diamonds containing corresponding letters.

— End of BIUUUK01 —

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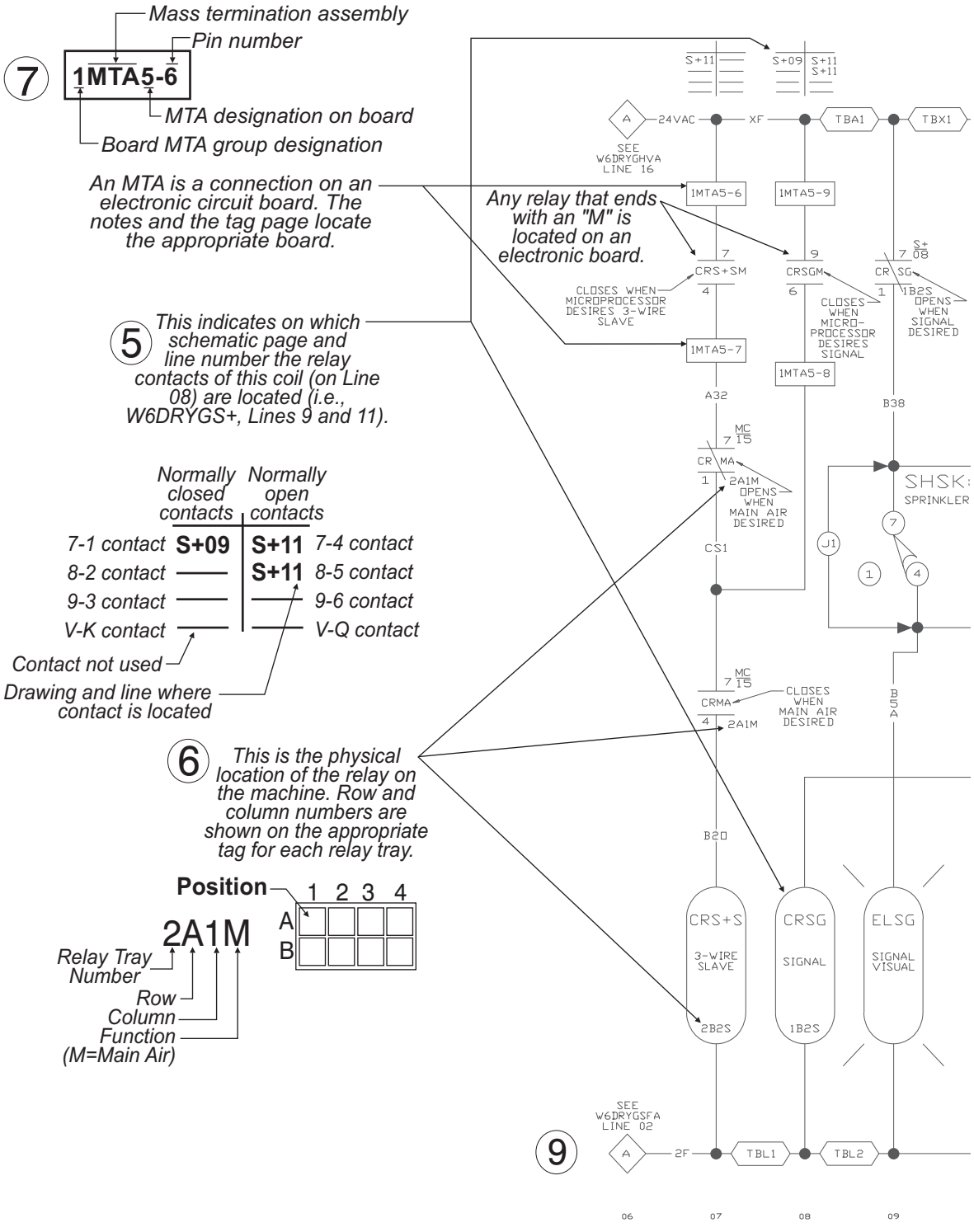
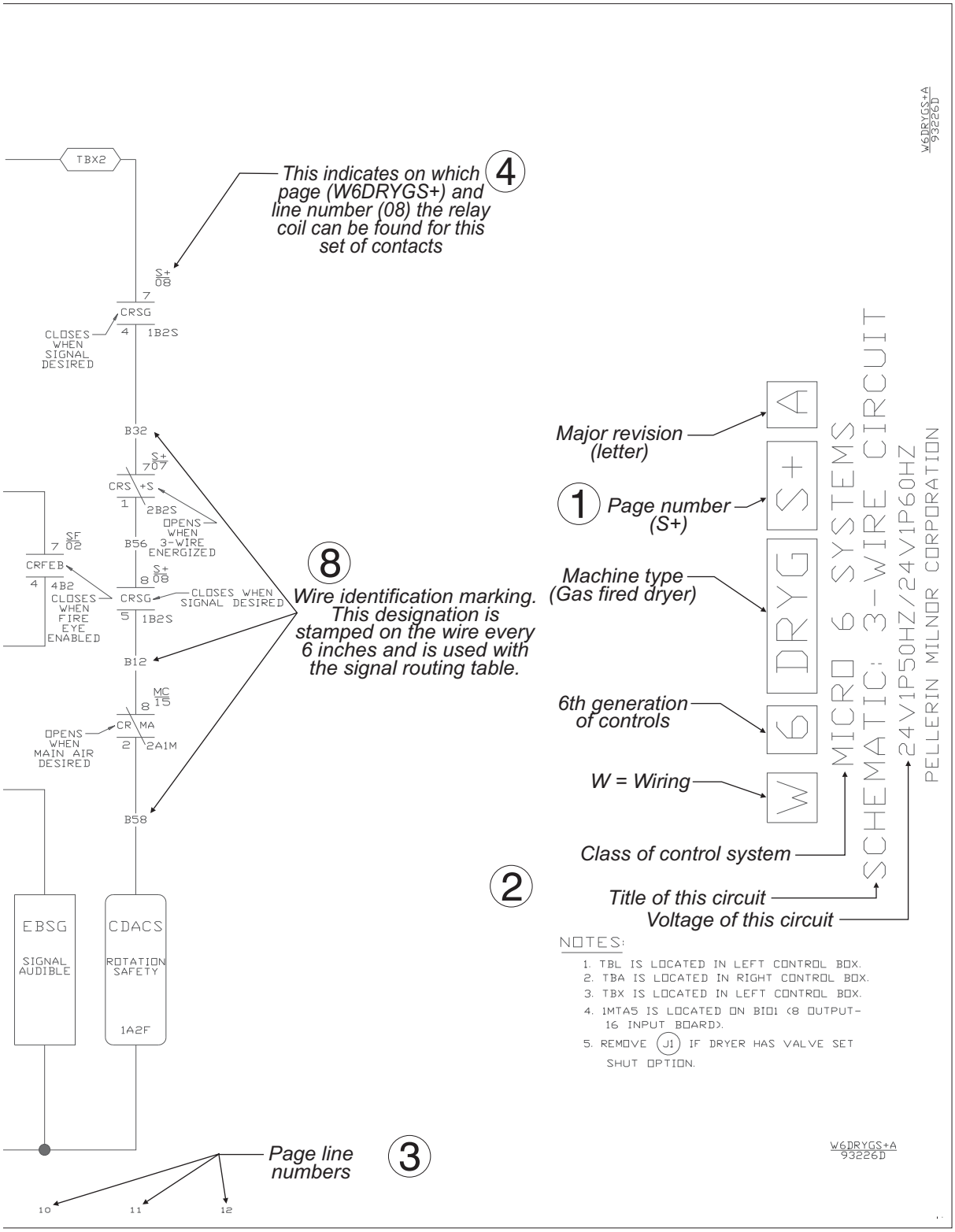
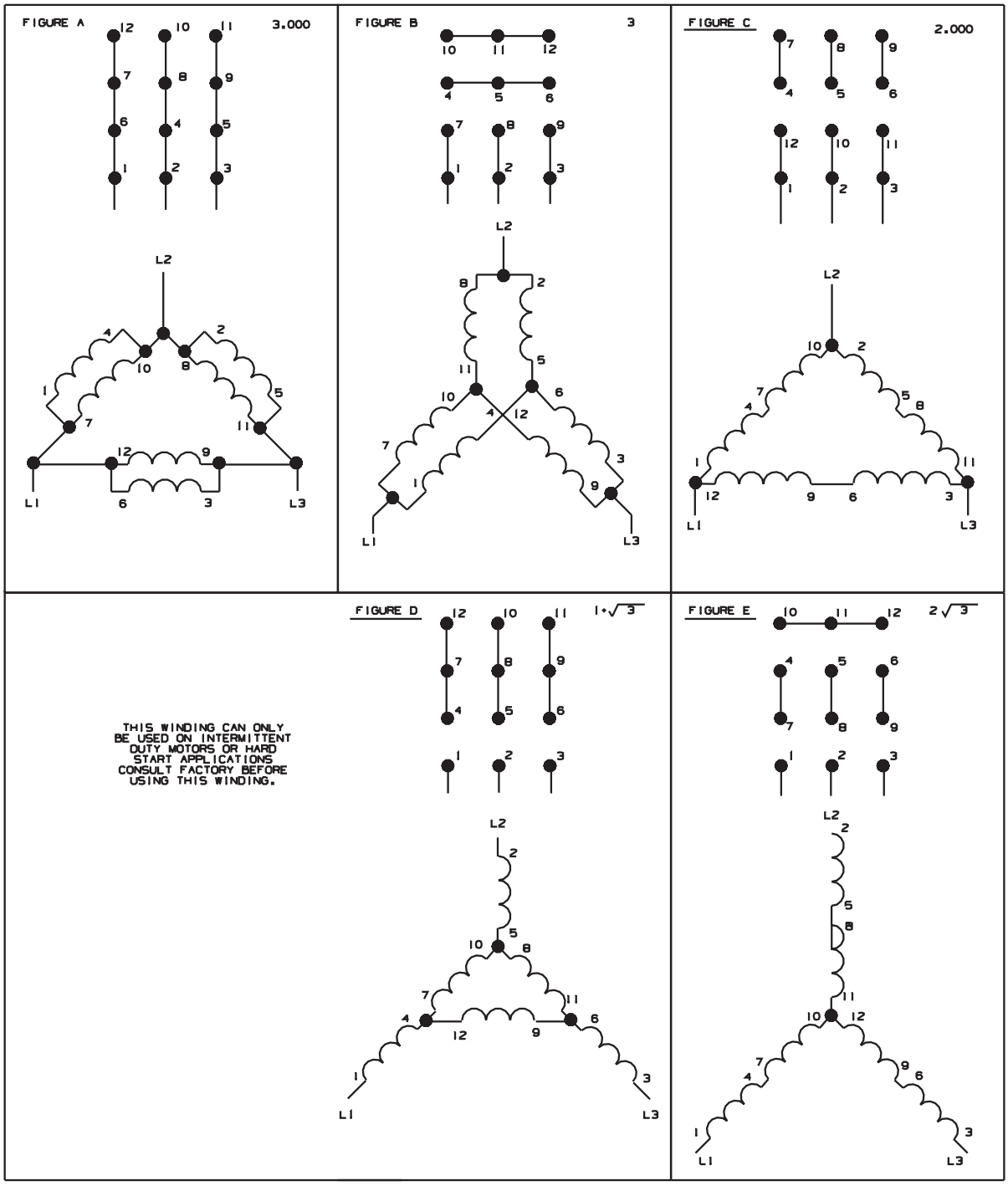


BMP010012 (left) / 2018343



BMP010012 (right) / 2018343

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	$1 \div \sqrt{3}$						600				600
E	$2\sqrt{3}$			380							



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

BMP850029

MOTOR CONNECTION DIAGRAMS

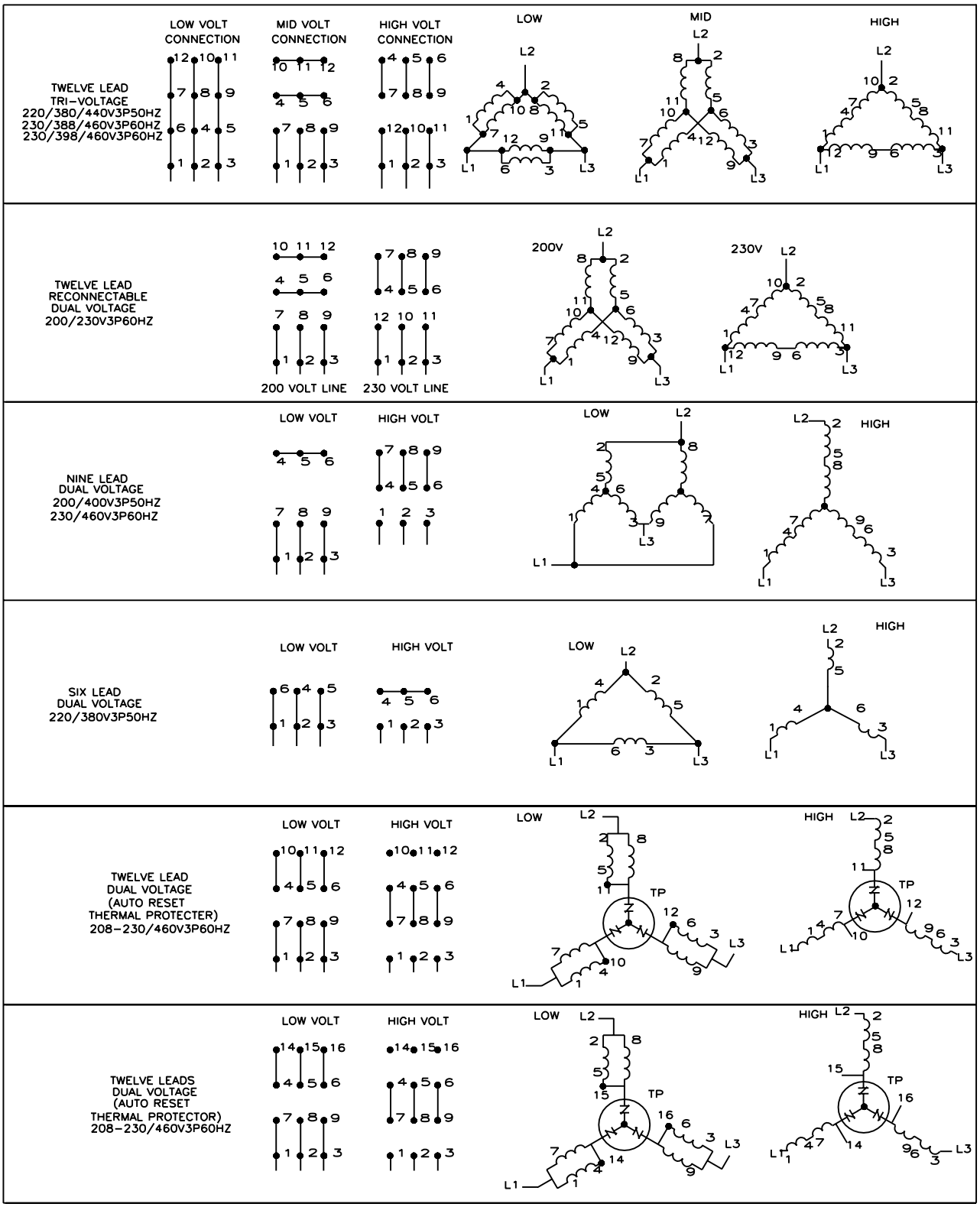
THREE PHASE SINGLE SPEED MOTORS WITH MULTIPLE VOLTAGE RATINGS

(ONLY FOR MOTOR SUFFIXES LISTED)

PELLERIN MILNOR CORPORATION

BMP850029
993628

BMP850029
993628

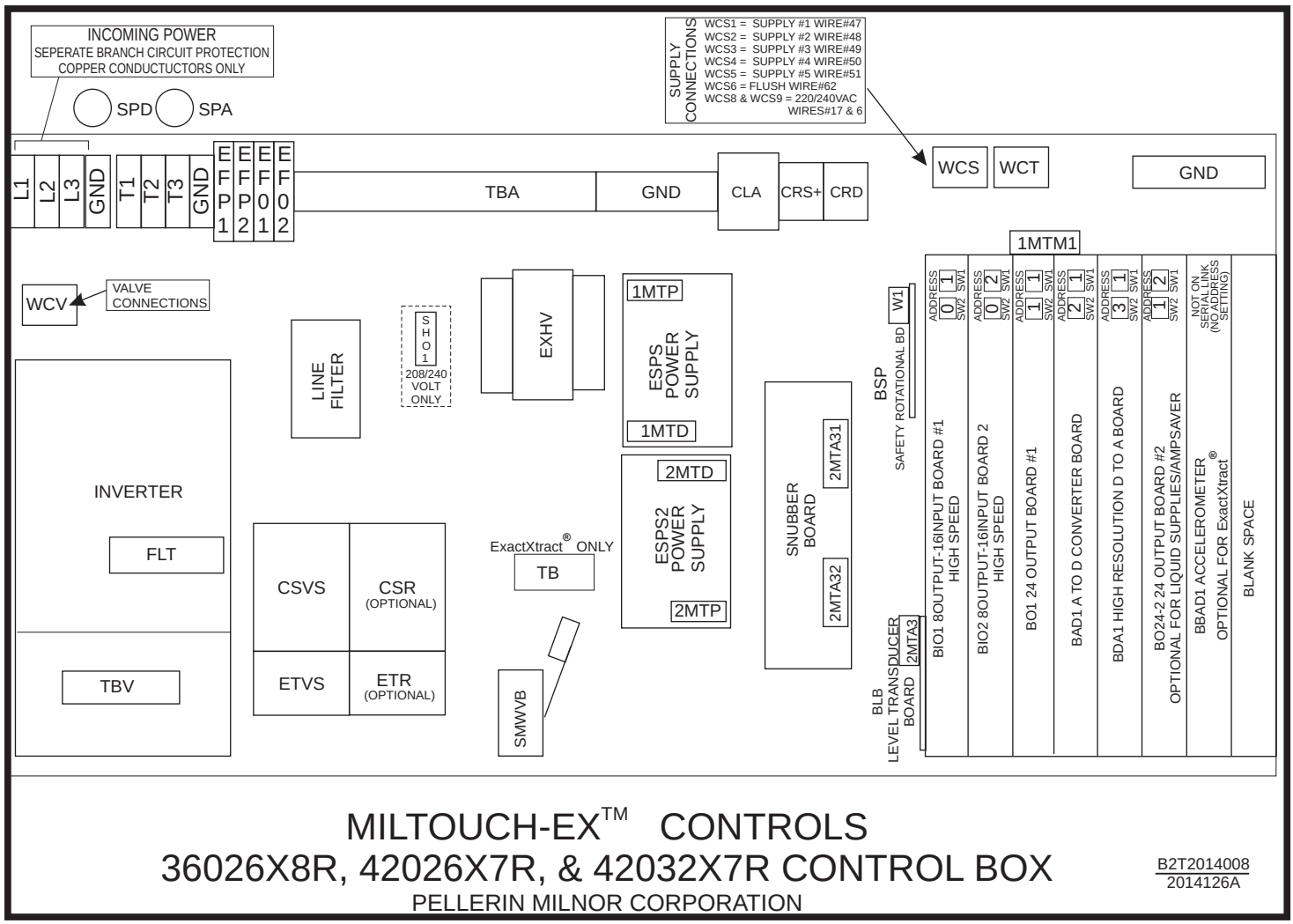


W80008

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

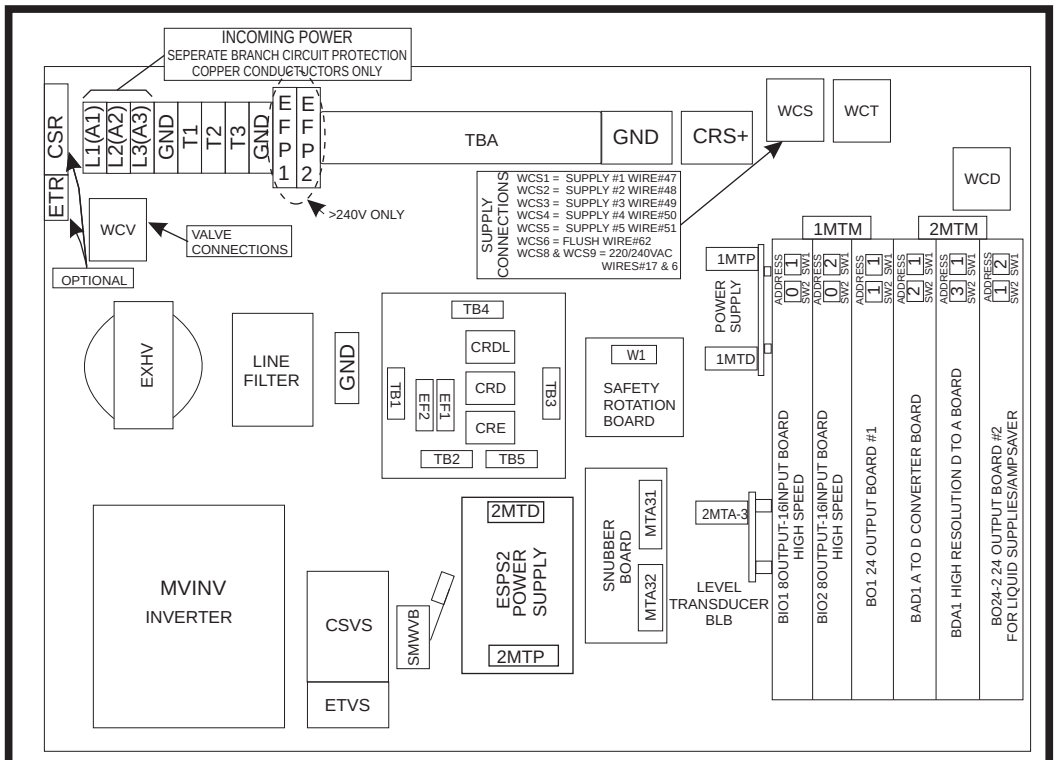
PELLERIN MILNOR CORPORATION

W80008
2001253A



MILTOUCH-EX™ CONTROLS
36026X8R, 42026X7R, & 42032X7R CONTROL BOX
PELLERIN MILNOR CORPORATION

B2T2014008
2014126A



MILTOUCH™ CONTROLS
30022X8R CONTROL BOX
PELLERIN MILNOR CORPORATION

B2T2014030
2017434A

W6X8RSTG1
2017434B

BIO-1	BO24-1	BIO-2	BO24-2(OPTIONAL) LIQUID SUPPLIES	BO24-3(OPTIONAL) 20 PROGRAMMABLE OUTPUTS
INPUTS		**INPUTS**		
0 HI LEVEL REUSE TANK		16 NOT USED	**OUTPUTS**	**OUTPUTS**
1 DOOR CLOSED	**OUTPUTS**	17 NOT USED	40 CHEM #14	64 OUTPUT 0
2 INVERTER FAULT	8 TANK TO MACHINE	18 NOT USED	41 CHEM #9	65 OUTPUT 1
3 NOT USED	9 ACCELERATE/DECELERATE	19 NOT USED	42 CHEM #13	66 OUTPUT 2
4 WASH POSITION	10 DOOR UNLOCK	20 NOT USED	43 FLUSH MANIFOLD	67 OUTPUT 3
5 LOAD POSITION	11 CLOCKWISE WASH	21 BEARING SEAL DEFLATED	44 CHEM #15	68 OUTPUT 4
6 DON'T ALLOW CHEM	12 COUNTER CLOCKWISE WASH	22 NOT USED	45 CHEM #11	69 OUTPUT 5
7 BASKET ROTATING	13 STEAM	23 EXTERNAL FAULT	46 CHEM SAVE	70 OUTPUT 6
8 EXCURSION	14 SIGNAL	24 NOT USED	47 DOOR UNLOCK PULSE(30022)	71 OUTPUT 7
9 NOT USED	15 3-WIRE ENABLED	25 OK TO STEAM TANK	48 CHEM #10	72 OUTPUT 8
10 BRAKE PAD WORN	16 NOT USED	26 RECIRCULATION PUMP O/L	49 DOORLOCK PULSE(30022)	73 OUTPUT 9
11 BRAKE IS OFF	17 HOT WATER	27 TANK PUMP O/L	50 CHEM #6	74 OUTPUT 10
12 DOOR OPEN DESIRED	18 COLD WATER	28 SIGNAL CANCEL	51 CHEM #7	75 OUTPUT 11
13 EXTRACT SPEED LIMIT	19 EXTRA WATER	29 FRESH METER	52 CHEM #8	76 OUTPUT 12
14 NOT USED	20 DRAIN TO SEWER	30 SEWER METER	53 CHEM #12	77 OUTPUT 13
15 3-WIRE ON	21 DRAIN TO REUSE	31 TANK METER	54 AUTO RECIRCULATION	78 OUTPUT 14
	22 MACHINE TO MACHINE		55 NOT USED	79 OUTPUT 15
OUTPUTS	23 MACHINE TO TANK	**OUTPUTS**	56 NOT USED	80 OUTPUT 16
0 RECIRCULATE PUMP	24 NOT USED	32 FRESH WATER TO MACH	57 NOT USED	81 OUTPUT 17
1 COOLDOWN	25 NOT USED	33 TANK TO SEWER	58 DRAIN SAVER	82 OUTPUT 18
2 CHEMICAL FLUSH	26 NOT USED	34 FRESH TO TANK	59 MOVE TO LOAD POSITION	83 OUTPUT 19
3 CHEMICAL #4	27 NOT USED	35 FLOW STOP	60 NOT USED	84 NOT USED
4 CHEMICAL #1	28 NOT USED	36 DOOR LOCK	61 MOVING	85 NOT USED
5 CHEMICAL #3	29 NOT USED	37 STEAM TANK	62 NOT USED	86 NOT USED
6 CHEMICAL #2	30 NOT USED	38 NOT USED	63 MOVE TO WASH POSITION	87 NOT USED
7 CHEMICAL #5	31 NOT USED	39 PULSE START		

MILTOUCH-EX ™ CONTROLS
WASHER EXTRACTOR
CONTROL BOARDS INPUTS/OUTPUTS
PELLERIN MILNOR CORPORATION

B2T2014013
2014162A

W6X8RSTG1
MILTOUCH-EX™ CONTROLS
CONTROL BOX LAYOUTS
PELLERIN MILNOR CORPORATION

IMPORTANT
SETTING MILTOUCH-EX™ POWER SUPPLIES

! ESPS and ESPS2 ARE DIFFERENT. TAKE CARE TO NOT MIX UP PART NUMBERS. IF WRONG POWER SUPPLY IS USED PERMANENT BOARD DAMAGE WILL OCCUR.

TO TEST POWER SUPPLIES OUTPUT

1. MAKE SURE MACHINE IS ON.
2. USING HIGH QUALITY DIGITAL VOLTMETER (FLUKE MODEL 77 OR EQUAL) MEASURE THE VOLTAGE ON ANY ONE OF BOARDS IN THE CARD CAGE *MTA#2 BETWEEN PINS 3 (+5V) AND PIN 4 (GND). THE VOLTAGE RANGE SHOULD BE 5.01-5.12VDC. SEE FIGURE 1.
3. MEASURE THE VOLTAGE AT BPB ON CONNECTOR J4 BETWEEN PIN 1 (+12V) AND PIN 2 (GND). THE VOLTAGE RANGE SHOULD BE 12.2-12.4VDC. SEE FIGURE 2

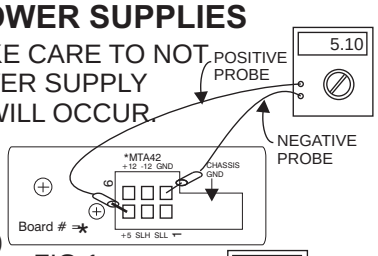


FIG 1.

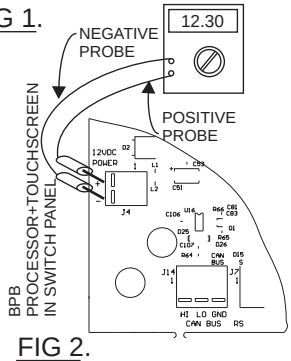


FIG 2.

TO ADJUST POWER SUPPLY VOLTAGES

1. +5V,+12V &-12V IS PROVIDED BY PART NUMBER 08PSS3401T LABELED ESPS. POWER SUPPLY PART NUMBER 08PSS2401T PROVIDES THE +12V FOR THE PROCESSOR BD LABELED ESPS2.
2. LOCATE THE VOLTAGE ADJUSTMENT POTENTIOMETER. THE POTENTIOMETER WILL BE A SMALL BLUE COMPONENT. IT IS SOLDERED ON EACH POWER SUPPLY'S PRINTED CIRCUIT BOARD. THERE MAY HAVE A SPOT OF SILICONE ON ADJUSTMENT SCREW. SEE FIGURE 3.
3. USING A SMALL (POCKET TYPE) SCREW DRIVER REMOVE THE SILICONE AND TURN THE POTENTIOMETER TURNING CLOCKWISE TO RAISE THE VOLTAGE AND COUNTER-CLOCKWISE TO LOWER.
4. RE-APPLY SPOT OF ELECTRONIC GRADE SILICONE ON ADJUSTMENT SCREW TO FIX IN PLACE. RE-TEST TO VERIFY +5VDC ON ESPS AND +12VDC ON ESPS2 ARE WITHIN CORRECT VOLTAGE RANGES.

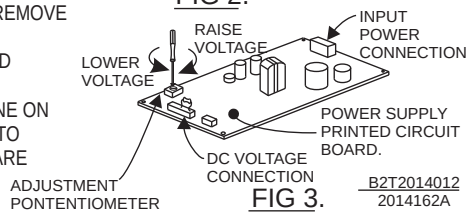
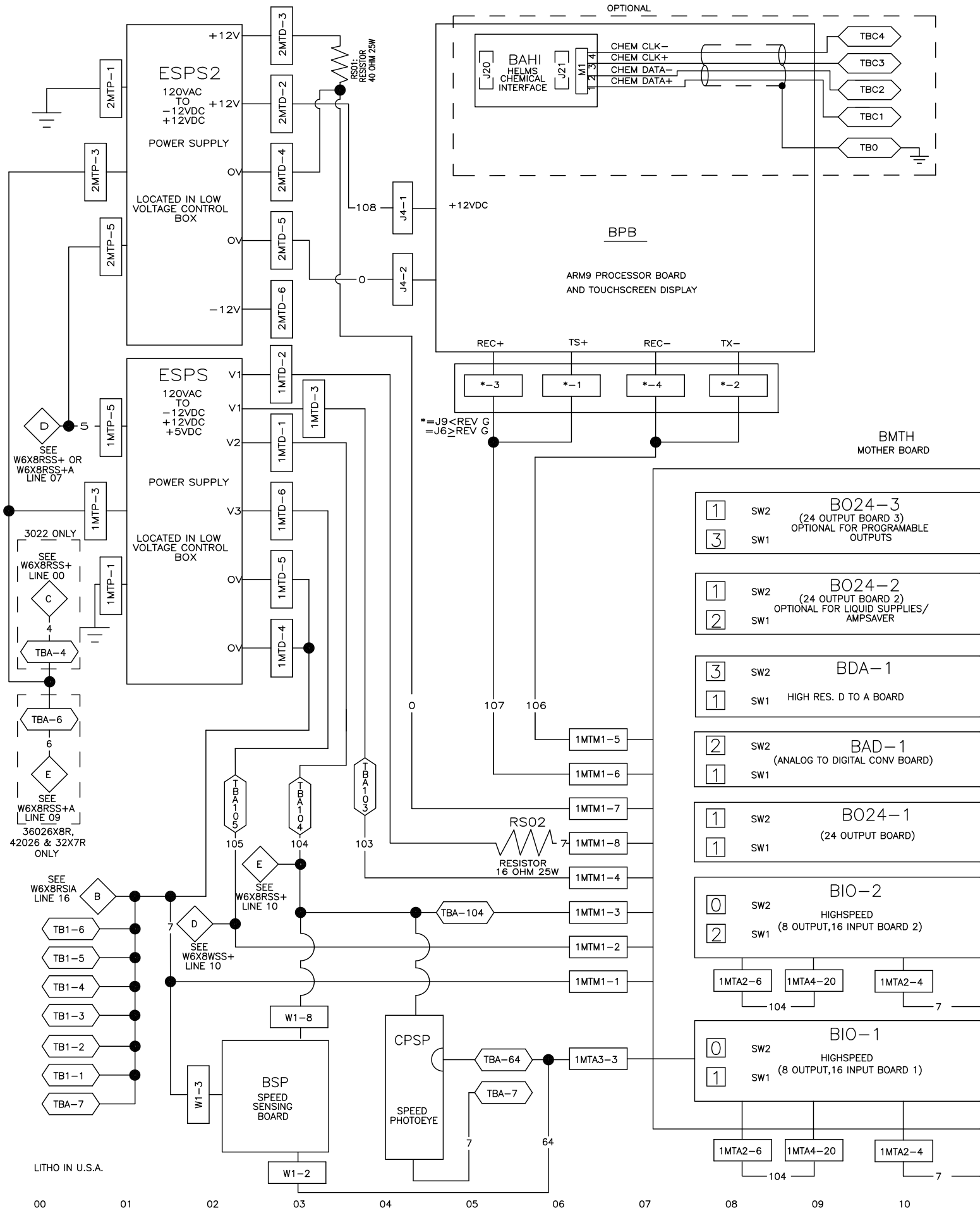


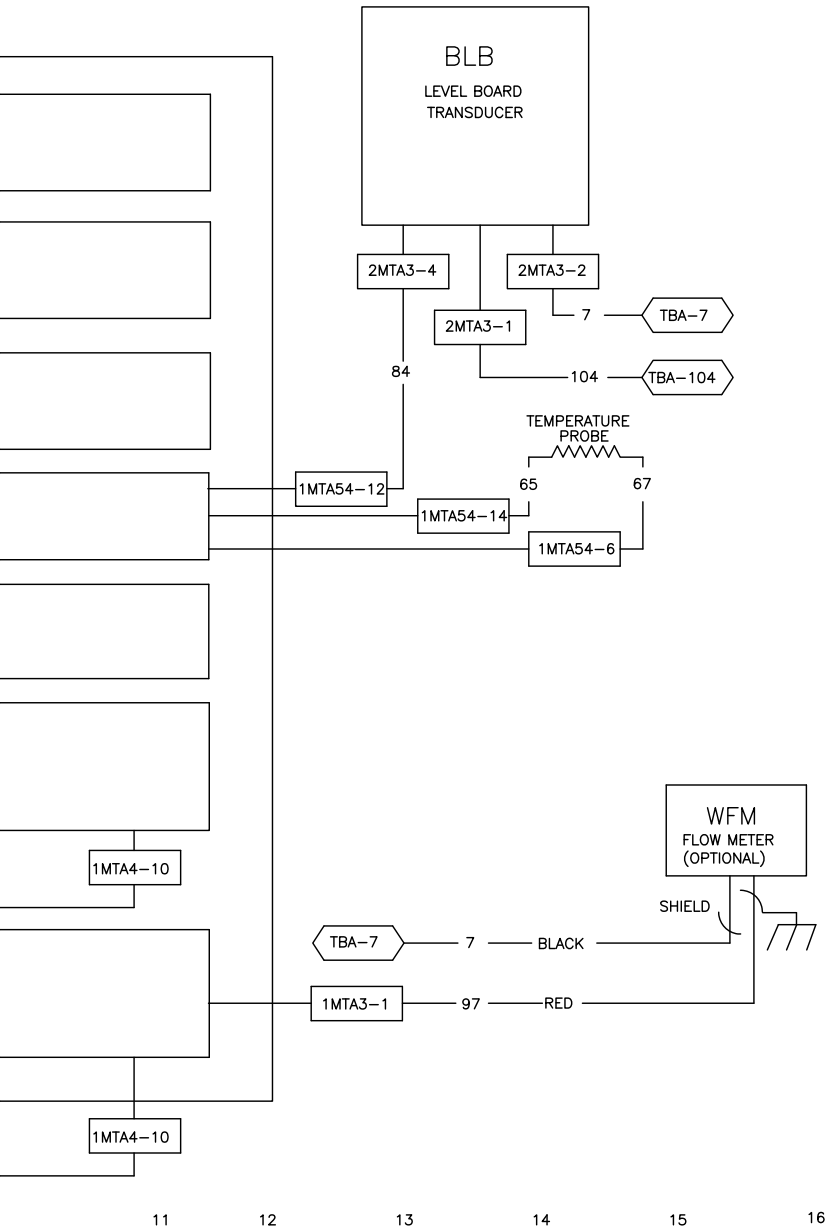
FIG 3.

B2T2014012
2014162A


OPTIONAL
BAHI
HELMS CHEMICAL INTERFACE
J20
J21
M1
CHEM CLK−
CHEM CLK+
CHEM DATA−
CHEM DATA+
TBC4
TBC3
TBC2
TBC1
TB0
ESPS2
120VAC TO −12VDC +12VDC +12VDC
POWER SUPPLY
LOCATED IN LOW VOLTAGE CONTROL BOX
+12V
+12V
0V
0V
−12V
2MTD−3
2MTD−2
2MTD−4
2MTD−5
2MTD−6
2MTP−1
2MTP−3
2MTP−5
RS01: RESISTOR 40 OHM 25W
108
0
J4−1
J4−2
+12VDC
BPB
ARM9 PROCESSOR BOARD AND TOUCHSCREEN DISPLAY
REC+
TS+
REC−
TX−
*−3
*−1
*−4
*−2
*=J9<REV G
=J6≥REV G
ESPS
120VAC TO −12VDC +12VDC +5VDC
POWER SUPPLY
LOCATED IN LOW VOLTAGE CONTROL BOX
V1
V1
V2
V3
0V
0V
1MTD−2
1MTD−3
1MTD−1
1MTD−6
1MTD−5
1MTD−4
1MTP−5
1MTP−3
1MTP−1
D
SEE W6X8RSS+ OR W6X8RSS+A LINE 07
3022 ONLY
SEE W6X8RSS+ LINE 00
C
TBA−4
TBA−6
E
SEE W6X8RSS+A LINE 09
36026X8R, 42026 & 32X7R ONLY
BMTH
MOTHER BOARD
1 SW2
3 SW1
B024−3
(24 OUTPUT BOARD 3)
OPTIONAL FOR PROGRAMABLE OUTPUTS
1 SW2
2 SW1
B024−2
(24 OUTPUT BOARD 2)
OPTIONAL FOR LIQUID SUPPLIES/ AMPSAVER
3 SW2
1 SW1
BDA−1
HIGH RES. D TO A BOARD
2 SW2
1 SW1
BAD−1
(ANALOG TO DIGITAL CONV BOARD)
1 SW2
1 SW1
B024−1
(24 OUTPUT BOARD)
0 SW2
2 SW1
BIO−2
HIGHSPEED
(8 OUTPUT,16 INPUT BOARD 2)
0 SW2
1 SW1
BIO−1
HIGHSPEED
(8 OUTPUT,16 INPUT BOARD 1)
1MTM1−5
1MTM1−6
1MTM1−7
1MTM1−8
1MTM1−4
1MTM1−3
1MTM1−2
1MTM1−1
1MTA2−6
1MTA4−20
1MTA2−4
1MTA3−3
0
107
106
RS02
RESISTOR 16 OHM 25W
TBA−104
TBA105
TBA104
TBA103
105
104
103
SEE W6X8RSIA LINE 16
B
SEE W6X8RSS+ LINE 10
SEE W6X8WSS+ LINE 10
TB1−6
TB1−5
TB1−4
TB1−3
TB1−2
TB1−1
TBA−7
W1−8
W1−3
W1−2
BSP
SPEED SENSING BOARD
CPSP
SPEED PHOTOEYE
TBA−64
TBA−7
64
LITHO IN U.S.A.
00
01
02
03
04
05
06
07
08
09
10
W6X8RSBW
2023443B

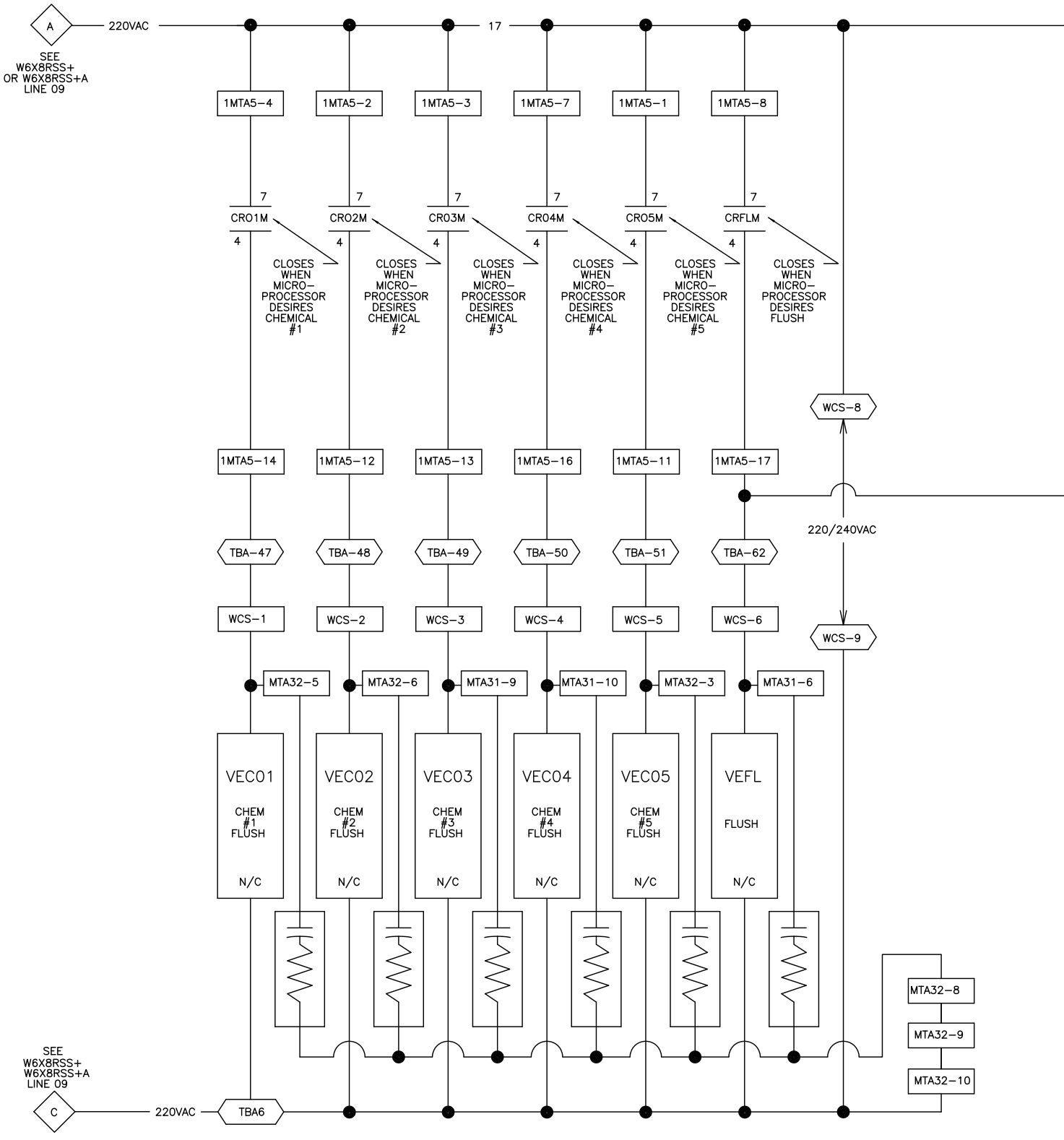
WIRE NO.	VOLTAGE	WIRE COLOR
103	+5VDC	BLUE
104	+12VDC	BLUE
105	−12VDC	BLUE
7	GROUND	BLUE
107	SERIAL HIGH	BLUE
106	SERIAL LOW	BLUE
INPUTS	−	BLUE
5	240VAC	RED
6	240VAC	RED

W6X8RSBW
MILTOUCH−EX™ CONTROLS
SCHEMATIC: BOARD TO BOARD WIRING
PELLERIN MILNOR CORPORATION



NOTES:

1. 1MTP, 1MTD ARE LOCATED ON ESPS (POWER SUPPLY).
2. 2MTP, 2MTD ARE LOCATED ON ESPS2 (POWER SUPPLY).
3. J4 AND J9 ARE LOCATED ON BPB (ARM 9 PROCESSOR BOARD)
4. 1MTA2, 1MTA3,AND 1MTA4 ARE LOCATED ON BIO−1 (HIGH SPEED 8 OUTPUT−16INPUT BOARD).
5. 1MTA1 IS LOCATED BMTH (MOTHER BOARD).
6. 1MTA54 IS LOCATED ON BAD−1 (ANALOG TO DIGITAL BOARD).
7. TBP IS LOCATED IN LOW VOLTAGE CONTROL BOX.
8. W1 IS LOCATED ON BSP (SPEED SENSING BOARD).
9. 2MTA3 IS LOCATED ON BLB (LEVEL TRANSDUCER BOARD)


A
220VAC
17
SEE W6X8RSS+ OR W6X8RSS+A LINE 09
1MTA5–4
1MTA5–2
1MTA5–3
1MTA5–7
1MTA5–1
1MTA5–8
7
CR01M
CR02M
CR03M
CR04M
CR05M
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
WCS–8
1MTA5–14
1MTA5–12
1MTA5–13
1MTA5–16
1MTA5–11
1MTA5–17
220/240VAC
TBA–47
TBA–48
TBA–49
TBA–50
TBA–51
TBA–62
WCS–1
WCS–2
WCS–3
WCS–4
WCS–5
WCS–6
WCS–9
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
MTA32–8
MTA32–9
MTA32–10
SEE W6X8RSS+ W6X8RSS+A LINE 09
C
220VAC
TBA6
LITHO IN U.S.A.
00
01
02
03
04
05
06
07
08
W6X8RSCF
2024294B

NOTES:

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

7

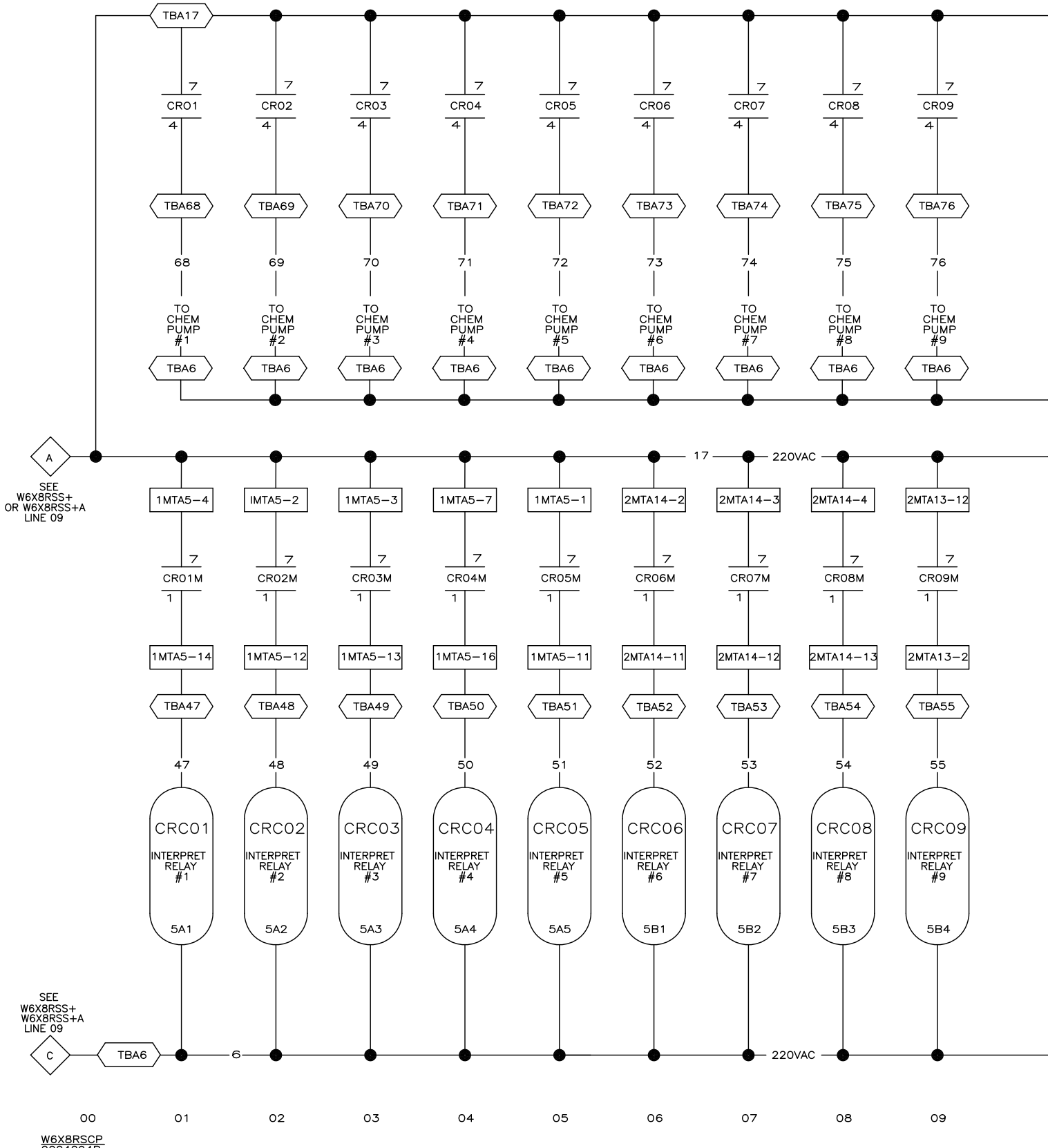
4

SHMF:
MANUAL FLUSH

W6X8RSCF
MILTOUCH–EX™ CONTROLS
SCHEMATIC: FLUSHING SUPPLIES
220V1P50HZ/240V1P60HZ

PELLERIN MILNOR CORPORATION

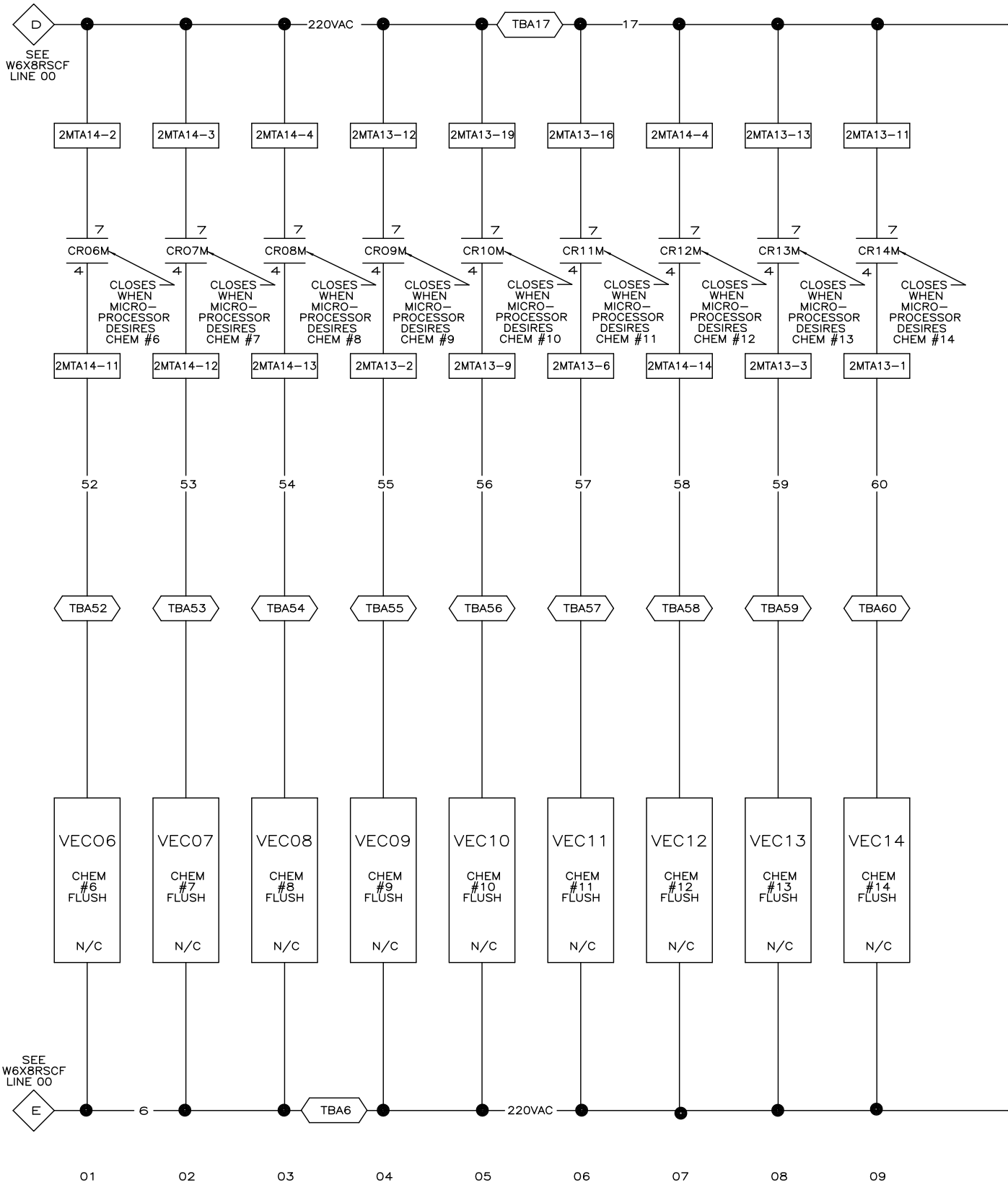
IF CUSTOMER IS SUPPLYING VOLTAGE FOR CHEMICAL PUMPS THEN TBA17 & TBA6 FEEDING THE INTERPRET RELAY CONTACTS MUST BE DISCONNECTED FROM THE INTERNAL 220/240VAC SUPPLY.



W6X8RSCP
2024294B

W6X8RSCP
MILTOUCH–EX™ CONTROLS
SCHEMATIC: LIQUID SUPPLY–INTERPRET RELAYS
220V1P50HZ/240V1P60HZ

PELLERIN MILNOR CORPORATION

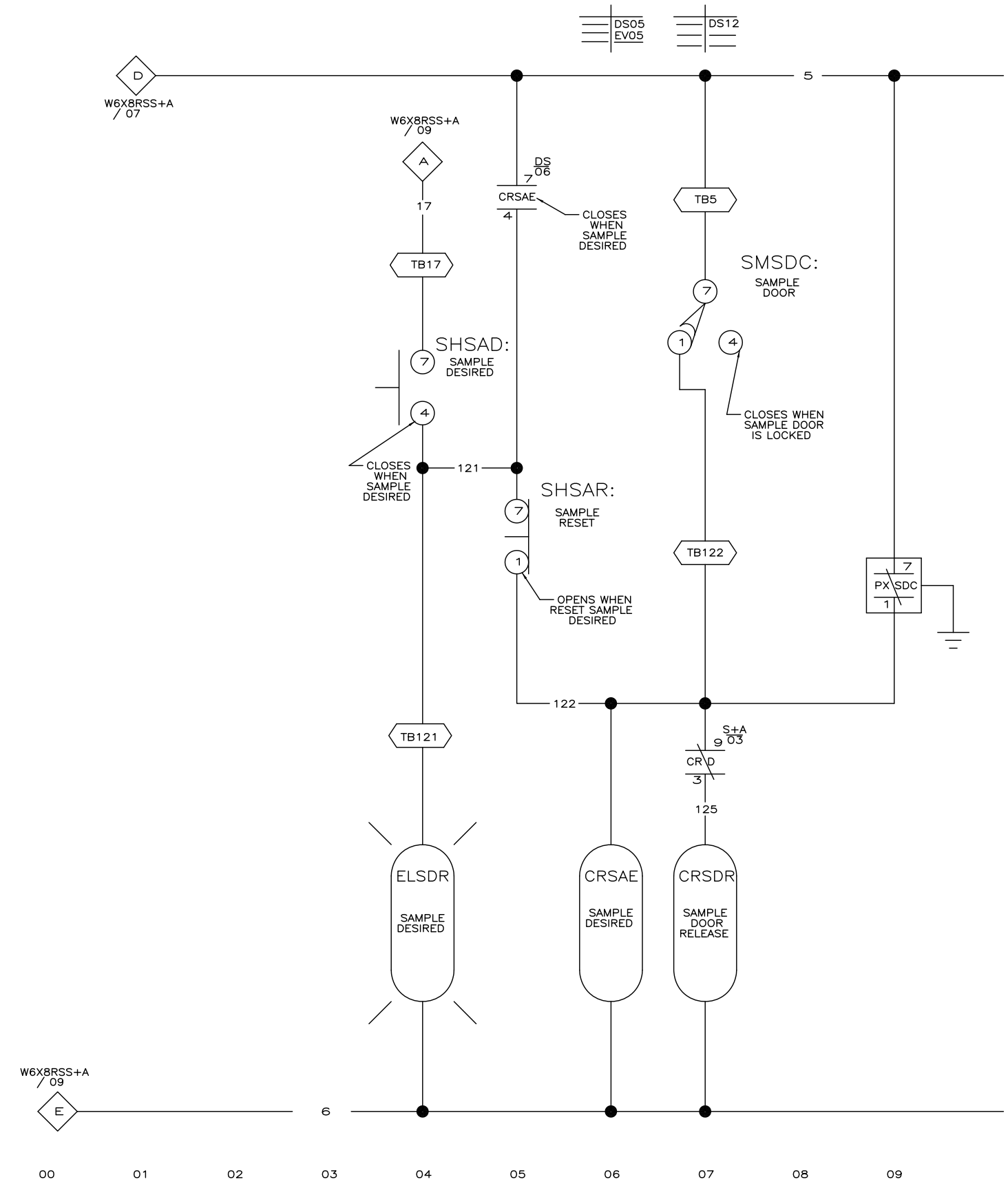

D
SEE W6X8RSCF LINE 00
220VAC
TBA17
17
2MTA14–2
2MTA14–3
2MTA14–4
2MTA13–12
2MTA13–19
2MTA13–16
2MTA14–4
2MTA13–13
2MTA13–11
7
CR06M
CR07M
CR08M
CR09M
CR10M
CR11M
CR12M
CR13M
CR14M
4
CLOSES WHEN MICRO–PROCESSOR DESIRES CHEM #6
CLOSES WHEN MICRO–PROCESSOR DESIRES CHEM #7
CLOSES WHEN MICRO–PROCESSOR DESIRES CHEM #8
CLOSES WHEN MICRO–PROCESSOR DESIRES CHEM #9
CLOSES WHEN MICRO–PROCESSOR DESIRES CHEM #10
CLOSES WHEN MICRO–PROCESSOR DESIRES CHEM #11
CLOSES WHEN MICRO–PROCESSOR DESIRES CHEM #12
CLOSES WHEN MICRO–PROCESSOR DESIRES CHEM #13
CLOSES WHEN MICRO–PROCESSOR DESIRES CHEM #14
2MTA14–11
2MTA14–12
2MTA14–13
2MTA13–2
2MTA13–9
2MTA13–6
2MTA14–14
2MTA13–3
2MTA13–1
52
53
54
55
56
57
58
59
60
TBA52
TBA53
TBA54
TBA55
TBA56
TBA57
TBA58
TBA59
TBA60
VEC06 CHEM #6 FLUSH N/C
VEC07 CHEM #7 FLUSH N/C
VEC08 CHEM #8 FLUSH N/C
VEC09 CHEM #9 FLUSH N/C
VEC10 CHEM #10 FLUSH N/C
VEC11 CHEM #11 FLUSH N/C
VEC12 CHEM #12 FLUSH N/C
VEC13 CHEM #13 FLUSH N/C
VEC14 CHEM #14 FLUSH N/C
SEE W6X8RSCF LINE 00
E
6
TBA6
220VAC
00
01
02
03
04
05
06
07
08
09

W6X8RSCX

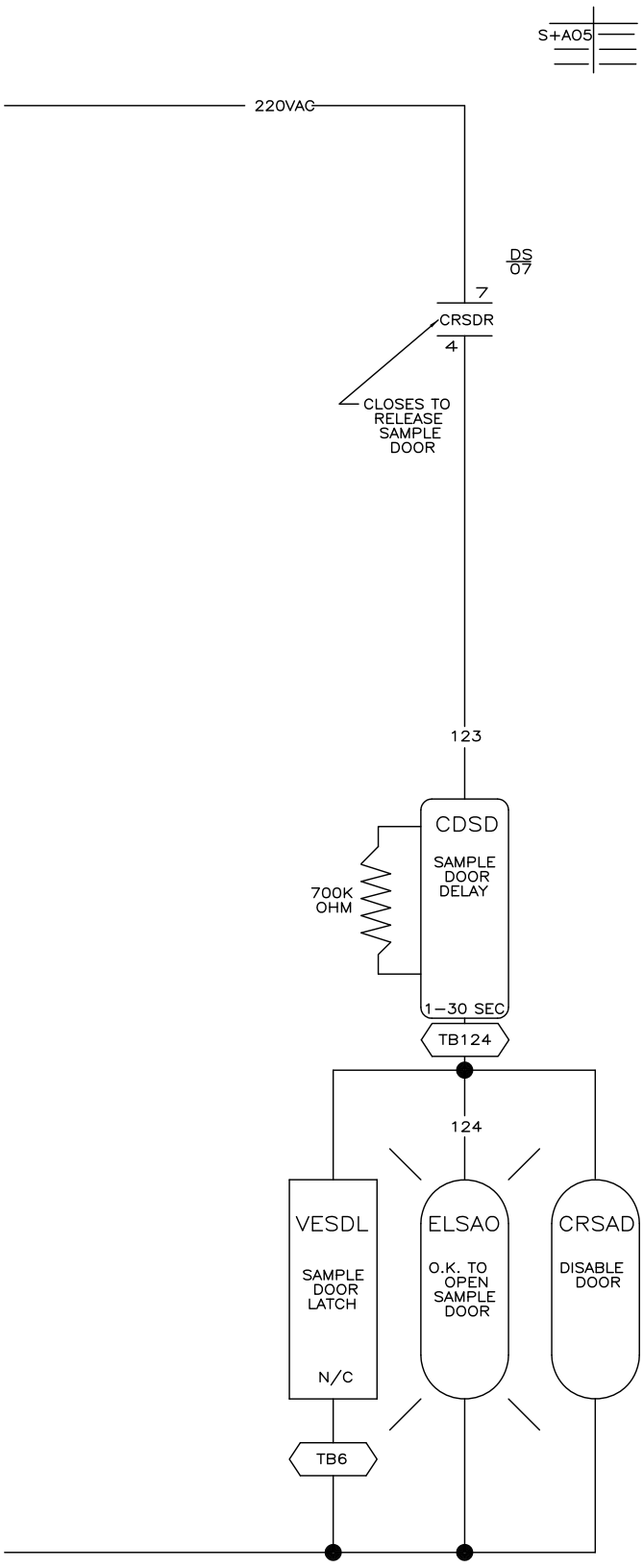
MILTOUCH–EX™ CONTROLS

SCHEMATIC: CENTRAL LIQUID SUPPLY FLUSH 6 THRU 15

PELLERIN MILNOR CORPORATION

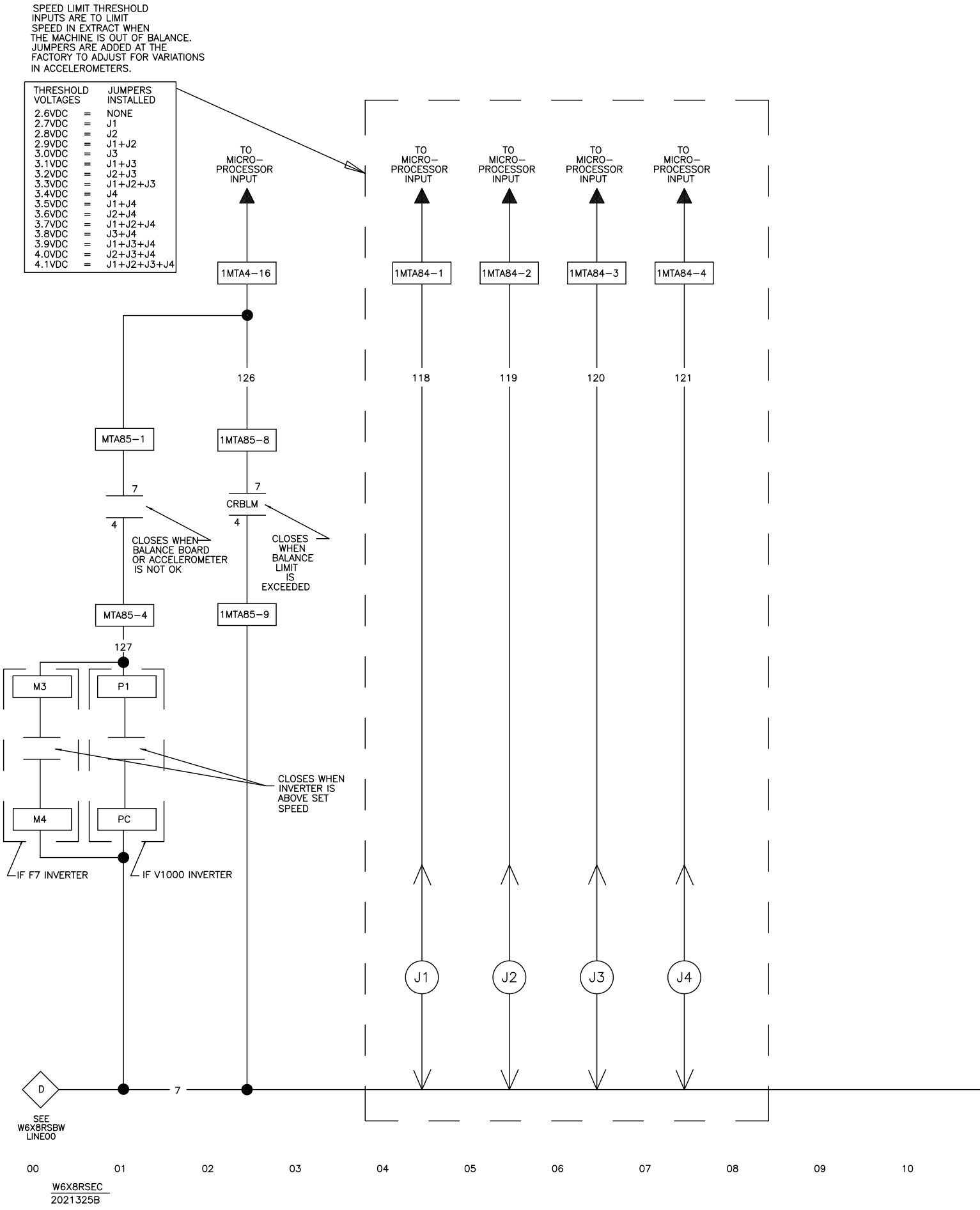


W6X8RSDS
2014112B

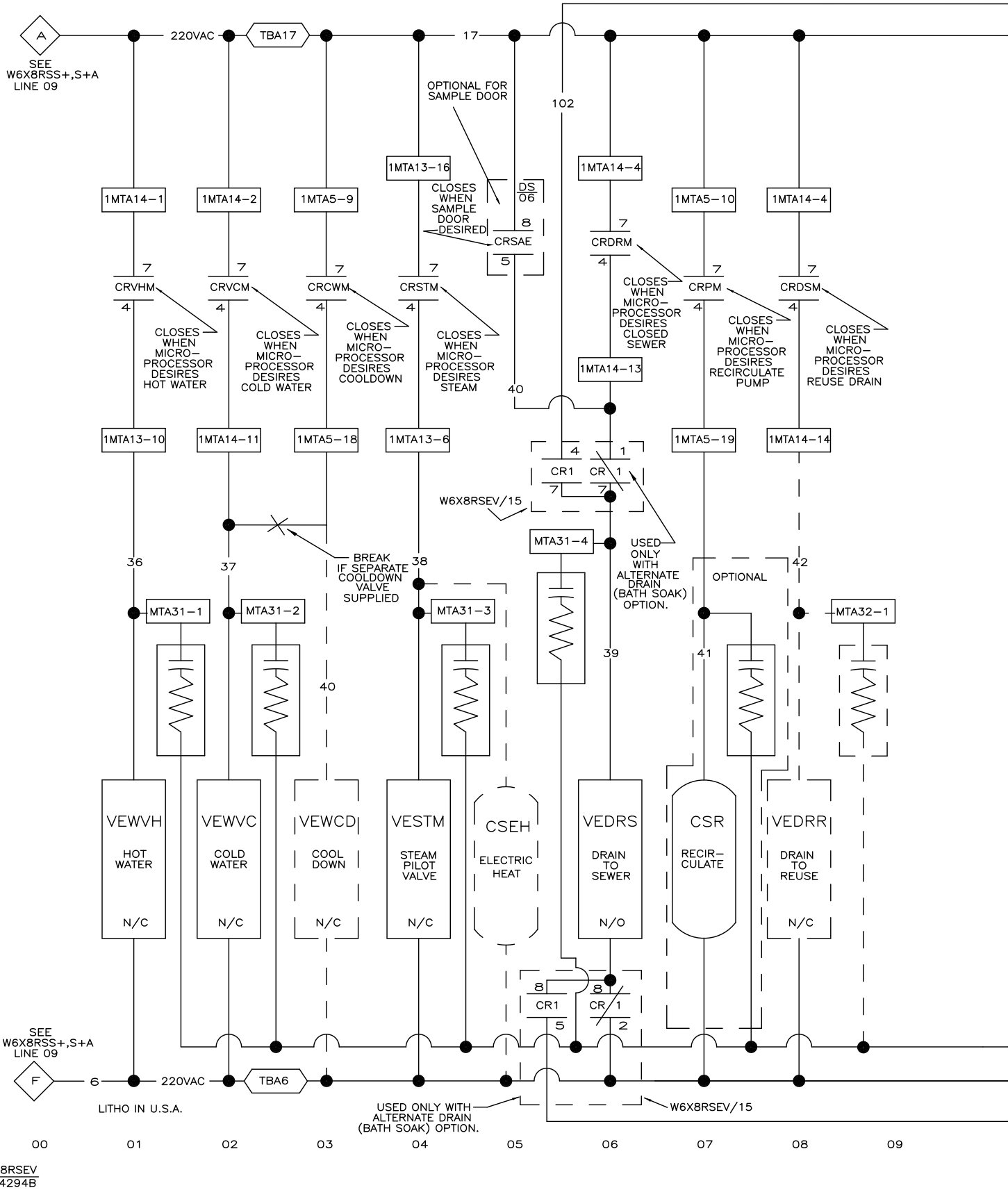


W6X8RSDS
MILTOUCH–EX™ CONTROLS
SCHEMATIC: DOOR SAMPLE
110V1P50HZ/120V1P60HZ
PELLERIN MILNOR CORPORATION

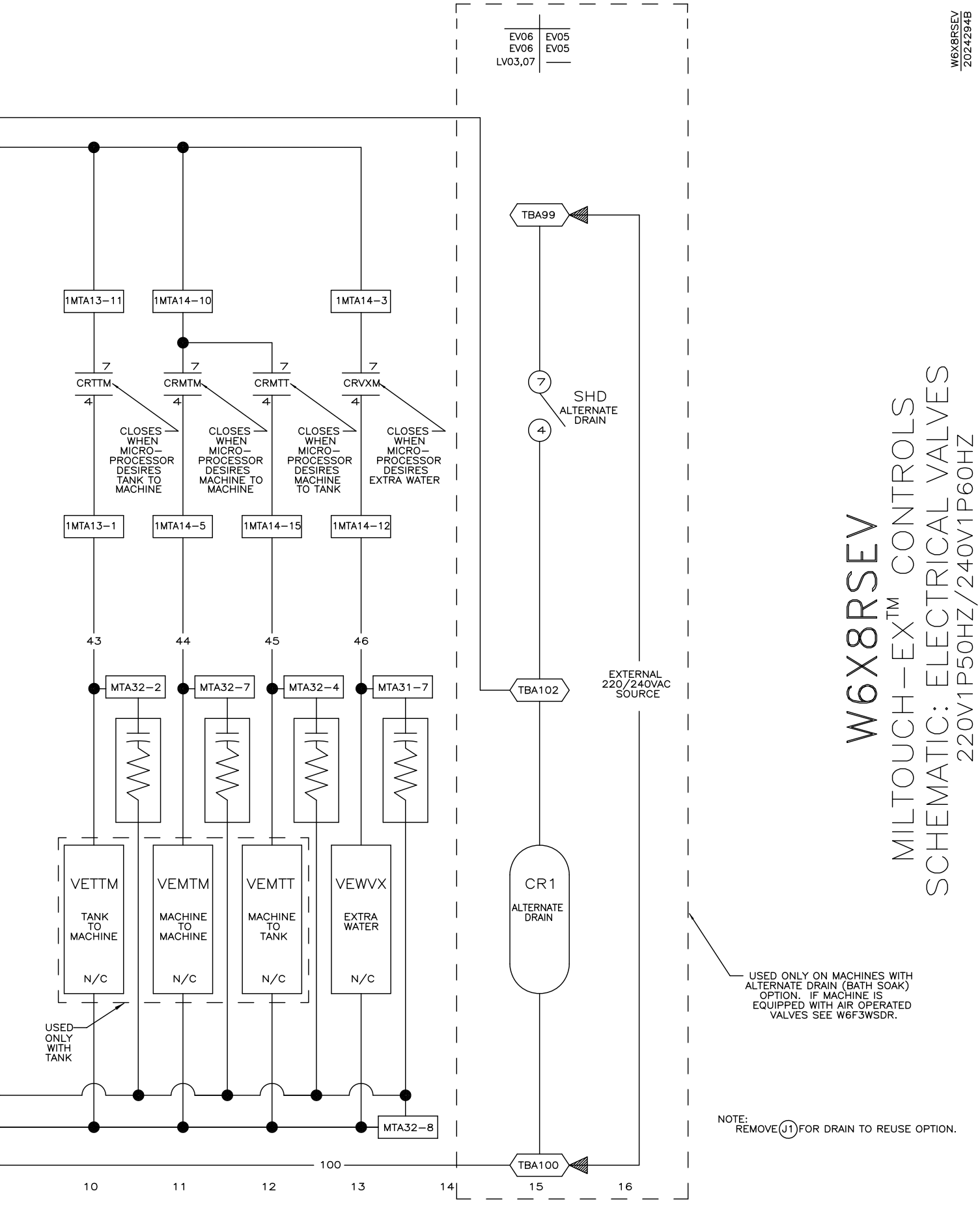
10 11 12 13 14 15 16 17 18


SPEED LIMIT THRESHOLD INPUTS ARE TO LIMIT SPEED IN EXTRACT WHEN THE MACHINE IS OUT OF BALANCE. JUMPERS ARE ADDED AT THE FACTORY TO ADJUST FOR VARIATIONS IN ACCELEROMETERS.
THRESHOLD VOLTAGES
JUMPERS INSTALLED
2.6VDC = NONE
2.7VDC = J1
2.8VDC = J2
2.9VDC = J1+J2
3.0VDC = J3
3.1VDC = J1+J3
3.2VDC = J2+J3
3.3VDC = J1+J2+J3
3.4VDC = J4
3.5VDC = J1+J4
3.6VDC = J2+J4
3.7VDC = J1+J2+J4
3.8VDC = J3+J4
3.9VDC = J1+J3+J4
4.0VDC = J2+J3+J4
4.1VDC = J1+J2+J3+J4
TO MICRO–PROCESSOR INPUT
1MTA4–16
1MTA84–1
1MTA84–2
1MTA84–3
1MTA84–4
126
118
119
120
121
MTA85–1
1MTA85–8
7
4
CRBLM
CLOSES WHEN BALANCE BOARD OR ACCELEROMETER IS NOT OK
CLOSES WHEN BALANCE LIMIT IS EXCEEDED
MTA85–4
1MTA85–9
127
M3
P1
M4
PC
CLOSES WHEN INVERTER IS ABOVE SET SPEED
IF F7 INVERTER
IF V1000 INVERTER
J1
J2
J3
J4
D
SEE W6X8RSBW LINE00
00
01
02
03
04
05
06
07
08
09
10
W6X8RSEC
2021325B

W6X8RSEC
MILTOUCH-EX™ DRYELL
SCHEMATIC: EXTRACT SPEED LIMIT CONTROL
PELLERIN MILNOR CORPORATION



W6X8RSEV
2024294B

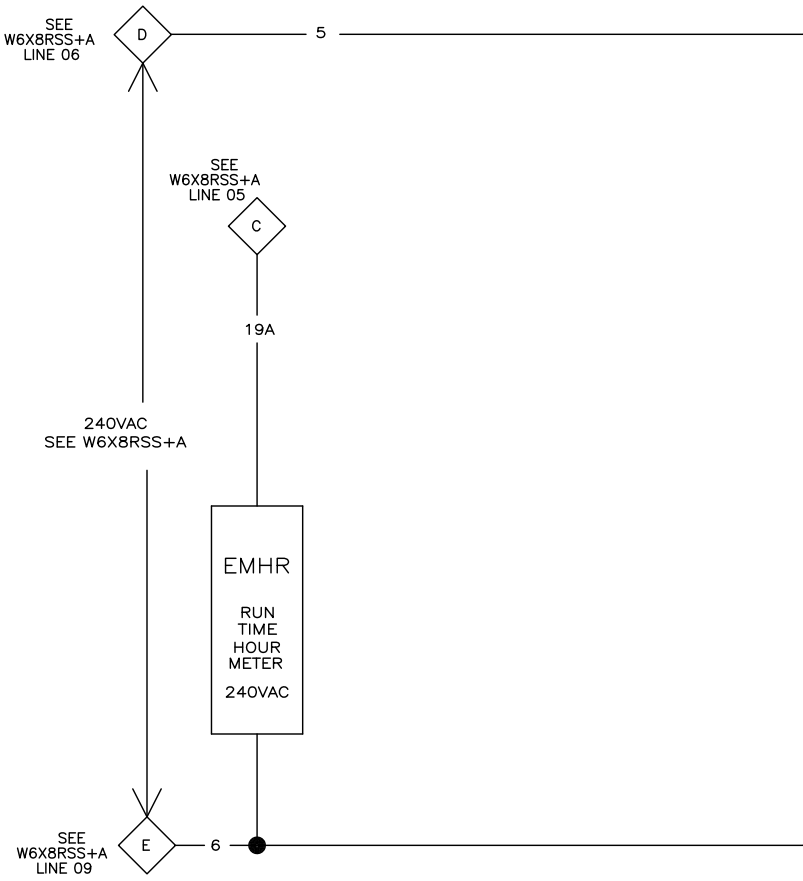


NOTE:
REMOVE (J1) FOR DRAIN TO REUSE OPTION.

W6X8RSEV
MILTOUCH–EX™ CONTROLS
SCHEMATIC: ELECTRICAL VALVES
220V1P50HZ/240V1P60HZ
PELLERIN MILNOR CORPORATION

W6X8RSEV
2024294B

W6X8RSEV
2024294B



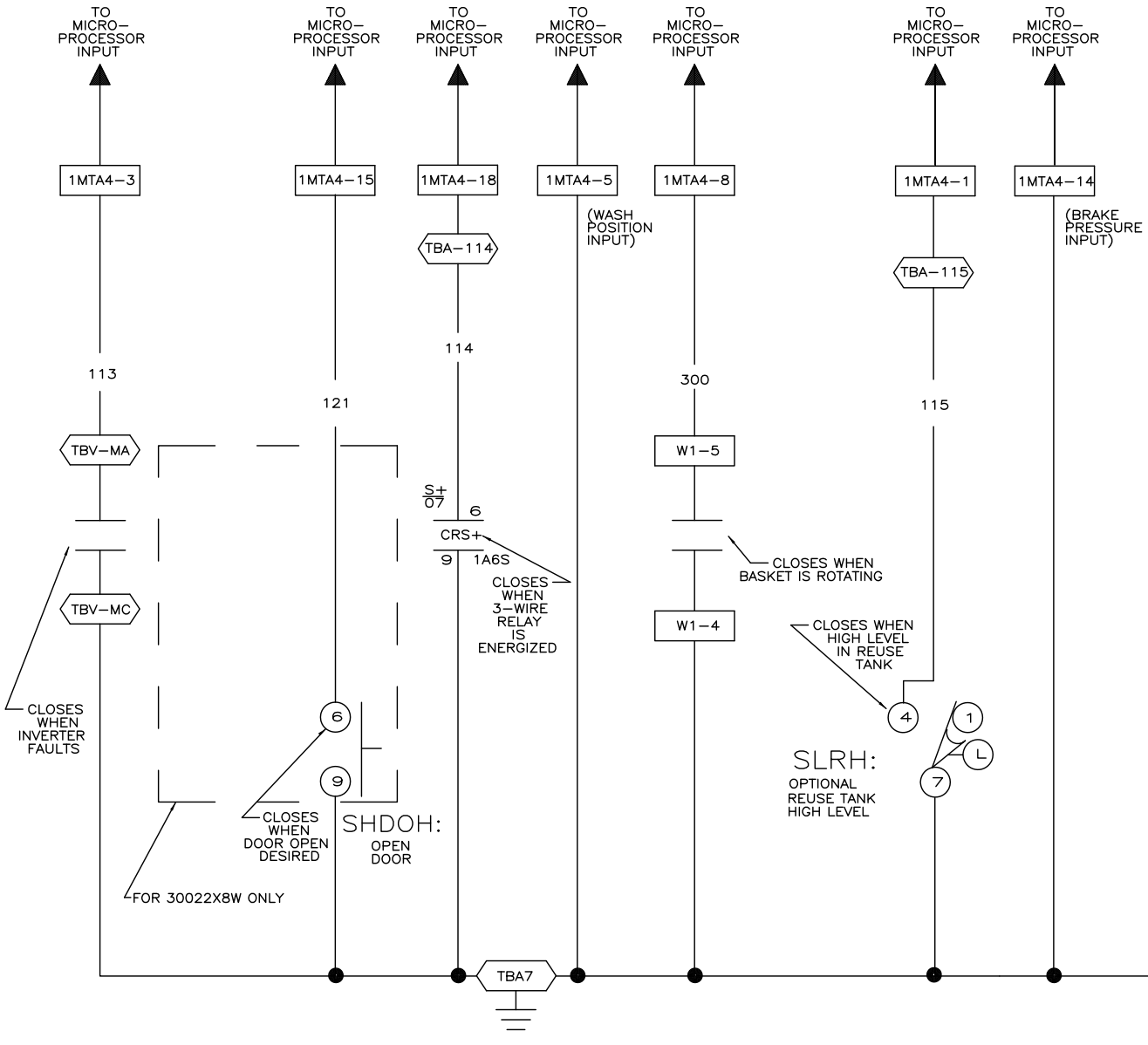
00 01 02 03 04 05 06 07 08 09

W6X8RSFS

SCHEMATIC: FLASHING SIGNAL LIGHT FOR V.A. MEDICAL CENTER

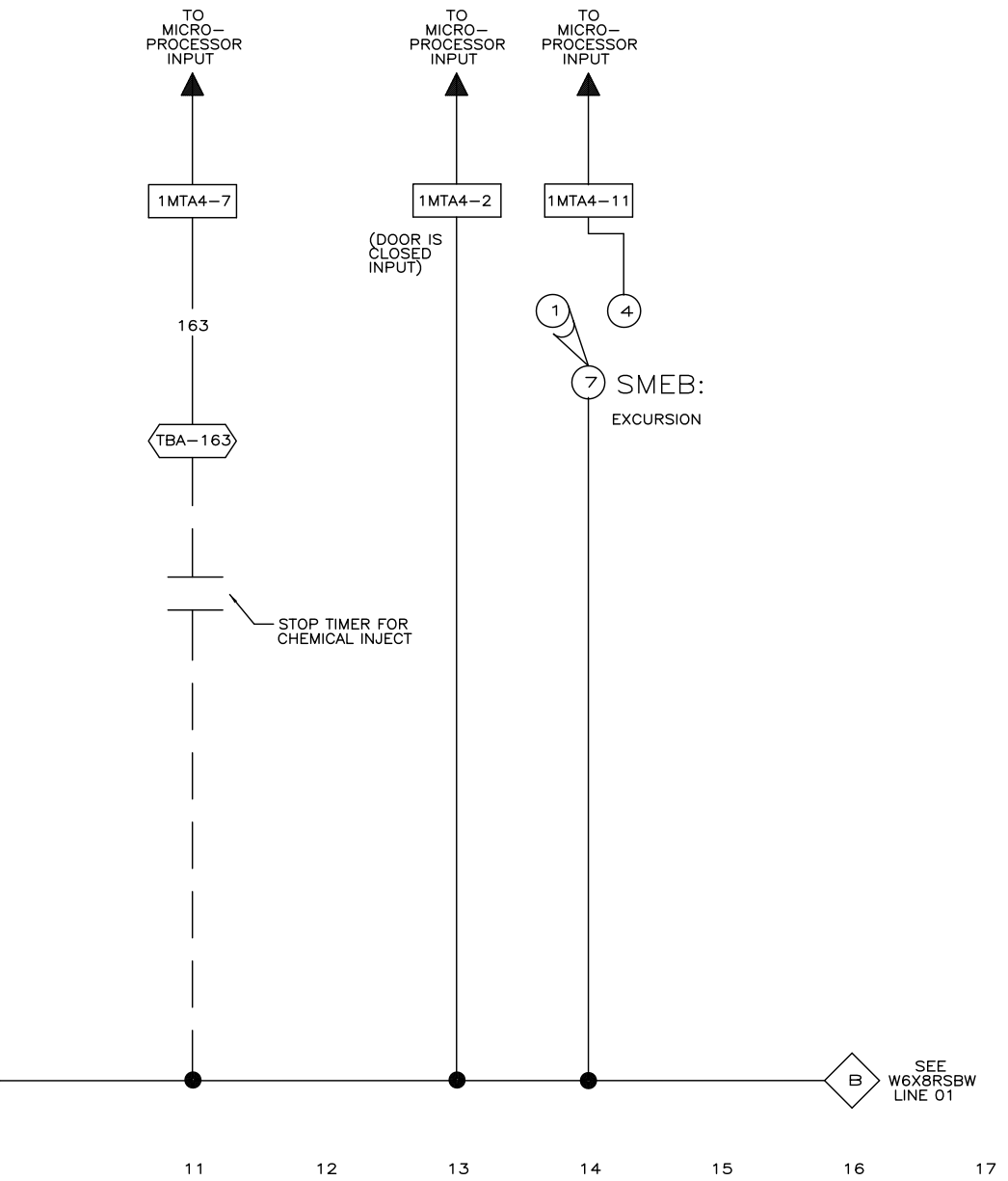
PELLERIN MILNOR CORPORATION

10 11 12 13 14 15 16 17 18 19

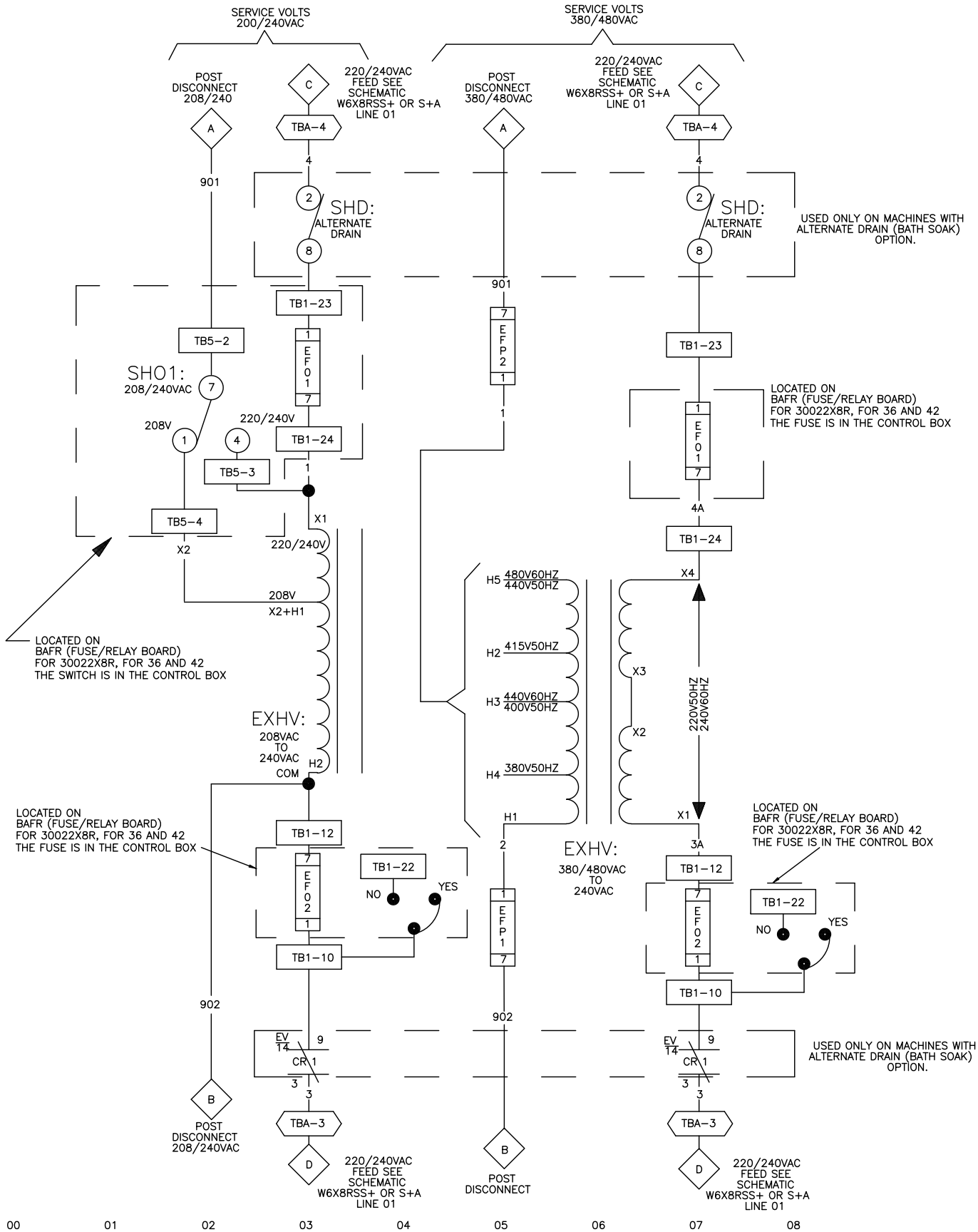


W6X8RSI1A
2016166B

1. 1MTA3 AND 1MTA4 ARE LOCATED ON BIO–1 (8 OUTPUT–16 INPUT BOARD).
2. TBR, TBP, AND TB3 (COPPER BUS BAR) ARE LOCATED IN LOW VOLTAGE CONTROL BOX.
3. INVERTER FAULT CONTACTS TBV–MA AND MC ARE ON INVERTER.
4. W1 IS LOCATED ON THE BSP (SPEED SENSING BOARD).



W6X8RSI1A
MILTOUCH–EX™ CONTROLS
SCHEMATIC: MICROPROCESSOR INPUTS
PELLERIN MILNOR CORPORATION


SERVICE VOLTS 200/240VAC
SERVICE VOLTS 380/480VAC
POST DISCONNECT 208/240
POST DISCONNECT 380/480VAC
220/240VAC FEED SEE SCHEMATIC W6X8RSS+ OR S+A LINE 01
220/240VAC FEED SEE SCHEMATIC W6X8RSS+ OR S+A LINE 01
SHD: ALTERNATE DRAIN
SHD: ALTERNATE DRAIN
USED ONLY ON MACHINES WITH ALTERNATE DRAIN (BATH SOAK) OPTION.
SHO1: 208/240VAC
208V
220/240V
LOCATED ON BAFR (FUSE/RELAY BOARD) FOR 30022X8R, FOR 36 AND 42 THE SWITCH IS IN THE CONTROL BOX
LOCATED ON BAFR (FUSE/RELAY BOARD) FOR 30022X8R, FOR 36 AND 42 THE FUSE IS IN THE CONTROL BOX
EXHV: 208VAC TO 240VAC COM
EXHV: 380/480VAC TO 240VAC
H5 480V60HZ 440V50HZ
H2 415V50HZ
H3 440V60HZ 400V50HZ
H4 380V50HZ
220V50HZ 240V60HZ
NO
YES
POST DISCONNECT 208/240VAC
POST DISCONNECT
220/240VAC FEED SEE SCHEMATIC W6X8RSS+ OR S+A LINE 01
USED ONLY ON MACHINES WITH ALTERNATE DRAIN (BATH SOAK) OPTION.
00 01 02 03 04 05 06 07 08
W6X8RSLV
2018486B

09

10

11

12

13

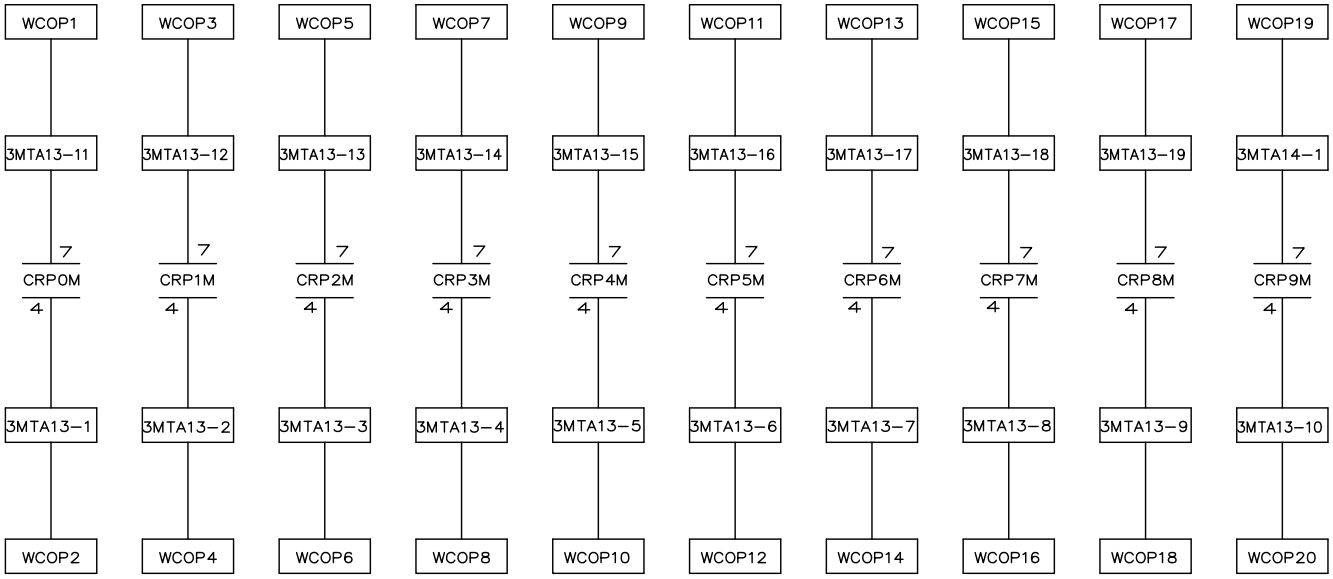
47

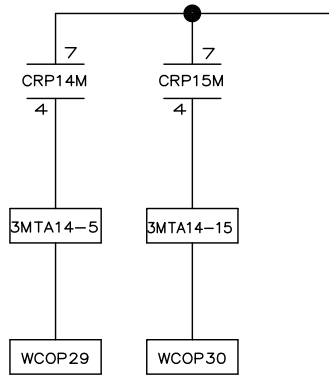
W6X8RSLV

MILTOUCH–EX™ CONTROLS
SCHEMATIC:CONTROL CIRCUIT TRANSFORMER
220V1P50HZ/240V1P60HZ

PELLERIN MILNOR CORPORATION

W6X8RSLV
2018486B



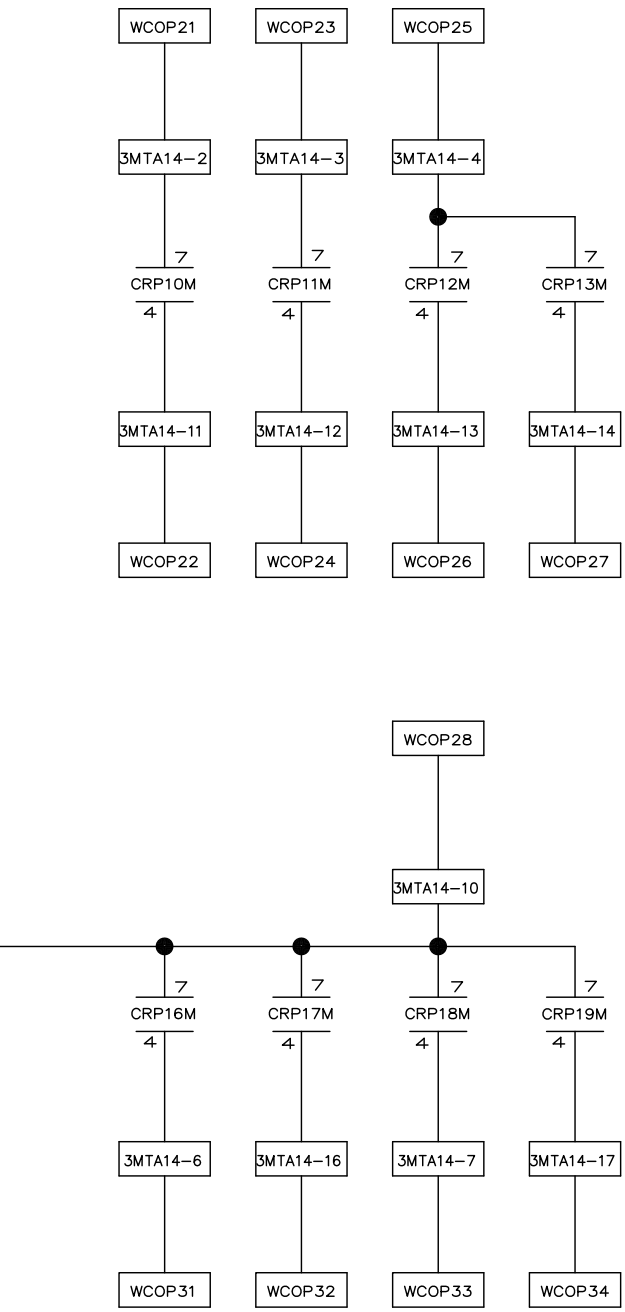


00 01 02 03 04 05 06 07 08 09 10

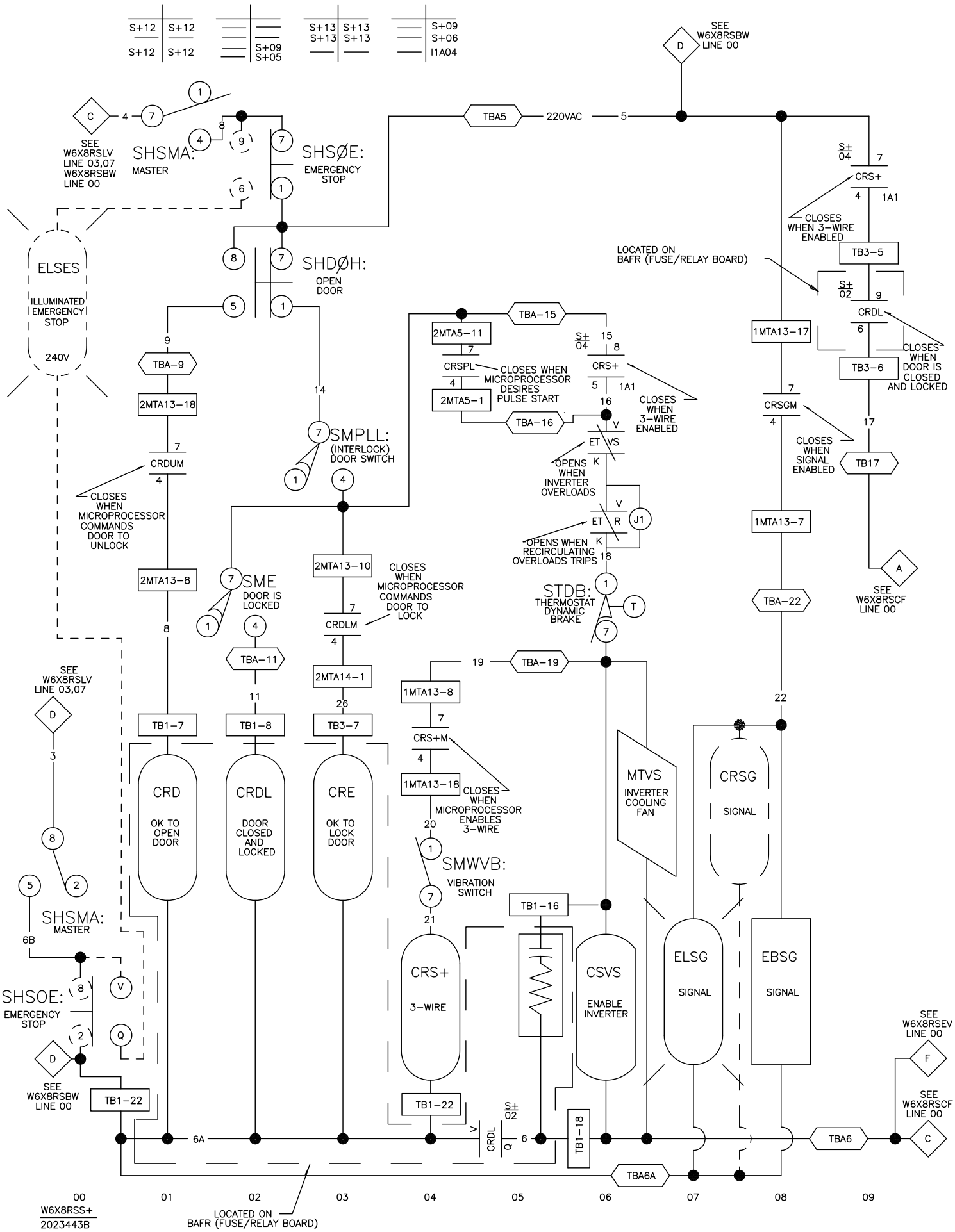
W6X8RSOP
2014112B

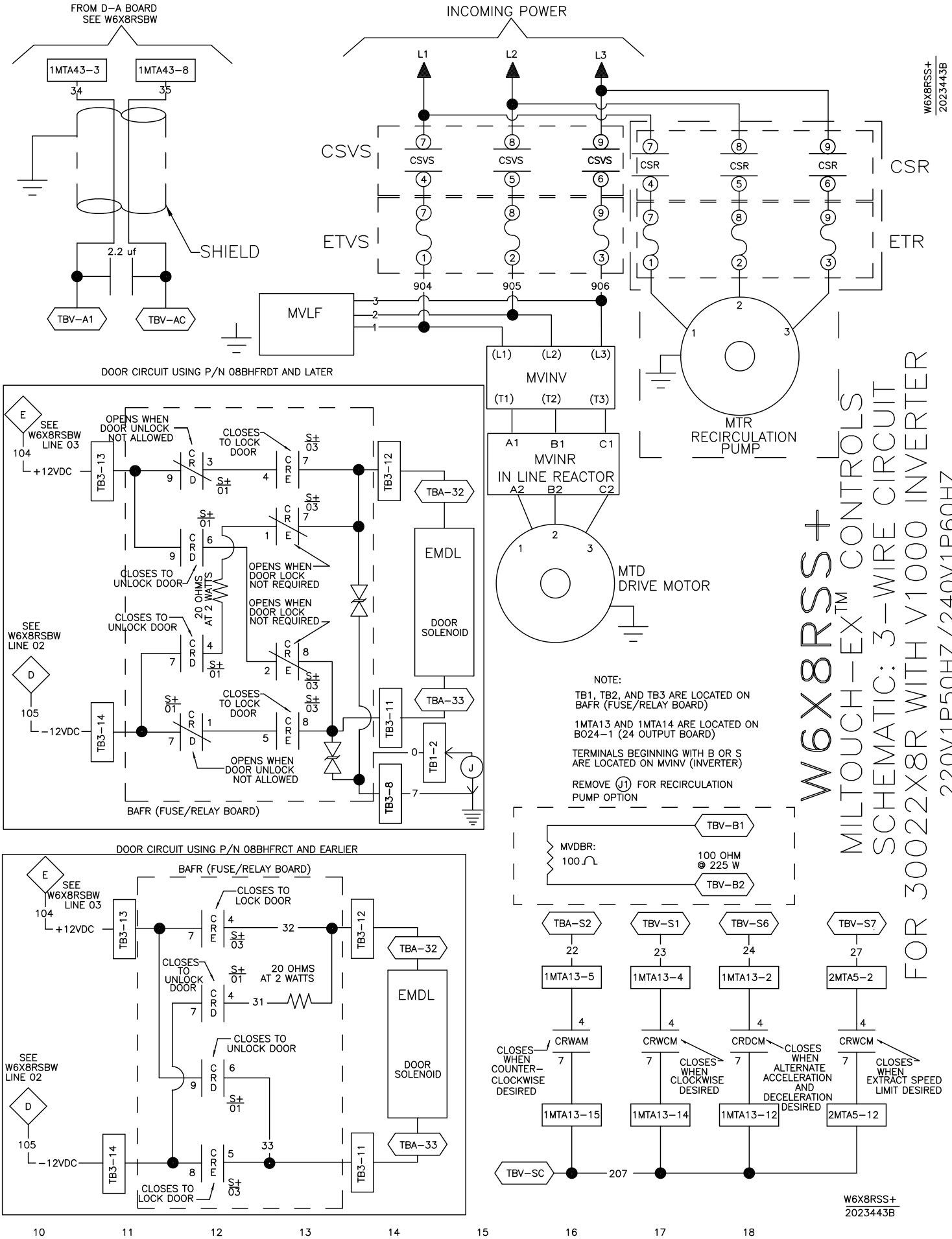
W6X8RSOP
MILTOUCH-EX™ CONTROLS
SCHEMATIC: 20 OPTIONAL PROGRAMABLE OUTPUTS

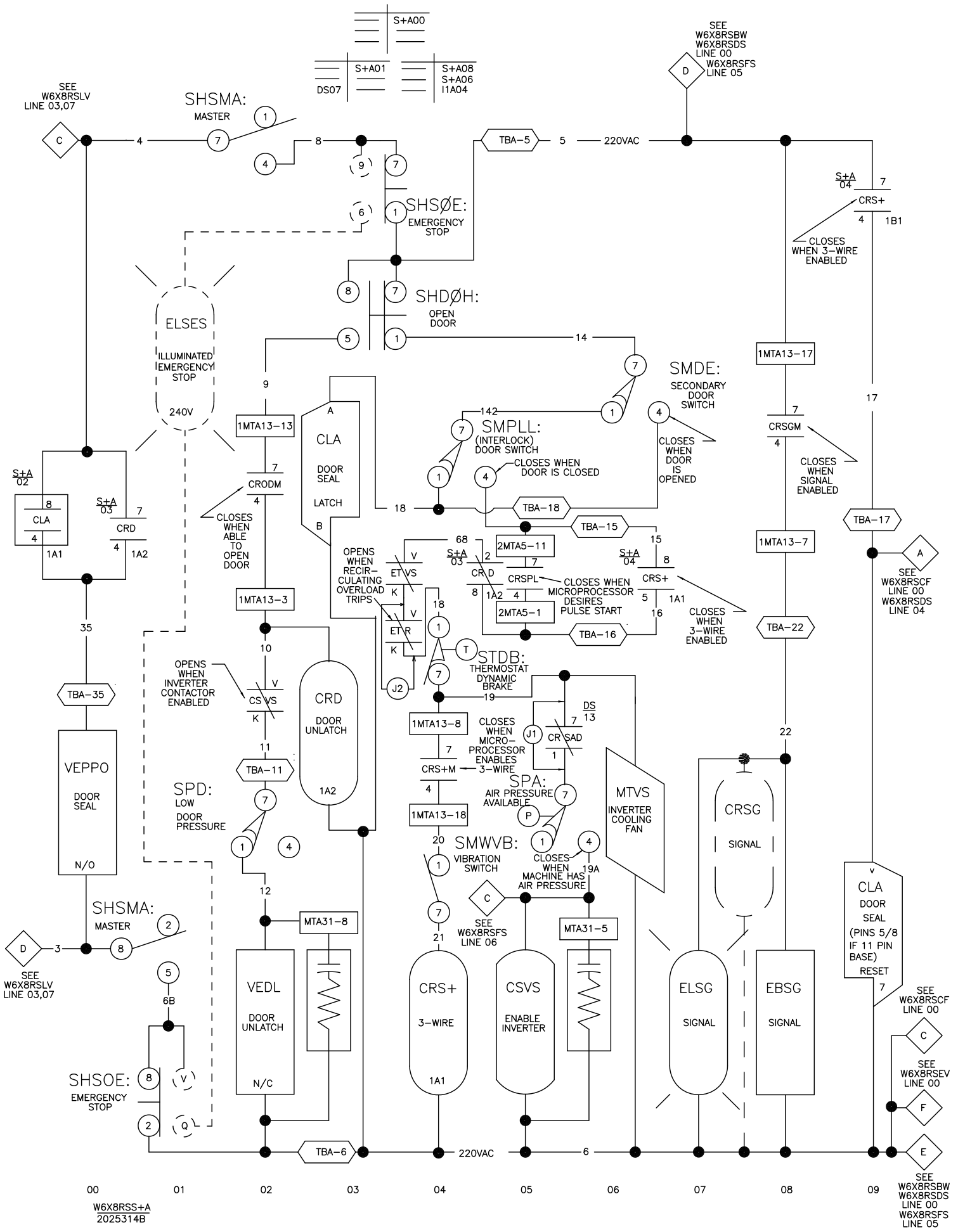
PELLERIN MILNOR CORPORATION

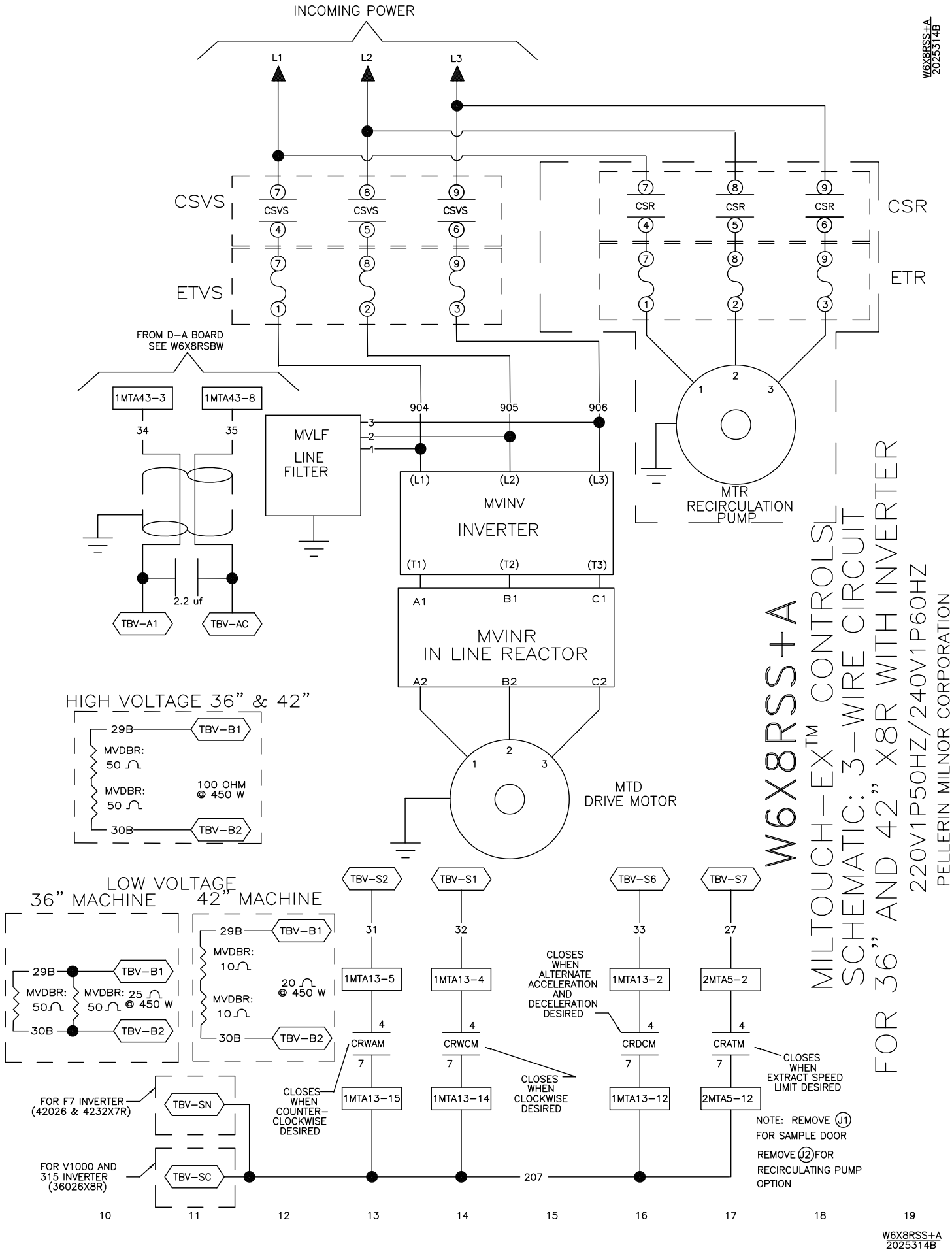


11 12 13 14 15 16 17


S+12 S+12 S+12 S+12
S+09 S+05
S+13 S+13 S+13 S+13
S+09 S+06 I1A04
SEE W6X8RSBW LINE 00
SEE W6X8RSLV LINE 03,07 W6X8RSBW LINE 00
SHSMA: MASTER
SHSØE: EMERGENCY STOP
TBA5
220VAC
SHDØH: OPEN DOOR
ELSES
ILLUMINATED EMERGENCY STOP
240V
TBA-9
2MTA13-18
CRDUM
CLOSES WHEN MICROPROCESSOR COMMANDS DOOR TO UNLOCK
SMPLL: (INTERLOCK) DOOR SWITCH
2MTA13-8
SME DOOR IS LOCKED
TBA-11
2MTA13-10
CLOSES WHEN MICROPROCESSOR COMMANDS DOOR TO LOCK
CRDLM
2MTA14-1
TB1-7
TB1-8
TB3-7
CRD OK TO OPEN DOOR
CRDL DOOR CLOSED AND LOCKED
CRE OK TO LOCK DOOR
TBA-15
2MTA5-11
CRSPL
CLOSES WHEN MICROPROCESSOR DESIRES PULSE START
2MTA5-1
TBA-16
CRS+
CLOSES WHEN 3-WIRE ENABLED
ET VS
OPENS WHEN INVERTER OVERLOADS
ET R J1
OPENS WHEN RECIRCULATING OVERLOADS TRIPS
STDB: THERMOSTAT DYNAMIC BRAKE
TBA-19
1MTA13-8
CRS+M
1MTA13-18
CLOSES WHEN MICROPROCESSOR ENABLES 3-WIRE
SMWVB: VIBRATION SWITCH
CRS+ 3-WIRE
TB1-16
CSVS ENABLE INVERTER
MTVS INVERTER COOLING FAN
CRSG SIGNAL
ELSG SIGNAL
EBSG SIGNAL
LOCATED ON BAFR (FUSE/RELAY BOARD)
CRS+
CLOSES WHEN 3-WIRE ENABLED
TB3-5
CRDL
1MTA13-17
CLOSES WHEN DOOR IS CLOSED AND LOCKED
TB3-6
CRSGM
CLOSES WHEN SIGNAL ENABLED
TB17
1MTA13-7
TBA-22
SEE W6X8RSCF LINE 00
SHSMA: MASTER
SHSOE: EMERGENCY STOP
SEE W6X8RSBW LINE 00
TB1-22
TB1-18
TBA6
TBA6A
SEE W6X8RSEV LINE 00
SEE W6X8RSCF LINE 00
00 01 02 03 04 05 06 07 08 09
W6X8RSS+ 2023443B
LOCATED ON BAFR (FUSE/RELAY BOARD)


FROM D-A BOARD
SEE W6X8RSBW
1MTA43-3
1MTA43-8
34
35
2.2 uf
SHIELD
TBV-A1
TBV-AC
INCOMING POWER
L1
L2
L3
CSVS
ETVS
CSR
ETR
904
905
906
MVLF
(L1) (L2) (L3)
MVINV
(T1) (T2) (T3)
A1 B1 C1
MVINR
IN LINE REACTOR
A2 B2 C2
MTD
DRIVE MOTOR
MTR
RECIRCULATION
PUMP
W6X8RSS+
2023443B
DOOR CIRCUIT USING P/N 08BHFRDT AND LATER
SEE W6X8RSBW LINE 03
104
+12VDC
TB3-13
OPENS WHEN DOOR UNLOCK NOT ALLOWED
CLOSES TO LOCK DOOR
TB3-12
TBA-32
EMDL
DOOR SOLENOID
CLOSES TO UNLOCK DOOR
20 OHMS AT 2 WATTS
OPENS WHEN DOOR LOCK NOT REQUIRED
SEE W6X8RSBW LINE 02
105
-12VDC
TB3-14
TB3-11
TBA-33
TB1-2
TB3-8
BAFR (FUSE/RELAY BOARD)
NOTE:
TB1, TB2, AND TB3 ARE LOCATED ON BAFR (FUSE/RELAY BOARD)
1MTA13 AND 1MTA14 ARE LOCATED ON BO24-1 (24 OUTPUT BOARD)
TERMINALS BEGINNING WITH B OR S ARE LOCATED ON MVINV (INVERTER)
REMOVE (J1) FOR RECIRCULATION PUMP OPTION
TBV-B1
MVDBR:
100
100 OHM @ 225 W
TBV-B2
DOOR CIRCUIT USING P/N 08BHFRCT AND EARLIER
TBA-S2
TBV-S1
TBV-S6
TBV-S7
1MTA13-5
1MTA13-4
1MTA13-2
2MTA5-2
CRWAM
CRWCM
CRDCM
CRWCM
CLOSES WHEN COUNTER-CLOCKWISE DESIRED
CLOSES WHEN CLOCKWISE DESIRED
CLOSES WHEN ALTERNATE ACCELERATION AND DECELERATION DESIRED
CLOSES WHEN EXTRACT SPEED LIMIT DESIRED
1MTA13-15
1MTA13-14
1MTA13-12
2MTA5-12
TBV-SC
207
W6X8RSS+
2023443B
W6X8RSS+
MILTOUCH-EX™ CONTROLS
SCHEMATIC: 3-WIRE CIRCUIT
FOR 30022X8R WITH V1000 INVERTER
220V1P50HZ/240V1P60HZ
PELLERIN MILNOR CORPORATION


S+A00
S+A01
S+A08
S+A06
I1A04
DS07
SEE W6X8RSBW W6X8RSDS LINE 00 W6X8RSFS LINE 05
SEE W6X8RSLV LINE 03,07
SHSMA: MASTER
TBA–5
220VAC
S+A 04
CRS+
1B1
CLOSES WHEN 3–WIRE ENABLED
SHSØE: EMERGENCY STOP
SHDØH: OPEN DOOR
ELSES ILLUMINATED EMERGENCY STOP 240V
1MTA13–17
SMDE: SECONDARY DOOR SWITCH
CRSGM
CLOSES WHEN SIGNAL ENABLED
1MTA13–13
CLA DOOR SEAL LATCH
SMPLL: (INTERLOCK) DOOR SWITCH
CLOSES WHEN DOOR IS CLOSED
CLOSES WHEN DOOR IS OPENED
S+A 02
CLA
1A1
S+A 03
CRD
1A2
CRODM
CLOSES WHEN ABLE TO OPEN DOOR
TBA–18
TBA–15
TBA–17
1MTA13–7
OPENS WHEN RECIR–CULATING OVERLOAD TRIPS
ETVS
ETR
2MTA5–11
2MTA5–1
CRSPL
CLOSES WHEN MICROPROCESSOR DESIRES PULSE START
CRS+
CLOSES WHEN 3–WIRE ENABLED
TBA–16
TBA–22
SEE W6X8RSCF LINE 00 W6X8RSDS LINE 04
1MTA13–3
STDB: THERMOSTAT DYNAMIC BRAKE
TBA–35
OPENS WHEN INVERTER CONTACTOR ENABLED
CSVS
CRD DOOR UNLATCH 1A2
1MTA13–8
CLOSES WHEN MICRO–PROCESSOR ENABLES 3–WIRE
CRS+M
CR SAD
DS 13
VEPPO DOOR SEAL N/O
TBA–11
SPD: LOW DOOR PRESSURE
SPA: AIR PRESSURE AVAILABLE
MTVS INVERTER COOLING FAN
CRSG SIGNAL
1MTA13–18
SMWVB: VIBRATION SWITCH
CLOSES WHEN MACHINE HAS AIR PRESSURE
SEE W6X8RSFS LINE 06
MTA31–8
MTA31–5
SHSMA: MASTER
SEE W6X8RSLV LINE 03,07
VEDL DOOR UNLATCH N/C
CRS+ 3–WIRE 1A1
CSVS ENABLE INVERTER
ELSG SIGNAL
EBSG SIGNAL
CLA DOOR SEAL (PINS 5/8 IF 11 PIN BASE) RESET
SEE W6X8RSCF LINE 00
SEE W6X8RSEV LINE 00
SHSOE: EMERGENCY STOP
TBA–6
220VAC
SEE W6X8RSBW W6X8RSDS LINE 00 W6X8RSFS LINE 05
00 01 02 03 04 05 06 07 08 09
W6X8RSS+A 2025314B


INCOMING POWER
L1
L2
L3
W6X8RSS+A
2025314B
CSVS
ETVS
CSR
ETR
FROM D-A BOARD
SEE W6X8RSBW
1MTA43-3
1MTA43-8
34
35
904
905
906
MVLF
LINE
FILTER
2.2 uf
TBV-A1
TBV-AC
(L1)
(L2)
(L3)
MVINV
INVERTER
(T1)
(T2)
(T3)
A1
B1
C1
MVINR
IN LINE REACTOR
A2
B2
C2
MTR
RECIRCULATION
PUMP
MTD
DRIVE MOTOR
HIGH VOLTAGE 36" & 42"
29B
TBV-B1
MVDBR:
50
100 OHM
@ 450 W
30B
TBV-B2
LOW VOLTAGE
36" MACHINE
42" MACHINE
MVDBR: 25
@ 450 W
10
20
TBV-S2
TBV-S1
TBV-S6
TBV-S7
1MTA13-5
1MTA13-4
1MTA13-2
2MTA5-2
CRWAM
CRWCM
CRDCM
CRATM
1MTA13-15
1MTA13-14
1MTA13-12
2MTA5-12
CLOSES
WHEN
ALTERNATE
ACCELERATION
AND
DECELERATION
DESIRED
CLOSES
WHEN
COUNTER-
CLOCKWISE
DESIRED
CLOSES
WHEN
CLOCKWISE
DESIRED
CLOSES
WHEN
EXTRACT SPEED
LIMIT DESIRED
FOR F7 INVERTER
(42026 & 4232X7R)
TBV-SN
FOR V1000 AND
315 INVERTER
(36026X8R)
TBV-SC
207
NOTE: REMOVE J1
FOR SAMPLE DOOR
REMOVE J2 FOR
RECIRCULATING PUMP
OPTION
10
11
12
13
14
15
16
17
18
19
W6X8RSS+A
2025314B
W6X8RSS+A
MILTOUCH-EX™ CONTROLS
SCHEMATIC: 3-WIRE CIRCUIT
FOR 36" AND 42" X8R WITH INVERTER
220V1P50HZ/240V1P60HZ
PELLERIN MILNOR CORPORATION