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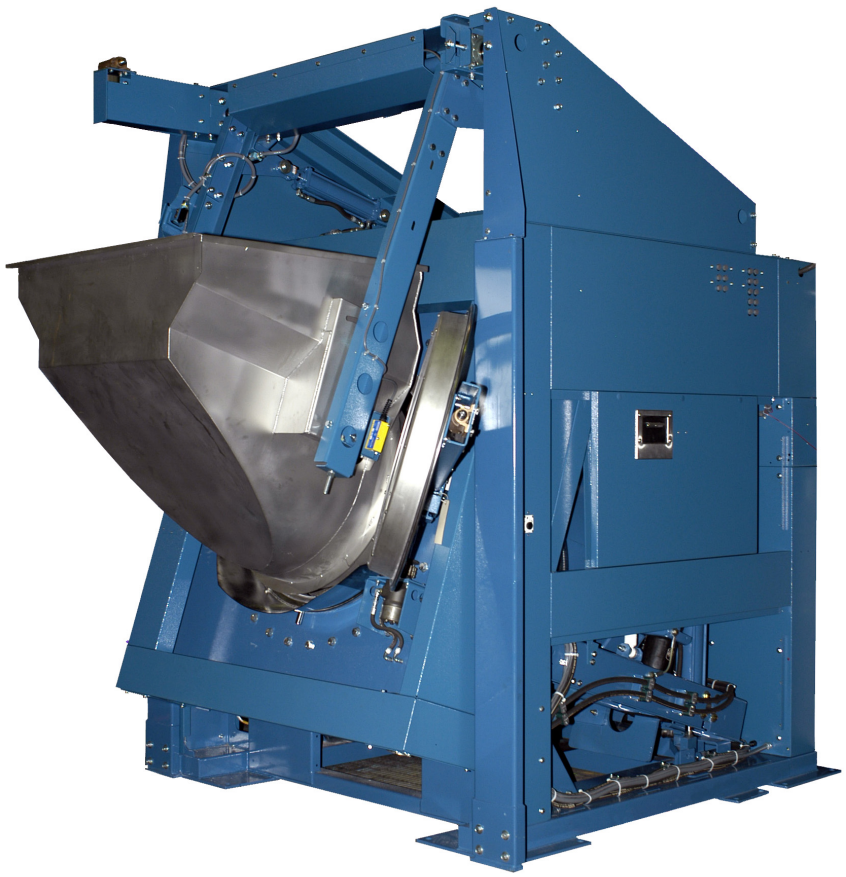
Schematic/Electrical Parts

48040H7K & 68036H5K
DRYELL, AUTOMATIC LOADING
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.

Table of Contents
ME6H7KZDAE/16205A

COMPONENT PARTS LIST

W6H5KZPL/2016204N

COMPONENT NUMBER	FUNCTION OF THIS COMPONENT NUMBER	WHERE TO FIND THIS COMPONENT	MILNOR P/N	DESCRIPTION	LOCATION
	>>>COMPONENT LOCATION DETAILS				
001	DETAIL LOW VOLTAGE CONTROL BOX	W6H5KZTG1	B2T2014014	TAG 68M/H5K LV BOX PLUS AUTOLOAD	CONTROL BOX
002	DETAIL HOW TO SET POWER SUPPLIES	W6H5KZTG1	B2T2014012	TAG: MILTOUCH-EX POWER SUPY SET	CONTROL BOX
003	DETAIL CONTROL BOARDS IN/OUT LIST	W6H5KZTG1	B2T2014016	TAG MTOUCH-EX BDS+DRYELL IN/OUT LIST	CONTROL BOX
004	DETAIL HIGH VOLTAGE CONTROL BOX	W6H5KZTG2	B2T2014015	TAG:47H7R-K/68H5K HIGH VOLT BOX	CONTROL BOX
ACBA	**>>>ACCELEROMETERS**				
ACBA	BOARD-ACCELEROMETER	W6H5KZEC	EACCLRM5	ASSY:ACCEL 1-5G ADXL 105+TEST	SHELL FRONT
BA	**>>>PRINTED CIRCUIT BOARDS**				
BAD-1	BOARD-ANALOG TO DIGITAL CONVERTER	W6H5KZBW	08BSADCT	BD: SERIAL A-D CONVERT->TEST	CONTROL BOX
BAD-1	BOARD-ANALOG TO DIGITAL CONVERTER	W6H5KZEC	08BSADCT	BD: SERIAL A-D CONVERT->TEST	CONTROL BOX
BAS	BOARD-16 SNUBBER CIRCUITS	W6H5KZEC	08BNCMBT	COIN MACHINE SNUBBER->TESTED	CONROL BOX
BAS	BOARD-16 SNUBBER CIRCUITS	W6H5KZHD	08BNCMBT	COIN MACHINE SNUBBER->TESTED	CONROL BOX
BDA-1	BOARD-DIGITAL TO ANALOG CONVERTOR	W6H5KZBW	08BSDACHT	BD:HI-RES SERIAL D-A->TEST	CONTROL BOX
BIO-1	BOARD-8OUTPUT/16INPUT #1	W6H5KZBW	08BS816CHT	BD 8OUT-16IN HIGH SPD->TEST	CONTROL BOX
BIO-3	BOARD-8OUTPUT/16INPUT #3	W6H5KZBW	08BS816CT	SERIAL 8OUT-16INPUT-TESTED	CONTROL BOX
BIO-4	BOARD-8OUTPUT/16INPUT #4	W6H5KZBW	08BS816CT	SERIAL 8OUT-16INPUT-TESTED	CONTROL BOX
BLB	BOARD-LEVEL TRANSDUCER	W6H5KZBW	08BNLTT	LEVEL TRANSDUCER BD->TEST	CONTROL BOX
BMTH	BOARD-5 CHANNEL MOTHER	W6H5KZBW	08BS8MTHAT	BD:SERIAL 8 CARD MOTHER->TEST	CONTROL BOX
BO24-1	BOARD-24 OUTPUT #1	W6H5KZBW	08BSO24AT	BD:SERIAL 24 OUTPUT->TEST	CONTROL BOX
BO24-2	BOARD-24 OUTPUT #2	W6H5KZBW	08BSO24AT	BD:SERIAL 24 OUTPUT->TEST	CONTROL BOX
BO24-3	BOARD-24 OUTPUT #3	W6H5KZBW	08BSO24AT	BD:SERIAL 24 OUTPUT->TEST	CONTROL BOX
BO24-4	BOARD-24 OUTPUT #4	W6H5KZBW	08BSO24AT	BD:SERIAL 24 OUTPUT->TEST	CONTROL BOX
BPB	BOARD-ARM9 WITH TOUCH SCREEN	W6H5KZBW	08BHA9D4T	ASSY:ARM9 PROC+8.4 OPTREX DSP-TESTED	PROCESSOR BX
BSP	BOARD-SPEED SENSING	W6H5KZBW	08BNDSRAT	BD DRY SAFETY ROTATION->TEST	CONTROL BOX
CP	**>>>PHOTOEYE**				
CPLCB	PHOTOEYE-LOAD CHUTE RECEIVER	W6H5KZI2	09RPE006B	PHOTOEYE RECEIVER 24/120V AC	LOAD CHUTE
CPLCB	PHOTOEYE-LOAD CHUTE RECEIVER	W6H5KZI2	09RPE007C	P.E. PWR.BLK. NO-OUT 240V-IN	LOAD CHUTE
CPLCB	PHOTOEYE-LOAD CHUTE RECEIVER	W6H5KZI2	09RP007B2	PHOTOEYE ON/OFF LOGICMOD #LM3	LOAD CHUTE
CPLCC	PHOTOEYE-LOAD CHUTE SENDER	W6H5KZI2	09RPE006A	PHOTOEYE EMITTER 24/120V AC,	LOAD CHUTE
CPLCC	PHOTOEYE-LOAD CHUTE SENDER	W6H5KZI2	09RPE007C1	P.E. PWR.BLK. 240V-OUT 240V-IN	LOAD CHUTE
CPSP	PHOTOEYE-SPEED	W6H5KZBW	09RPE013Q	SENSOR E-Z BEAM QUICK CONN DC	MAIN PULLEY
CR	**>>>RELAY-PILOT OR CONTROL**				
CRAD	RELAY-BASE BLOCK ON MILTOUCH POWER UP	W6H5KZVP	09C024D71	RELAY 4PDT DIFGLD 14PN 240V W/LED	LOW VOLT BOX

COMPONENT PARTS LIST

COMPONENT NUMBER	FUNCTION OF THIS COMPONENT NUMBER	WHERE TO FIND THIS COMPONENT	MILNOR P/N	DESCRIPTION	LOCATION
CRC01	RELAY-INTERPRET #1	W6H5KZCP	09C024D71	RELAY 4PDT DIFGLD 14PN 240V W/LED	CONTROL BOX
CRC02	RELAY-INTERPRET #2	W6H5KZCP	09C024D71	RELAY 4PDT DIFGLD 14PN 240V W/LED	CONTROL BOX
CRC03	RELAY-INTERPRET #3	W6H5KZCP	09C024D71	RELAY 4PDT DIFGLD 14PN 240V W/LED	CONTROL BOX
CRC04	RELAY-INTERPRET #4	W6H5KZCP	09C024D71	RELAY 4PDT DIFGLD 14PN 240V W/LED	CONTROL BOX
CRC05	RELAY-INTERPRET #5	W6H5KZCP	09C024D71	RELAY 4PDT DIFGLD 14PN 240V W/LED	CONTROL BOX
CRC06	RELAY-INTERPRET #6	W6H5KZCP	09C024D71	RELAY 4PDT DIFGLD 14PN 240V W/LED	CONTROL BOX
CRC07	RELAY-INTERPRET #7	W6H5KZCP	09C024D71	RELAY 4PDT DIFGLD 14PN 240V W/LED	CONTROL BOX
CRC08	RELAY-INTERPRET #8	W6H5KZCP	09C024D71	RELAY 4PDT DIFGLD 14PN 240V W/LED	CONTROL BOX
CRC09	RELAY-INTERPRET #9	W6H5KZCP	09C024D71	RELAY 4PDT DIFGLD 14PN 240V W/LED	CONTROL BOX
CRC10	RELAY-INTERPRET #10	W6H5KZCP	09C024D71	RELAY 4PDT DIFGLD 14PN 240V W/LED	CONTROL BOX
CRC11	RELAY-INTERPRET #11	W6H5KZCP	09C024D71	RELAY 4PDT DIFGLD 14PN 240V W/LED	CONTROL BOX
CRC12	RELAY-INTERPRET #12	W6H5KZCP	09C024D71	RELAY 4PDT DIFGLD 14PN 240V W/LED	CONTROL BOX
CRC13	RELAY-INTERPRET #13	W6H5KZCP	09C024D71	RELAY 4PDT DIFGLD 14PN 240V W/LED	CONTROL BOX
CRC14	RELAY-INTERPRET #14	W6H5KZCP	09C024D71	RELAY 4PDT DIFGLD 14PN 240V W/LED	CONTROL BOX
CRC15	RELAY-INTERPRET #15	W6H5KZCP	09C024D71	RELAY 4PDT DIFGLD 14PN 240V W/LED	CONTROL BOX
CRDB	RELAY-RESISTOR TEMPERATURE HIGH	W6H5KZS+	09C024D71	RELAY 4PDT DIFGLD 14PN 240V W/LED	CONTROL BOX
CRDRR	RELAY-DRAIN TO REUSE	W6H5KZEV	09C024D71	RELAY 4PDT DIFGLD 14PN 240V W/LED	CONTROL BOX
CRLCB	RELAY-LOAD CHUTE BLOCKED	W6H5KZI2	09C024D71	RELAY 4PDT DIFGLD 14PN 240V W/LED	CONTROL BOX
CRPLL	RELAY-DOOR CLOSED	W6H5KZDR	09C024D71	RELAY 4PDT DIFGLD 14PIN 240V	ALT DRAIN BX
CRRTD	RELAY-REAR FULL DOWN	W6H5KZRH	09C024D71	RELAY 4PDT DIFGLD 14PN 240V W/LED	CONTROL BOX
CRRTU	RELAY-REAR FULL UP	W6H5KZRH	09C024D71	RELAY 4PDT DIFGLD 14PN 240V W/LED	CONTROL BOX
CRS+	RELAY-START 3-WIRE	W6H5KZS+	09C024D71	RELAY 4PDT DIFGLD 14PN 240V W/LED	CONTROL BOX
CRS+A	RELAY-START 3-WIRE	W6H5KZS+	09C024D71	RELAY 4PDT DIFGLD 14PN 240V W/LED	CONTROL BOX
CRSG	RELAY-OPTIONAL SIGNAL	W6H5KZS+	09C024D71	RELAY 4PDT DIFGLD 14PN 240V W/LED	CONTROL BOX
CS	**>>>CONTACTOR-MOTOR STARTER**				
CSDO	CONTACTOR-HYDRAULIC DOOR OPEN	W6H5KZHD	09MC08C371	16A 3P MCS CONT NR 240V5/6	CONTROL BOX
CSVS	CONTACTOR-INVERTER 48040 LOW VOLTAGE	W6H5KZS+	09MC08N371	72A 3P MCS CONT NR 240V5/6	CONTROL BOX
CSVS	CONTACTOR-INVERTER 68036 LOW VOLTAGE	W6H5KZS+	09MC08T371	115A 3P MCS CONT. NR 240V5/6	CONTROL BOX
CSVS	CONTACTOR-INVERTER 48040 HIGH VOLTAGE	W6H5KZS+	09MC08G371	37A 3P MCS CONT NR 240V5/6	CONTROL BOX
CSVS	CONTACTOR-INVERTER 68036 HIGH VOLTAGE	W6H5KZS+	09MC08N371	72A 3P MCS CONT NR 240V5/6	CONTROL BOX
EB	**>>>BUZZER OR AUDIBLE SIGNAL**				
EBSG	BUZZER-SIGNAL AUDIBLE	W6H5KZS+	09H016	BUZZ. 230V W/6-32 CTR+6" LEADS	SWITCH PANEL
EF	**>>>FUSE OR FUSE HOLDER**				

COMPONENT PARTS LIST

W6H5KZPL/2016204N

COMPONENT NUMBER	FUNCTION OF THIS COMPONENT NUMBER	WHERE TO FIND THIS COMPONENT	MILNOR P/N	DESCRIPTION	LOCATION
EF01	FUSE-CONTROL CIRCUIT	W6H5KZLV	09FF006AMA	FUSE BK/ABC 6 AMP 250V BUSS	CONTROL BOX
EF02	FUSE-CONTROL CIRCUIT	W6H5KZLV	09FF006AMA	FUSE BK/ABC 6 AMP 250V BUSS	CONTROL BOX
EFP1	FUSE-CONTROL CIRCUIT 200-240VOLTS	W6H5KZLV	09FF006AWV	FUSE BUSS STYLE CC TYPE FNQ-R 6 AMP 60	CONTROL BOX
EFP1	FUSE-CONTROL CIRCUIT380-600VOLTS	W6H5KZLV	09FF003AWV	FUSE BUSS STYLE CC TYPE FNQ-R 3 AMP 60	CONTROL BOX
EFP2	FUSE-CONTROL CIRCUIT 200-240VOLTS	W6H5KZLV	09FF006AWV	FUSE BUSS STYLE CC TYPE FNQ-R 6 AMP 60	CONTROL BOX
EFP2	FUSE-CONTROL CIRCUIT 380-600VOLTS	W6H5KZLV	09FF003AWV	FUSE BUSS STYLE CC TYPE FNQ-R 3 AMP 60	CONTROL BOX
EFSG	FLASHING LIGHT-OPTIONAL LED	W6H5KZS+	09H025V12	BEACON ROTARY AMBER LED 12VDC	FRONT OF MACH
EL	**>>>LIGHT-PILOT OR INDICATOR**				
ELES	OPTIONAL ILLUMINATED E-STOP	W6H5KZS+	09N507B	ESTOP ILLUMINATED 240VAC 1-NC CONTACT	SWITCH PANEL
ELSG	LIGHT-SIGNAL VISUAL	W6H5KZS+	09J060A71	LAMP 1/2" AMB 250V IDI 1051QC3	SWITCH PANEL
EM	>>>ELECTRIC METERS				
EMHR	OPTIONAL RUN HOUR METER	W6H5KZS+	38C203	HOUR METER 3.8IN 3 HOLE MTG 230V/60C	CONTROL BOX
ES	**>>>POWER SUPPLY-ELECTRONIC**				
ESPS	POWER SUPPLY-CONTROL BOARDS	W6H5KZBW	08PSS3401T	40 WATT POWER SUPPLY TESTED	CONTROL BOX
ESPS2	POWER SUPPLY-PROCESSOR/TOUCHSCREEN	W6H5KZBW	08PSS3401T	40 WATT POWER SUPPLY TESTED	CONTROL BOX
PSFL	POWER SUPPLY-OPTIONAL FLASHING LIGHT	W6H5KZS+	08PSS3401T	40 WATT POWER SUPPLY TESTED	CONTROL BOX
ET	**>>>THERMAL OVERLOAD DEVICES**				
ETDO	OVERLOAD-HYDRAULIC PUMP MOTOR	W6H5KZVP	09FTD0037T	E1 PLUS OL RELAY 3.2-16A	CONTROL BOX
ETVS	OVERLOAD-VARIABLE SPEED INVERTER	W6H5KZVP	09FTD0230T	E1 PLUS OL RELAY 18-90A	CONTROL BOX
EX	**>>>TRANSFORMERS**				
EX37-1	TRANSFORMER-208 TO 240V	W6H5KZLV	09UB25AU71	AUTOXFMR 208V/230V 250VA UL/CSA	CONTROL BOX
EX37-2	TRANSFORMER-380/480 TO 240VAC	W6H5KZLV	09UA025AAB	XFMR 380-480PRI/120-240SEC250V	CONTROL BOX
EX96A	TRANSFORMER-600V TO 480V -48040H7	W6H5KZMT6	09US050A96	XFMR 1PH 5KVA 240/480X120/240	SIDE OF MACH
EX96A	TRANSFORMER-600V TO 480V -68036H5	W6H5KZMT6	09US100A96	XFMR 1PH 10KVA 240/480X120/240	SIDE OF MACH
EX96B	TRANSFORMER-600V TO 480V -48040H7	W6H5KZMT6	09US050A96	XFMR 1PH 5KVA 240/480X120/240	SIDE OF MACH
EX96B	TRANSFORMER-600V TO 480V -68036H5	W6H5KZMT6	09US100A96	XFMR 1PH 10KVA 240/480X120/240	SIDE OF MACH
IN	**>>>INVERTER BRAKING UNIT**				
INVD1-H	BRAKING UNIT-68036H5K 380-480VOLTS	W6H5KZVP	09MVBT25HC	BRAKE MODULE-OPEN CHASSIS	CONTROL BOX
INVD1-L	BRAKING UNIT-68036H5K 200-240VOLTS	W6H5KZVP	09MVBT25LC	BRAKEMODULE OPEN CHASIS INVERT	CONTROL BOX
MT	**>>>MOTORS**				
MTD	MOTOR-DRIVE	W6H5KZVP	MESSAGE SO	SEE SPECIFIC COMPONENT+NAMEPLATE	MACHINE
MTHD	MOTOR-HYDRAULIC PUMP	W6H5KZHD	39T050CAN	5HP 4P TEFC 208-230/460 60C	MACHINE REAR
MTLF	FILTER-INVERTER/MOTOR POWER	W6H5KZS+	09MVFILTR1	INCOME POWER FILTER CAP	CONTROL BOX

3

COMPONENT PARTS LIST

COMPONENT NUMBER	FUNCTION OF THIS COMPONENT NUMBER	WHERE TO FIND THIS COMPONENT	MILNOR P/N	DESCRIPTION	LOCATION
MTVS	FAN-INVERTOR COOLING	W6H5KZS+	13AF235A71	FAN 235CFM 230V 50/60	BACK C-BOX
MV	**>>>MOTOR POWER INVERTERS**				
MVDBR	RESISTOR-DYNAMIC BRAKE-48HV	W6H5KZVP	09MV100RES	RESIST 100 OHM 225WATT ADJ	BELOW C-BX
MVDBR	RESISTOR-DYNAMIC BRAKE-48LV	W6H5KZVP	09MV050REV	RESISTOR 50OHM 225W #FVT200-50	BELOW C-BX
MVDBR	RESISTOR-DYNAMIC BRAKE-68HV	W6H5KZVP	09MVR272S9	RESISTOR 27.2 OHMS SINGLE 600V 10 AMP	BELOW C-BX
MVDBR	RESISTOR-DYNAMIC BRAKE-68LV	W6H5KZVP	09MVR068S9	RESISTOR 6.8OHM SINGLE 600V	BELOW C-BX
MVFLT	INV FILTER-DRIVE	W6H5KZVP	09MVFILTR1	INCOME POWER FILTER CAP	CONTROL BOX
MVINV-H	INVERTER-4840H7N/F7W 380-460 VOLTS	W6H5KZVP	09MWA03996	INVERTER 39AMPS 480V F7	CONTROL BOX
MVINV-H	INVERTER-6836H5N/F5W 380-460 VOLTS	W6H5KZVP	09MWC07596	A1000 INVERTER 75 AMP	CONTROL BOX
MVINV-L	INVERTER-4840H7N/F7W 200-240VOLTS	W6H5KZVP	09MWA07174	F7 INVERTER 71AMP	CONTROL BOX
MVINV-L	INVERTER-6836H5N/F5W 200-240VOLTS	W6H5KZVP	09MWC14574	A1000 INVERTER 145AMPS	CONTROL BOX
PX	**>>>PROXIMITY SWITCHES**				
PXDCL	PROX SW BIFOLD DOORS CLS LEFT	W6H5KZRHA	09RPS18CAU	PRXSW QK CONN 18M NO-AC UNSHLD	LOAD CHUTE
PXDCR	PROX SW BIFOLD DOORS CLS RIGHT	W6H5KZRHA	09RPS18CAU	PRXSW QK CONN 18M NO-AC UNSHLD	LOAD CHUTE
PXDOL	PROX SW BIFOLD DOORSOPEN LEFT	W6H5KZRHA	09RPS18CAU	PRXSW QK CONN 18M NO-AC UNSHLD	LOAD CHUTE
PXDOR	PROX SW BIFOLD DOORS OPEN RIGHT	W6H5KZRHA	09RPS18CAU	PRXSW QK CONN 18M NO-AC UNSHLD	LOAD CHUTE
PXRTD	PROX SW-REAR FULL DOWN	W6H5KZRHA	09RPS30ADS	PRXSW QK CONN 30M NC-AC SHLD	SIDE OF MACH
PXRTU	PROX SW-REAR FULL UP	W6H5KZRHA	09RPS30ADS	PRXSW QK CONN 30M NC-AC SHLD	SIDE OF MACH
PXWP	PROX SW-AT WASH LEVEL	W6H5KZ1A	09RPS30DAS	PROX SW QK CONN 30M NO-DC SHLD	SIDE OF MACH
RS	**>>RESISTORS**				
RS01	RESISTOR 16OHM 25W	W6H5KZBW	ECEUMTRES	LOAD RESISTOR ASSY MILTOUCH EX	LOW VOLT BOX
SH	**>>>SWITCH-HAND OPERATED**				
SH01	SWITCH-208-240V SELECT	W6H5KZLV	09N050	TOGSW SPDT NO OFF 10A250V	CONTROL BOX
SHFL	SWITCH-MANUAL FLUSH	W6H5KZCF	09N405PB10	SWASS PBBK 1NO	SIDE OF MACH
SHMF	SWITCH-MANUAL FLUSH SOAP CHUTE	W6H5KZCF	09N405PB10	SWASS PBBK 1NO	SUPPLY INJEC
SHMHE	SWITCH-MANUAL HYDRAULIC ENABLED	W6H5KZI2	09N405PB10	SWASS PBBK 1NO	SWITCH PANEL
SHS+	SWITCH-START	W6H5KZS+	09N405PG10	SWASS PBGN 1NO	SWITCH PANEL
SHSMA	SWITCH-MASTER	W6H5KZS+	09N405M210	SWASS M2W 1NO	SWITCH PANEL
SHSOE	SWITCH-EMERGENCY STOP	W6H5KZS+	09N505	SW ASSY EMER STOP	SWITCH PANEL
SK	**>>>SWITCH-KEY OPERATED**				
SKAM	SWITCH-AUTO/MANUAL	W6H5KZI2A	09N127C	KEYSW SPST 7A120VAC SCREW TERM	LOW VOLT BOX
SM	**>>>SWITCH-MECHANICAL OPERATED**				
SMDLU	SWITCH-DRYELL LOCKED UP	W6H5KZI2	09R012	MICSW SPDT PAINTED BZE6-RN 01	LOAD CHUTE

COMPONENT PARTS LIST

COMPONENT NUMBER	FUNCTION OF THIS COMPONENT NUMBER	WHERE TO FIND THIS COMPONENT	MILNOR P/N	DESCRIPTION	LOCATION
SMEB	SWITCH-EXCURSION	W6H5KZI1	09R008A	MICSW SPDT BZE6-2RN183	UNDER SHELL
SMEBD	SWITCH-ELBOW DOWN	W6H5KZI2	09R012	MICSW SPDT PAINTED BZE6-RN 01	LOAD CHUTE
SMPLL	SWITCH-DOOR SWITCH	W6H5KZDR	09R014A	MINI-SW SPDT STAKON #V15G1C26K	DOOR LATCH
SMWVB	SWITCH-VIBRATION	W6H5KZS+	09R020	SWITCH NC VIBR#WZ-2RW84429-P52	CONTROL BOX
SP	**>>>SWITCH-PRESSURE OPERATED**				
SPBP	PRESSURE SW-BEARING SEAL	W6H5KZI1	09N082B05	PRESSW NASON CLOSE @ 5 LB	AIR VALVE BX
SPBS	PRESSURE SW-BRAKE PRESSURE	W6H5KZI1	09N082A	PRESSW NASON CLOSE @ 62 LB	AIR VALVE BX
SPOF	PRESSURE SW-OVERFILL	W6H5KZEV	09M069	PRESS SW 4"WC INVENSYS 738-719	LEVEL SW BOX
SPWDP	PRESS SWITCH-LOW DOOR PRESSURE	W6H5KZDR	09N082B10	PRESSW NASON CLOSE @ 10 LB	AIR VALVE BX
ST	**>>>SWITCH-TEMPERATURE OPERATED**				
STDB	SWITCH-THERMOSTAT	W6H5KZS+	30RA175T	THERMOSTAT OPEN AT 175F	CONTROL BOX
VE	**>>>VALVE-ELECTRIC OPERATED**				
VEBP	VALVE-BEARING PRESSURE	W6H5KZEV	96TBC2BA71	1/4" N/C 2WAY 220V50/60C VALVE	AIR VALVE BX
VEBR	VALVE-BRAKE RELEASE	W6H5KZS+	96R301A71	1/8" AIRPILOT 3W NC 240V50/60	AIR VALVE BOX
VEC01	VALVE-CHEMICAL #1 FLUSH	W6H5KZCF	96P013G71	3/4" 2WAYPLASTCVAL 240V/60C	SUPPLY INJEC
VEC02	VALVE-CHEMICAL #2 FLUSH	W6H5KZCF	96P013G71	3/4" 2WAYPLASTCVAL 240V/60C	SUPPLY INJEC
VEC03	VALVE-CHEMICAL #3 FLUSH	W6H5KZCF	96P013G71	3/4" 2WAYPLASTCVAL 240V/60C	SUPPLY INJEC
VEC04	VALVE-CHEMICAL #4 FLUSH	W6H5KZCF	96P013G71	3/4" 2WAYPLASTCVAL 240V/60C	SUPPLY INJEC
VEC05	VALVE-CHEMICAL #5 FLUSH	W6H5KZCF	96P013G71	3/4" 2WAYPLASTCVAL 240V/60C	SUPPLY INJEC
VEC06	VALVE-CHEMICAL #6	W6H5KZCX	MESSAGE EW	SUPPLIED BY OTHERS	SUPPLY VLVST
VEC07	VALVE-CHEMICAL #7	W6H5KZCX	MESSAGE EW	SUPPLIED BY OTHERS	SUPPLY VLVST
VEC08	VALVE-CHEMICAL #8	W6H5KZCX	MESSAGE EW	SUPPLIED BY OTHERS	SUPPLY VLVST
VEC09	VALVE-CHEMICAL #9	W6H5KZCX	MESSAGE EW	SUPPLIED BY OTHERS	SUPPLY VLVST
VEC10	VALVE-CHEMICAL #10	W6H5KZCX	MESSAGE EW	SUPPLIED BY OTHERS	SUPPLY VLVST
VEC11	VALVE-CHEMICAL #11	W6H5KZCX	MESSAGE EW	SUPPLIED BY OTHERS	SUPPLY VLVST
VEC12	VALVE-CHEMICAL #12	W6H5KZCX	MESSAGE EW	SUPPLIED BY OTHERS	SUPPLY VLVST
VEC13	VALVE-CHEMICAL #13	W6H5KZCX	MESSAGE EW	SUPPLIED BY OTHERS	SUPPLY VLVST
VEC14	VALVE-CHEMICAL #14	W6H5KZCX	MESSAGE EW	SUPPLIED BY OTHERS	SUPPLY VLVST
VEC15	VALVE-CHEMICAL #15	W6H5KZCX	MESSAGE EW	SUPPLIED BY OTHERS	SUPPLY VLVST
VECFL	VALVE-FLUSH SOAP CHUTE	W6H5KZCF	96P013G71	3/4" 2WAYPLASTCVAL 240V/60C	SUPPLY INJEC
VEDL	VALVE D OOR UNLATCH	W6H5KZDR	96R301A71	1/8" AIRPILOT 3W NC 240V50/60	AIR VALVE BX
VEDRR	VALVE-REUSE DRAIN	W6H5KZEV	96R302B71	1/8" AIRPILOT 3W NO 240V50/60	AIR VALVE BX
VEDRS	VALVE-DRAIN	W6H5KZEV	96R301A71	1/8" AIRPILOT 3W NC 240V50/60	REAR OF MACH

COMPONENT PARTS LIST

COMPONENT NUMBER	FUNCTION OF THIS COMPONENT NUMBER	WHERE TO FIND THIS COMPONENT	MILNOR P/N	DESCRIPTION	LOCATION
VEDUD	VALVE-DRYELL DOWN LOCK RELEASE	W6H5KZDE	96R301B71	1/8" AIRPILOT 3W NC 240V50/60	CONTROL BOX
VEDUU	VALVE-DRYELL UP LOCK RELEASE	W6H5KZDE	96R301B71	1/8" AIRPILOT 3W NC 240V50/60	CONTROL BOX
VEFL	VALVE-FLUSH	W6H5KZCF	96P013G71	3/4" 2WAYPLASTCVAL 240V/60C	SUPPLY INJEC
VEHDC	VALVE-HYDRAULIC DOOR CLOSED	W6H5KZHD	96RH705E37	VALVE-HYD.VICKERS#DG4S4W012CB60	MACHINE REAR
VEHDL	VALVE-TILT DOOR UNLATCH	W6H5KZDR	96R301A71	1/8" AIRPILOT 3W NC 240V50/60	AIR VALVE BX
VEHDO	VALVE-HYDRAULIC DOOR OPEN	W6H5KZHD	96RH705E37	VALVE-HYD.VICKERS#DG4S4W012CB60	MACHINE REAR
VEHTD	VALVE-HYDRAULIC TILT DOWN	W6H5KZRH	96RH711E71	DIRECTIONAL CNT VLV D05NG10 230V	AIR VALVE BX
VEHTU	VALVE-HYDRAULIC TILT UP	W6H5KZRH	96RH711E71	DIRECTIONAL CNT VLV D05NG10 230V	AIR VALVE BX
VELDU	VALVE-DRYELL DOWN	W6H5KZDE	96R301B71	1/8" AIRPILOT 3W NC 240V50/60	CONTROL BOX
VELRU	VALVE-DRYELL UP	W6H5KZDE	96R301B71	1/8" AIRPILOT 3W NC 240V50/60	CONTROL BOX
VEPPO	VALVE-DOOR SEAL	W6H5KZDR	96R301A71	1/8" AIRPILOT 3W NC 240V50/60	ALT DRAIN BX
VESTM	VALVE-STEAM	W6H5KZEV	96R301A71	1/8" AIRPILOT 3W NC 240V50/60	AIR VALVE BX
VEWVC	VALVE-COLD WATER	W6H5KZEV	96R301A71	1/8" AIRPILOT 3W NC 240V50/60	AIR VALVE BX
VEWVH	VALVE-HOT WATER	W6H5KZEV	96R301A71	1/8" AIRPILOT 3W NC 240V50/60	AIR VALVE BX
VEWVX	VALVE-EXTRA WATER	W6H5KZEV	96R301A71	1/8" AIRPILOT 3W NC 240V50/60	AIR VALVE BX
WFM	**>>>METERS**				
WFM	METER-WATER FLOW	W6H5KZBW	30F515	FLOW SENSOR SIGNET #P51530-PO	INLET PIPING

PELLERIN MILNOR CORPORATION
LIMITED STANDARD WARRANTY

We warrant to the original purchaser that MILNOR machines including electronic hardware/software (hereafter referred to as "equipment"), will be free from defects in material and workmanship for a period of one year from the date of shipment (unless the time period is specifically extended for certain parts pursuant to a specific MILNOR published extended warranty) from our factory with no operating hour limitation. This warranty is contingent upon the equipment being installed, operated and serviced as specified in the operating manual supplied with the equipment, and operated under normal conditions by competent operators.

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

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

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

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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).

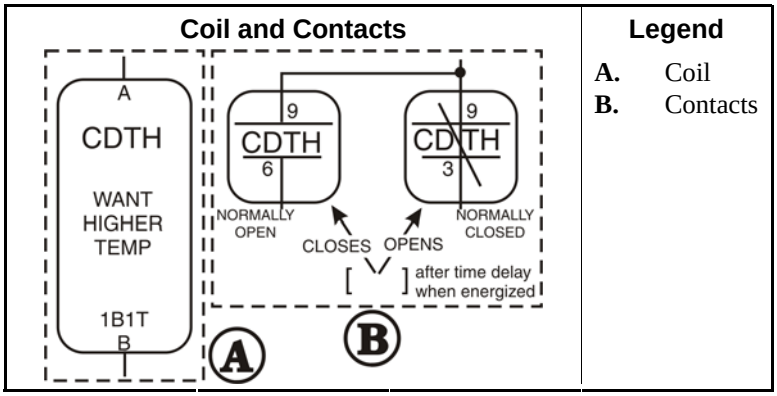
BA=Printed Circuit Board—Insulating substrate on which a thin pattern of copper conductors has been formed to connect discrete electronic components also mounted on the board.

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)

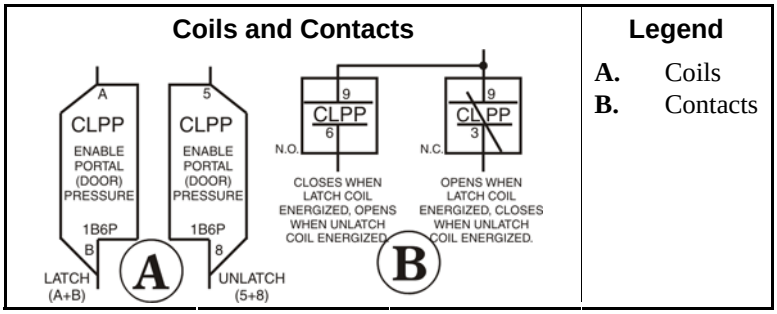
CD=Control, Time Delay Relay (Figure 2)—A relay whose contacts switch only after a fixed or adjustable delay, once voltage has been applied to its coil. The contacts switch back to normal (de-energized state) immediately when the voltage is removed.

Figure 2: Time Delay Relay (CD)



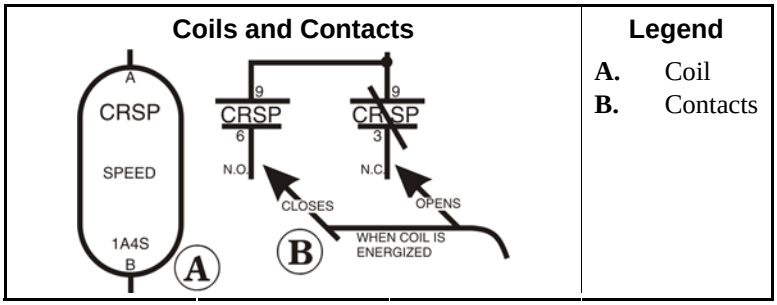
CL=Control, Latch Relay (Figure 3)—A relay which latches in an energized or set position when operated by one coil (the latch/set coil). The relay stays latched even though coil voltage is removed. The relay releases or unlatches when voltage is applied to a second coil (the unlatch/reset coil).

Figure 3: Latch Relay (CL)



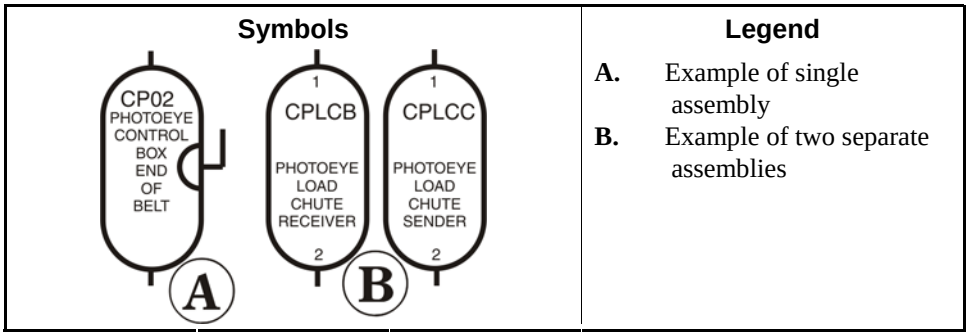
CR=Control, Relay (Figure 4)—A relay whose contacts switch immediately when voltage is applied to its coil and revert to normal when the voltage is removed.

Figure 4: Standard Relay (CR)



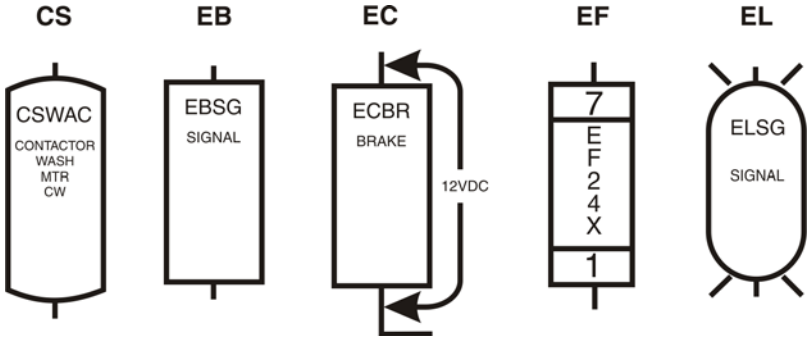
CP=Control, Photo-Eye (Figure 5)—Photo-eyes sense the presence of an object without direct physical contact. Photo-eyes consist of a transmitter, receiver, and output module. These components may be housed in one assembly with the transmitter bouncing light off of a reflector to the receiver, or these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

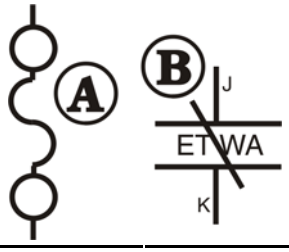
EL=Electric Light (Figure 6)—Indicator lights may be either incandescent or fluorescent.

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.

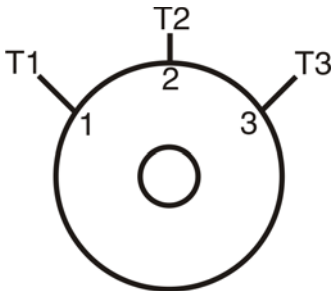
KB=Keyboard—Device similar to a typewriter for making entries to a computer.

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)

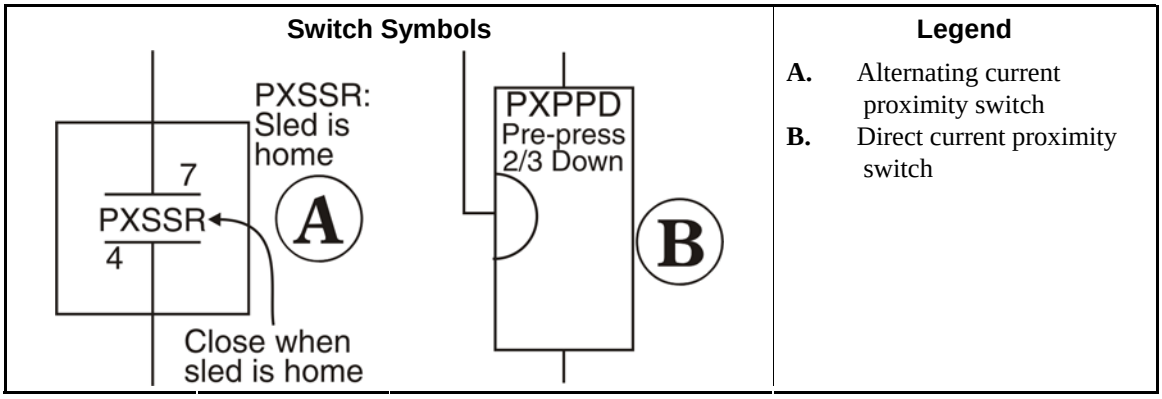


MV=Motor (Variable Speed) Inverter—To vary the speed of an AC motor, the volts to frequency ratio must be kept constant. The motor will overheat if this ratio is not maintained. The motor variable speed inverter converts three phase AC to DC. The inverter then uses this DC voltage to generate AC at the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

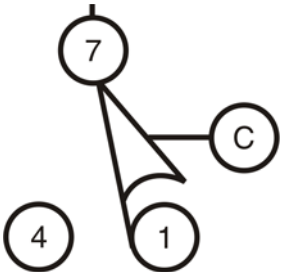
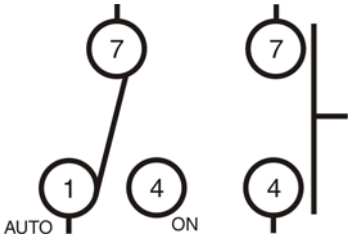


Figure 12: Hand Operated Switch (SH)



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)

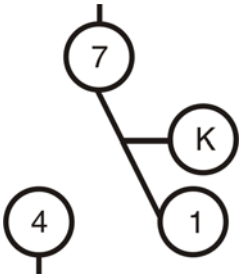
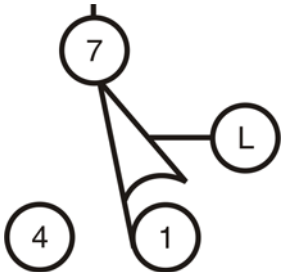


Figure 14: Level Switch (SL)



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)

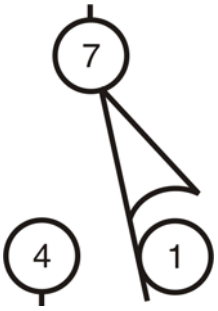
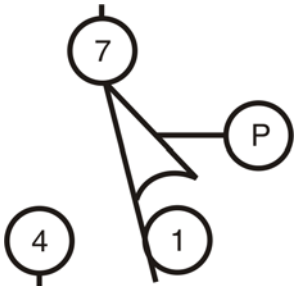


Figure 16: Pressure Switch (SP)



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)

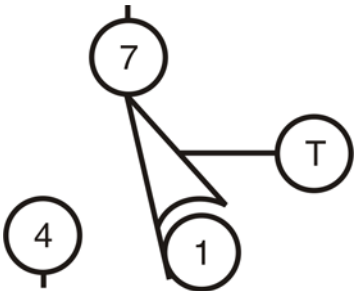
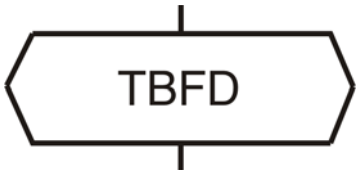


Figure 18: Terminal Board (TB)



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)

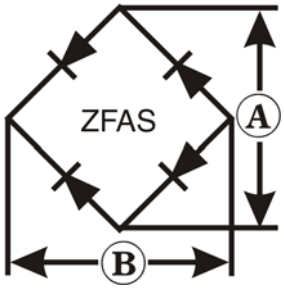
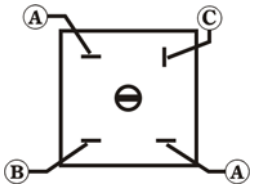
Component Symbol	Legend
	**A.** Alternating current input **B.** Direct current output

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.

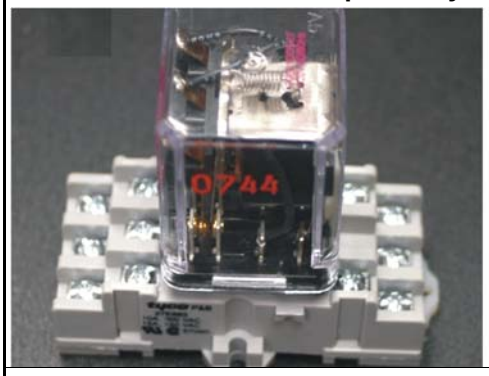
2. Component Terminal Numbering

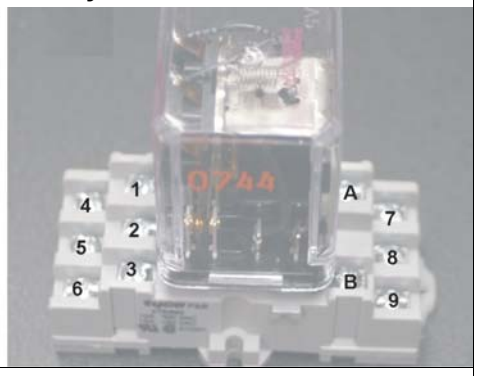
CAUTION 1: Risk of Mis-wiring—Due to electrical component manufacturing inconsistencies, the pin numbers imprinted on components such as connectors and relay bases used on Milnor machines often do not correspond to the pin numbers shown in the schematics.

- 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.

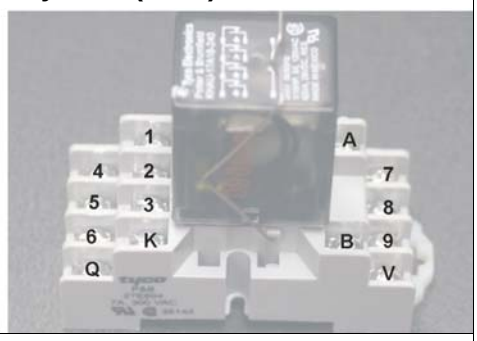
Figure 22: Plug-in Relays

11-pin Relay with Grey Base

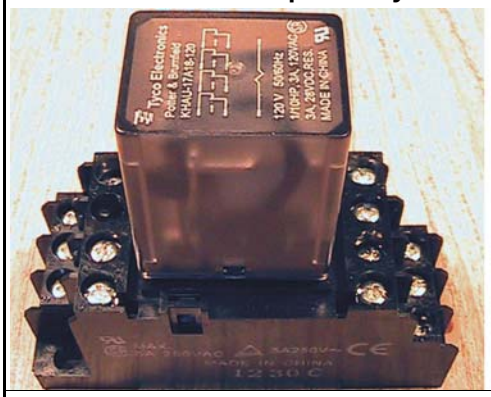


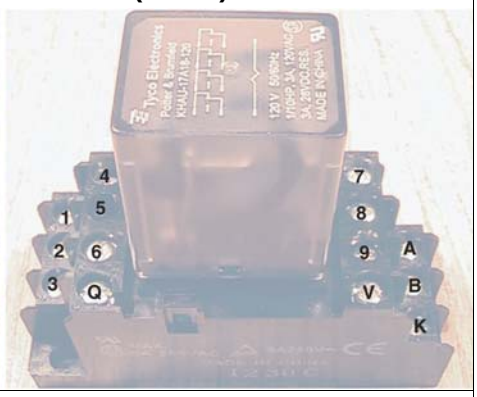


14-pin Relay with Grey Base (older)

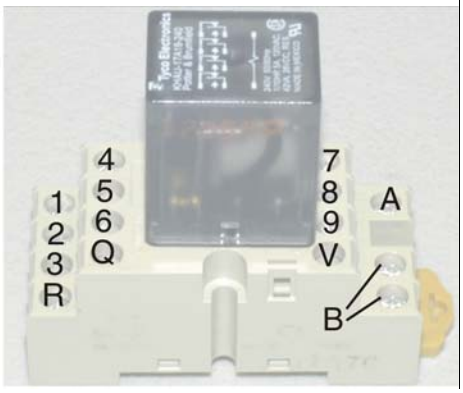


14-pin Relay with Black Base (newer)





14-pin Relay with Beige Base (rare)



Legend

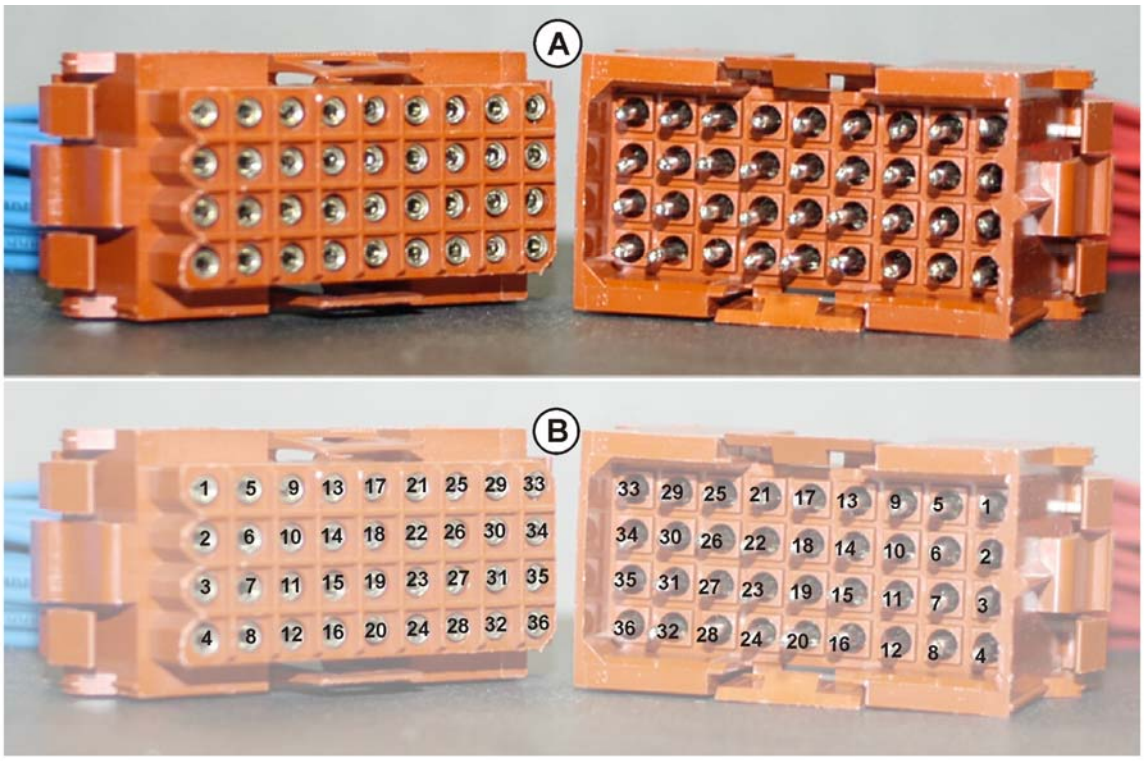
Left. View of relay and base

Right. Same view, showing pin numbers

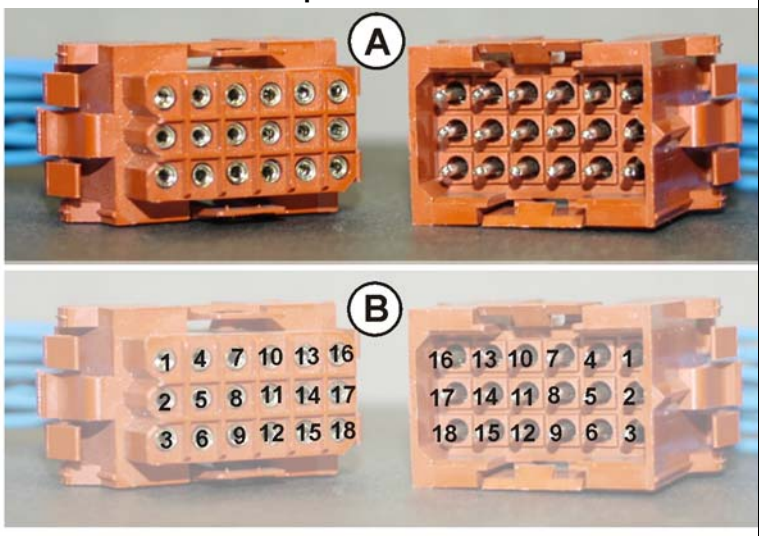
Note 3: Relay functional names ending with the letter "M" (e.g., CRxxM) are not discrete components but are a component of a printed circuit board. They are usually not individually replaceable.

Figure 23: AMP Connector Pin Locations

36-pin Connector



18-pin Connector

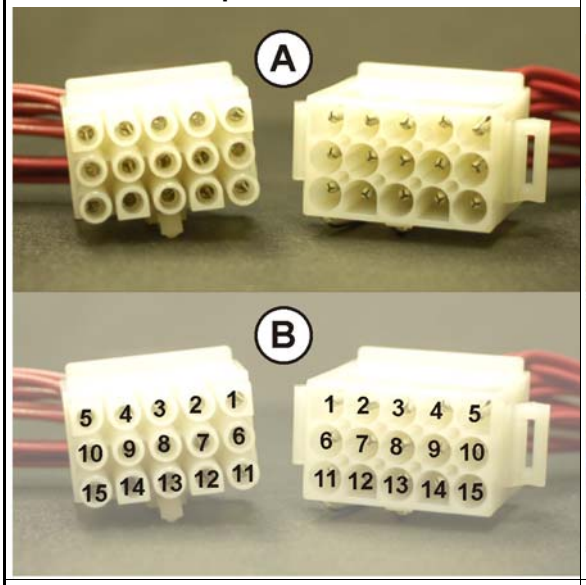


Legend

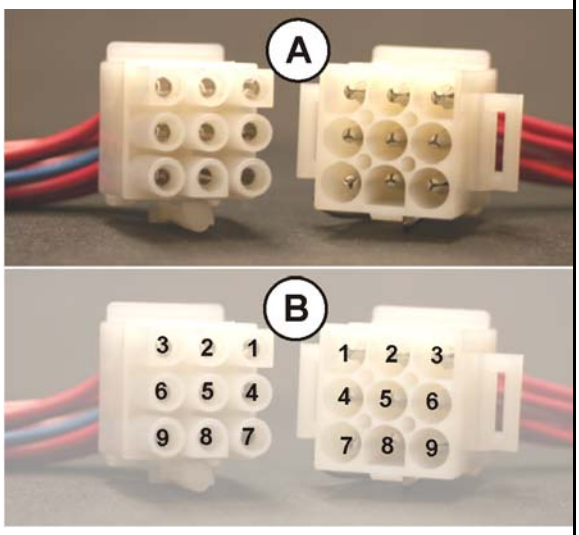
A. View of mating halves of connector
B. Same view, showing assigned pin numbers

Figure 24: Molex Connector Pin Locations

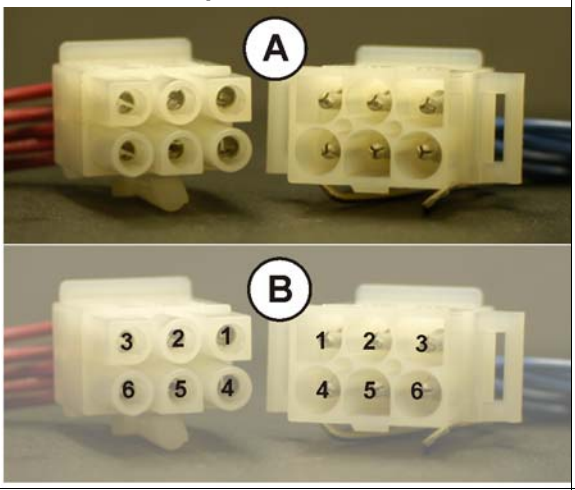
15-pin Connector



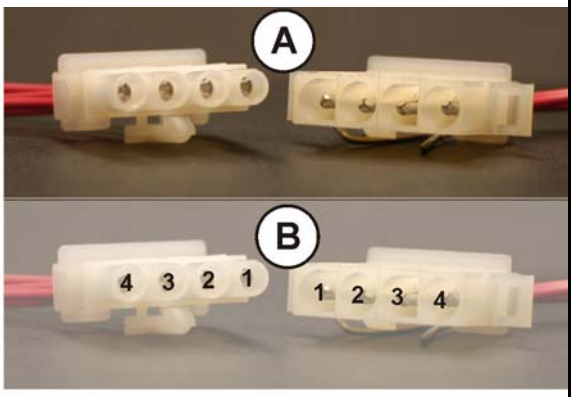
9-pin Connector



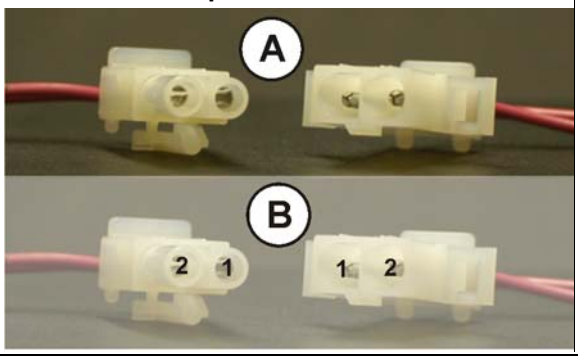
6-pin Connector



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

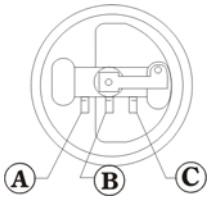
Component	Legend
	**A.** Contact 1—Normally open **B.** Contact 2—Normally closed **C.** Contact 3—Common

Figure 26: Toggle Switch

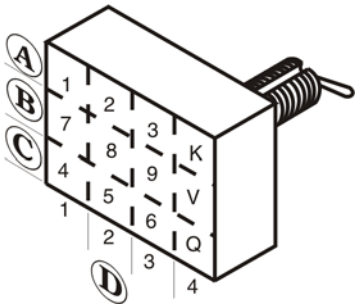
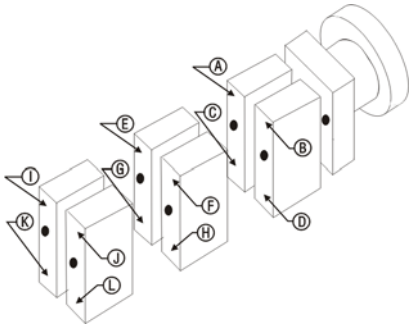
Component	Legend
	**A.** Normally closed contacts **B.** Common contacts **C.** Normally open contacts **D.** Pole

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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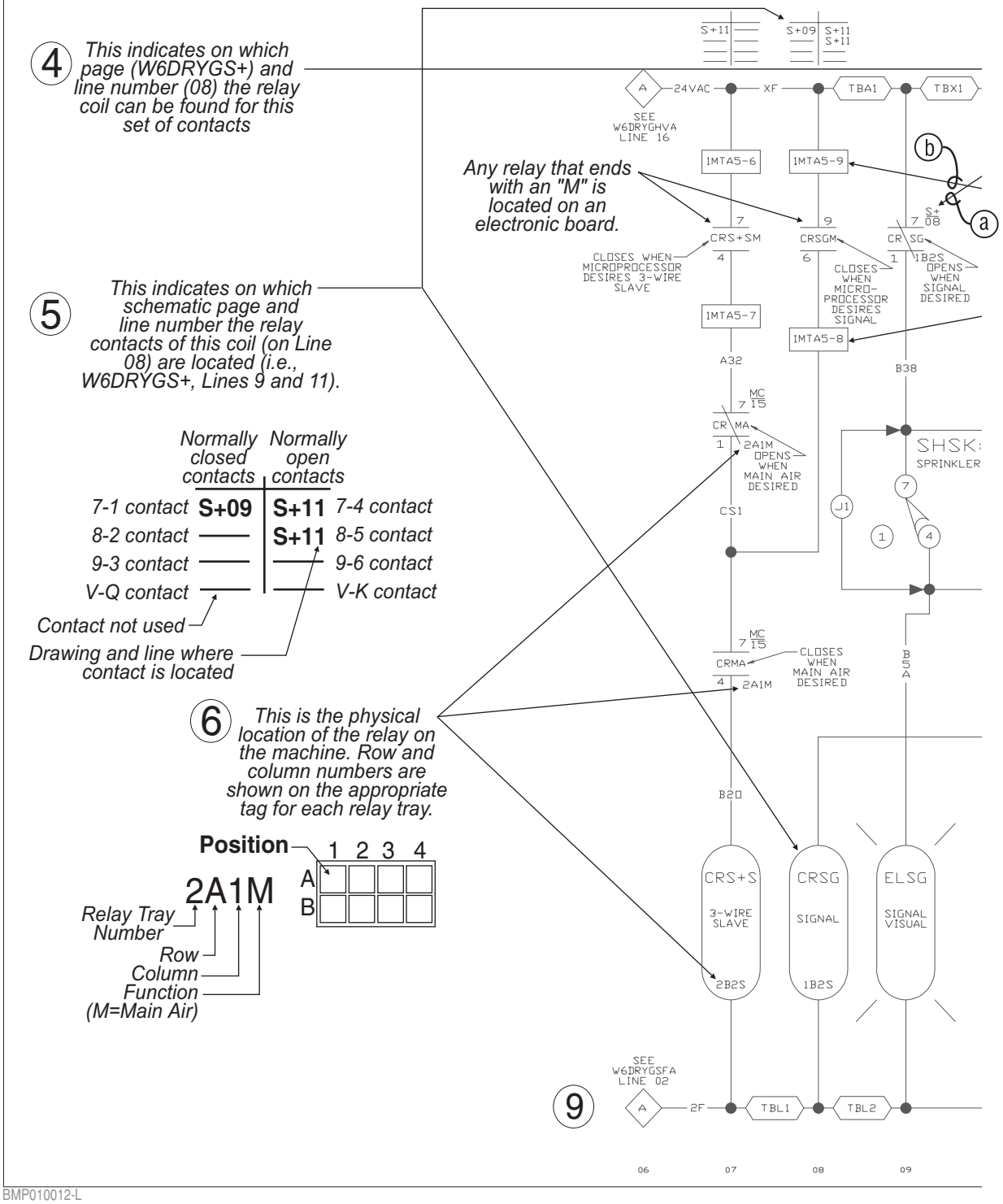
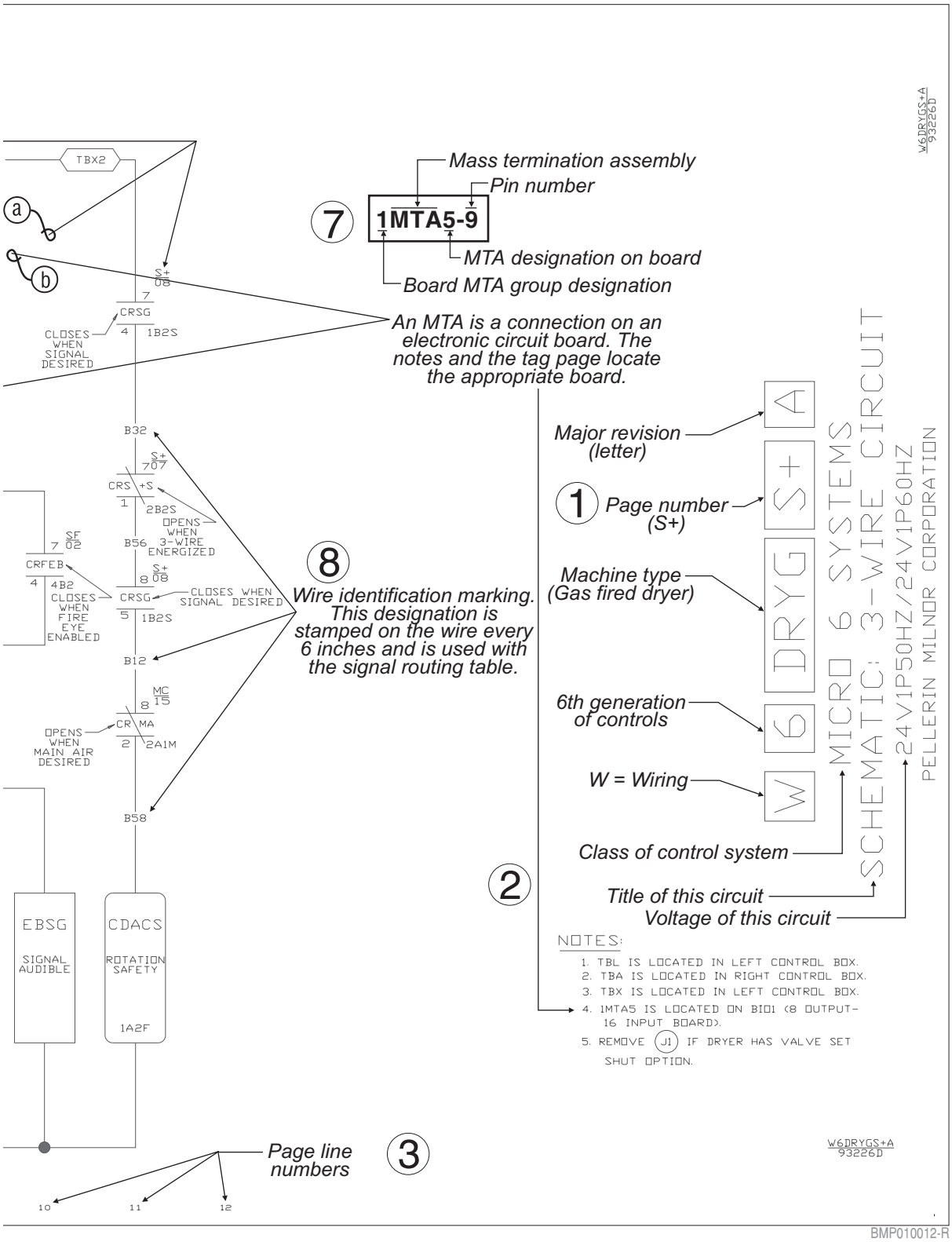
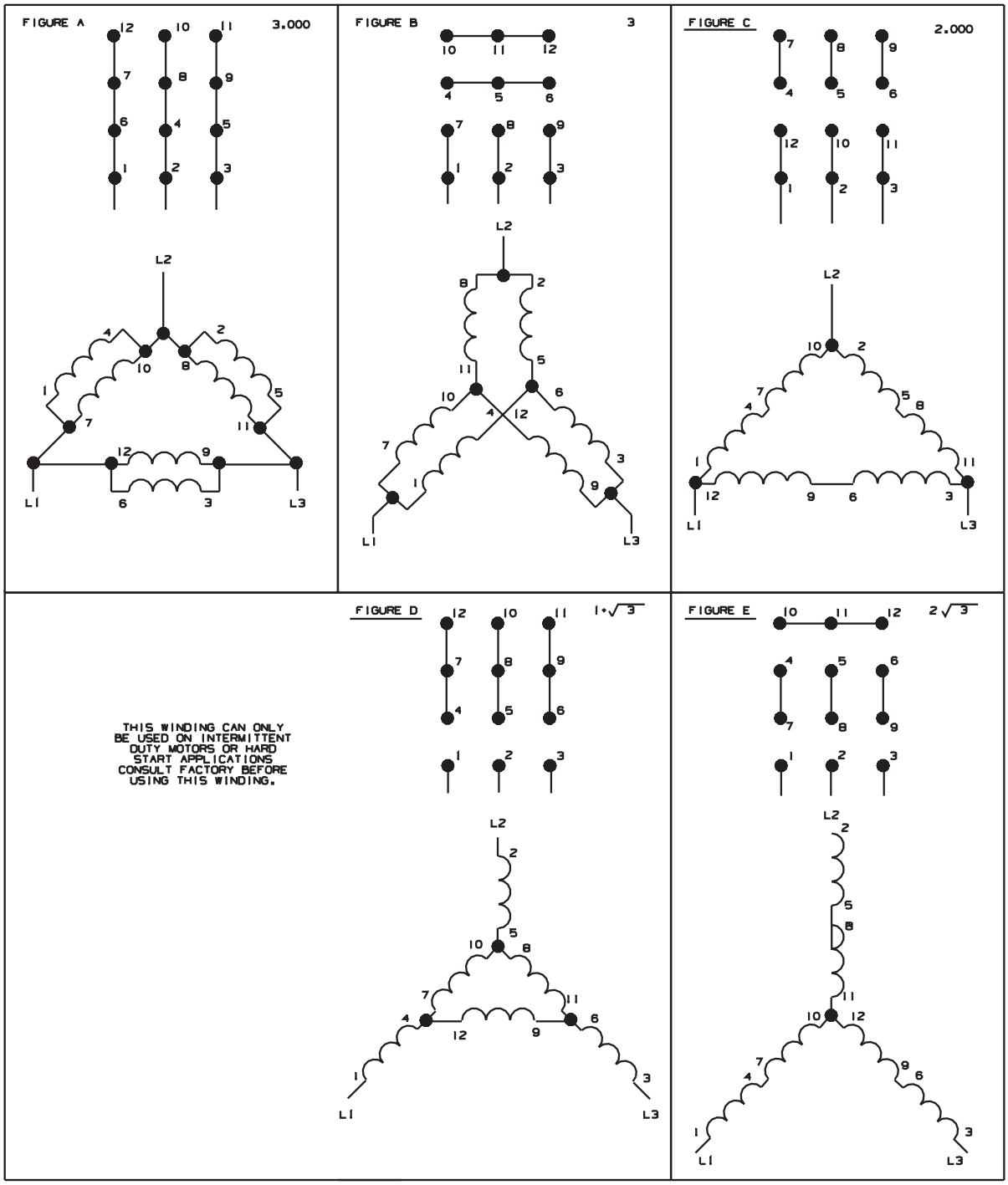

4
This indicates on which page (W6DRYGS+) and line number (08) the relay coil can be found for this set of contacts
5
This indicates on which schematic page and line number the relay contacts of this coil (on Line 08) are located (i.e., W6DRYGS+, Lines 9 and 11).
Normally closed contacts
Normally open contacts
7-1 contact S+09 S+11 7-4 contact
8-2 contact S+11 8-5 contact
9-3 contact 9-6 contact
V-Q contact V-K contact
Contact not used
Drawing and line where contact is located
6
This is the physical location of the relay on the machine. Row and column numbers are shown on the appropriate tag for each relay tray.
Position 1 2 3 4
A
B
2A1M
Relay Tray Number
Row
Column
Function (M=Main Air)
Any relay that ends with an "M" is located on an electronic board.
S+11
S+09 S+11 S+11
A
24VAC
XF
TBA1
TBX1
SEE W6DRYGHVA LINE 16
1MTA5-6
1MTA5-9
b
a
S+08
CRS+SM
CRSGM
CR SG
CLOSES WHEN MICROPROCESSOR DESIRES 3-WIRE SLAVE
CLOSES WHEN MICRO-PROCESSOR DESIRES SIGNAL
1B2S OPENS WHEN SIGNAL DESIRED
1MTA5-7
1MTA5-8
A32
B38
MC 15
CR MA
2A1M OPENS WHEN MAIN AIR DESIRED
SHSK
SPRINKLER
CS1
J1
CRMA
CLOSES WHEN MAIN AIR DESIRED
2A1M
B5A
B20
CRS+S
3-WIRE SLAVE
2B2S
CRSG
SIGNAL
1B2S
ELSG
SIGNAL VISUAL
9
SEE W6DRYGSFA LINE 02
2F
TBL1
TBL2
06
07
08
09

BMP010012-L


W6DRYGS+A
93226D
TBX2
a
b
Mass termination assembly
Pin number
7
1MTA5-9
MTA designation on board
Board MTA group designation
An MTA is a connection on an electronic circuit board. The notes and the tag page locate the appropriate board.
S+ 08
7
CRSG
4
1B2S
CLOSES WHEN SIGNAL DESIRED
B32
S+ 707
CRS
1
+S
2B2S
OPENS WHEN 3-WIRE ENERGIZED
SF 7 02
B56
CRFEB
4
4B2
CLOSES WHEN FIRE EYE ENABLED
S+ 8 08
CRSG
5
1B2S
CLOSES WHEN SIGNAL DESIRED
8
Wire identification marking. This designation is stamped on the wire every 6 inches and is used with the signal routing table.
B12
MC 8 15
CR
2
MA
2A1M
OPENS WHEN MAIN AIR DESIRED
B58
EBSG
SIGNAL AUDIBLE
CDACS
ROTATION SAFETY
1A2F
Page line numbers
3
10
11
12
Major revision (letter)
1
Page number (S+)
Machine type (Gas fired dryer)
6th generation of controls
W = Wiring
Class of control system
2
Title of this circuit
Voltage of this circuit
W 6 DRYG S+ A
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.
W6DRYGS+A
93226D

BMP010012-R

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

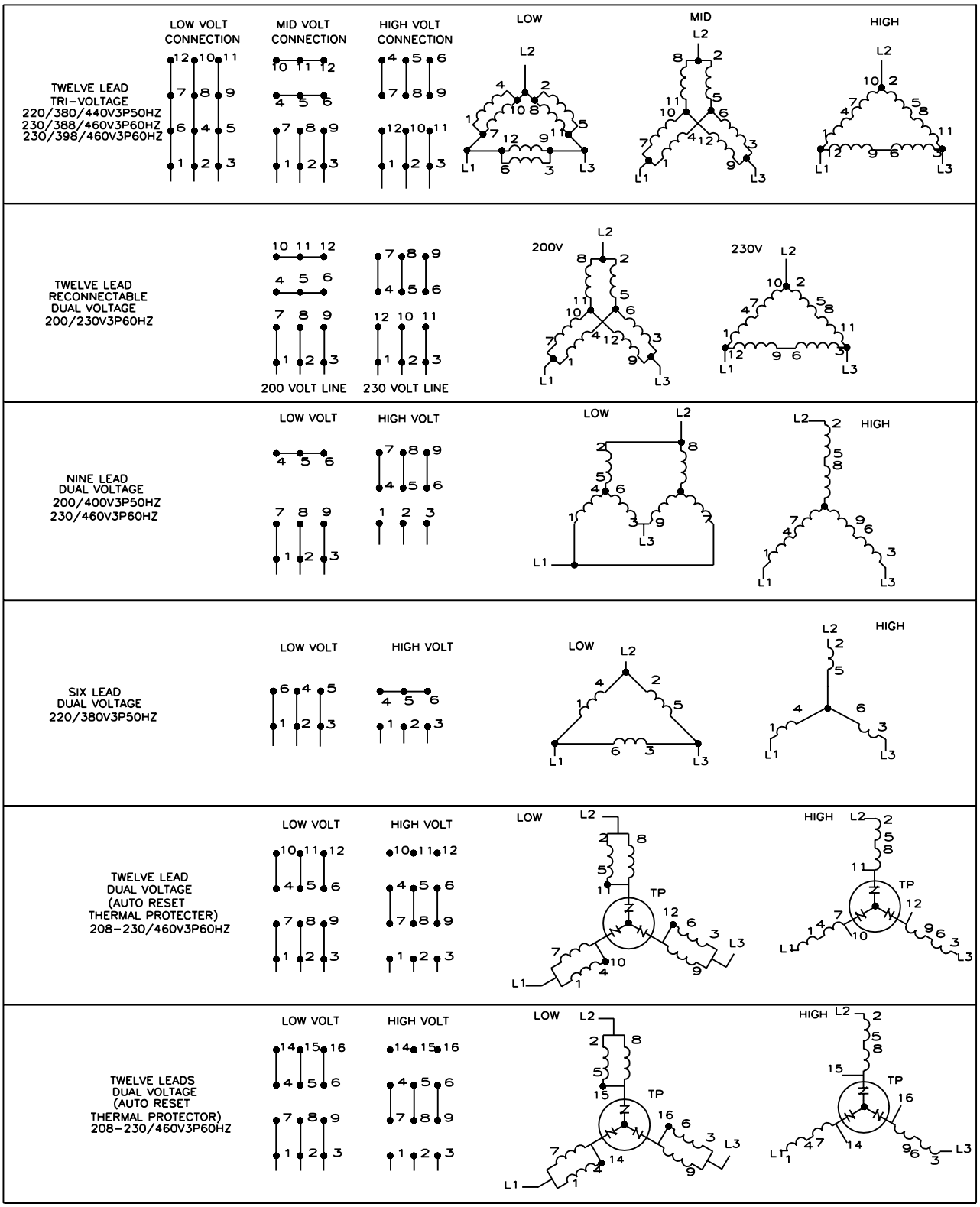
BMP850029

MOTOR CONNECTION DIAGRAMS

THREE PHASE SINGLE SPEED MOTORS WITH MULTIPLE VOLTAGE RATINGS

(ONLY FOR MOTOR SUFFIXES LISTED)

PELLERIN MILNOR CORPORATION

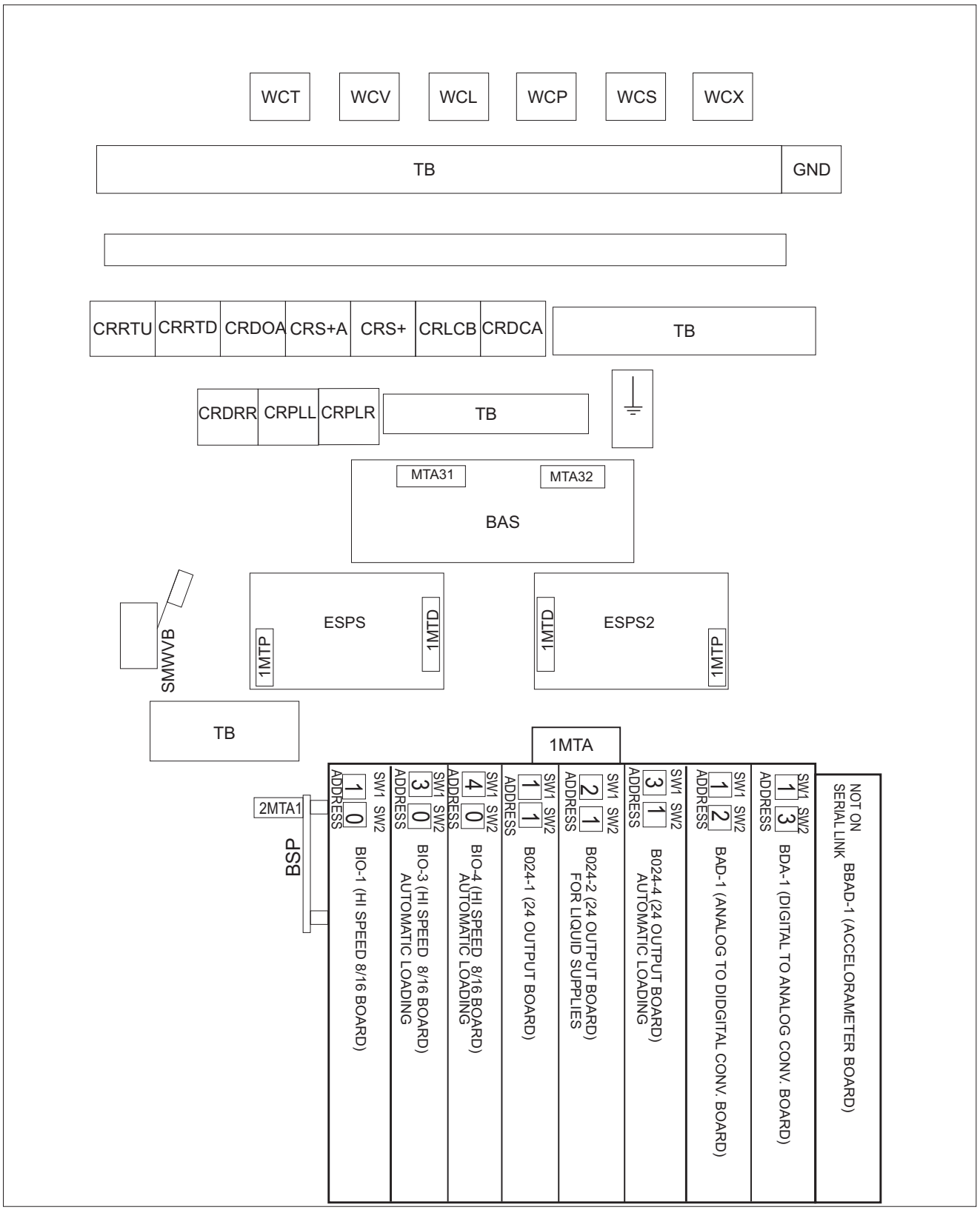


W80008

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

PELLERIN MILNOR CORPORATION

W80008
2001253A



68036H5K/M5K W/ AUTOMATIC LOADING MILTOUCH-EX™ CONTROLS LOW VOLTAGE CONTROL BOX

B2T2014014
2015233A

PELLERIN MILNOR CORPORATION

W6H5KZTG1
2015223B

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

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.

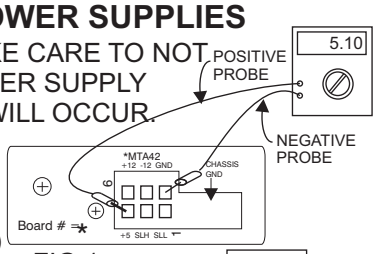


FIG 1.

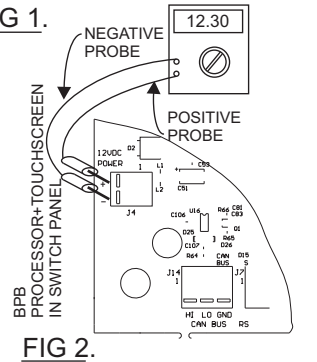


FIG 2.

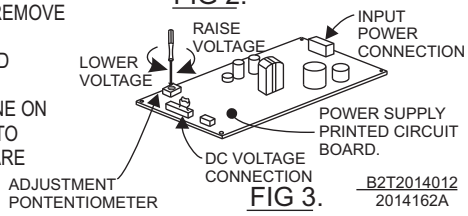


FIG 3.

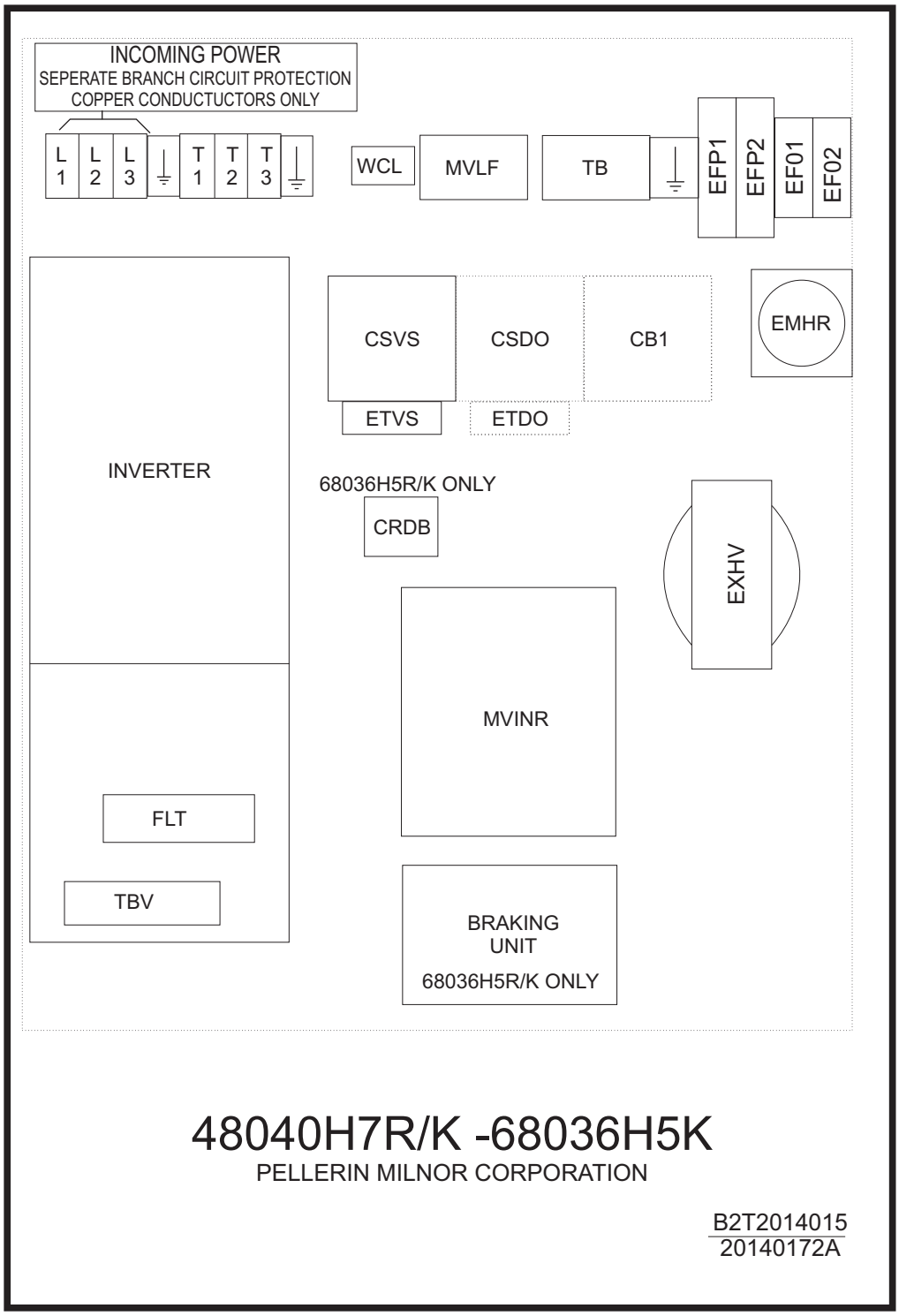
B2T2014012
2014162A

W6H5KZTG1
MILTOUCH-EX™ CONTROLS
CONTROL BOX LAYOUTS
PELLERIN MILNOR CORPORATION

BIO-1	BO24-1	BO24-2	BIO-3	BO24-4
INPUTS 0 BEARING SEAL DEFLATED 1 DOOR CLOSED 2 INVERTER FAULT 3 NOT USED 4 WASH POSITION 5 LOAD POSITION 6 DON'T ALLOW CHEM 7 BASKET ROTATING 8 EXCURSION 9 NOT USED 10 BRAKE PAD WORN 11 BRAKE IS OFF 12 DOOR OPEN DESIRED 13 EXTRACT SPEED LIMIT 14 NOT USED 15 3-WIRE ON **OUTPUTS** 0 RECIRCULATE PUMP 1 COOLDOWN 2 CHEMICAL FLUSH 3 CHEMICAL #4 4 CHEMICAL #1 5 CHEMICAL #3 6 CHEMICAL #2 7 CHEMICAL #5	**OUTPUTS** 8 TANK TO MACHINE 9 ACCELERATE/DECELERATE 10 DOOR UNLOCK 11 CLOCKWISE WASH 12 COUNTER CLOCKWISE WASH 13 STEAM 14 SIGNAL 15 3-WIRE ENABLED 16 BRAKE RELEASE 17 HOT WATER 18 COLD WATER 19 EXTRA WATER 20 DRAIN TO SEWER 21 DRAIN TO REUSE 22 MACHINE TO MACHINE 23 MACHINE TO TANK 24 NOT USED 25 NOT USED 26 NOT USED 27 NOT USED 28 NOT USED 29 NOT USED 30 NOT USED 31 NOT USED	**OUTPUTS** 40 CHEM #14 41 CHEM #9 42 CHEM #13 43 FLUSH MANIFOLD 44 CHEM #15 45 CHEM #11 46 CHEM SAVE 47 NOT USED 48 CHEM #10 49 NOT USED 50 CHEM #6 51 CHEM #7 52 CHEM #8 53 CHEM #12 54 AUTO RECIRCULATION 55 NOT USED 56 NOT USED 57 NOT USED 58 DRAIN SAVER 59 MOVE TO LOAD POSITION 60 NOT USED 61 MOVING 62 NOT USED 63 MOVE TO WASH POSITION	**INPUTS** 32 ELBOW UP LOCKED 33 NOT USED 34 ELBOW DOWN LOCKED 35 MANUAL DESIRED 36 DISCHARGE ALLOWED 37 LOAD ALLOWED 38 LOAD TERMINATED 39 ELBOW EYE BLOCKED 40 NOT USED 41 DOOR FULL OPEN 42 ALLIED START LOADING 43 NOT USED 44 NOT USED 45 ALLIED LOAD TERMINATED 46 ALLIED START DISCHARGING 47 HYDRAULIC ENABLED **OUTPUTS** 64 DRYELL BLOW 65 DRYELL UP LOCK RELEASE 66 DRYELL DN LOCK RELEASE 67 LOAD DESIRED 68 DRYELL FLUSH 69 DISCHARGE TERMINATED 70 DRYELL MOVE UP 71 DRYELL MOVE DOWN	**OUTPUTS** 104 HYDRAULIC PUMP 105 OPEN DOOR 106 CLOSE DOOR 107 DISCHARGE DESIRED 108 LOAD/UNLOAD TERMINATED 109 TILT UP 110 TILT DOWN 111 LIMIT EXTRACT SPEED 112 NOT USED 113 DEFLATE DOOR 114 START LOADING 115 START DISCHARGING 116 TILT DOOR LATCH 117 DOOR UNLATCH 118 SEQ LOAD ALLOWED 119 SEQ LOAD DESIRED 120 NOT USED 121 NOT USED 122 FLAG DOWN 123 SEQ LOAD UNLOAD TERM 124 SEQ DISCHARGE DESIRED 125 SEQ DISCHARGE ALLOWED 126 SEQ FLAG DOWN

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

B2T2014016
2014162A



48040H7R/K -68036H5K

PELLERIN MILNOR CORPORATION

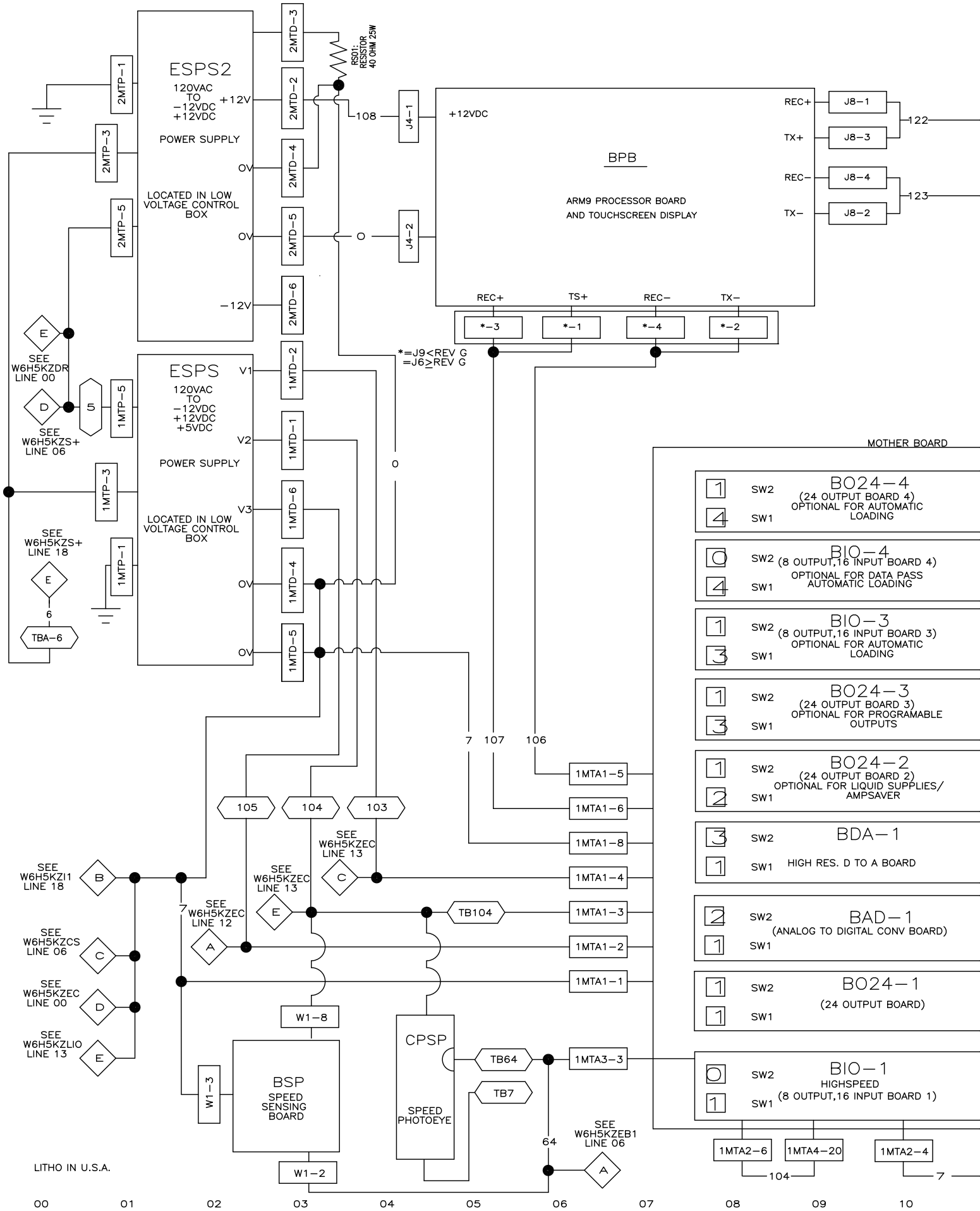
B2T2014015
20140172A

W6H5KZTG2
2014156B

W6H5KZTG2

MILTOUCH-EX™ CONTROLS
CONTROL BOX LAYOUTS

PELLERIN MILNOR CORPORATION


ESPS2
120VAC TO −12VDC +12VDC
POWER SUPPLY
LOCATED IN LOW VOLTAGE CONTROL BOX
+12V
0V
0V
−12V
2MTP−1
2MTP−3
2MTP−5
2MTD−3
2MTD−2
2MTD−4
2MTD−5
2MTD−6
RS01: RESISTOR 40 OHM 25W
108
J4−1
J4−2
0
+12VDC
BPB
ARM9 PROCESSOR BOARD AND TOUCHSCREEN DISPLAY
REC+
TX+
REC−
TX−
J8−1
J8−3
J8−4
J8−2
122
123
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
V2
V3
0V
0V
0V
1MTD−2
1MTD−1
1MTD−6
1MTD−4
1MTD−5
1MTP−5
1MTP−3
1MTP−1
0
SEE W6H5KZDR LINE 00
SEE W6H5KZS+ LINE 06
SEE W6H5KZS+ LINE 18
E
D
5
6
TBA−6
MOTHER BOARD
1 SW2
4 SW1
BO24−4
(24 OUTPUT BOARD 4)
OPTIONAL FOR AUTOMATIC LOADING
0 SW2
4 SW1
BIO−4
(8 OUTPUT,16 INPUT BOARD 4)
OPTIONAL FOR DATA PASS AUTOMATIC LOADING
1 SW2
3 SW1
BIO−3
(8 OUTPUT,16 INPUT BOARD 3)
OPTIONAL FOR AUTOMATIC LOADING
1 SW2
3 SW1
BO24−3
(24 OUTPUT BOARD 3)
OPTIONAL FOR PROGRAMABLE OUTPUTS
1 SW2
2 SW1
BO24−2
(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
BO24−1
(24 OUTPUT BOARD)
0 SW2
1 SW1
BIO−1
HIGHSPEED
(8 OUTPUT,16 INPUT BOARD 1)
7
107
106
105
104
103
1MTA1−5
1MTA1−6
1MTA1−8
1MTA1−4
1MTA1−3
1MTA1−2
1MTA1−1
1MTA3−3
1MTA2−6
1MTA4−20
1MTA2−4
104
7
SEE W6H5KZEC LINE 13
SEE W6H5KZEC LINE 13
SEE W6H5KZEC LINE 12
SEE W6H5KZI1 LINE 18
SEE W6H5KZCS LINE 06
SEE W6H5KZEC LINE 00
SEE W6H5KZLIO LINE 13
SEE W6H5KZEB1 LINE 06
B
C
D
E
A
TB104
W1−8
W1−3
W1−2
BSP
SPEED SENSING BOARD
CPSP
SPEED PHOTOEYE
TB64
TB7
64
LITHO IN U.S.A.
00
01
02
03
04
05
06
07
08
09
10
W6H5KZBW
2016205B

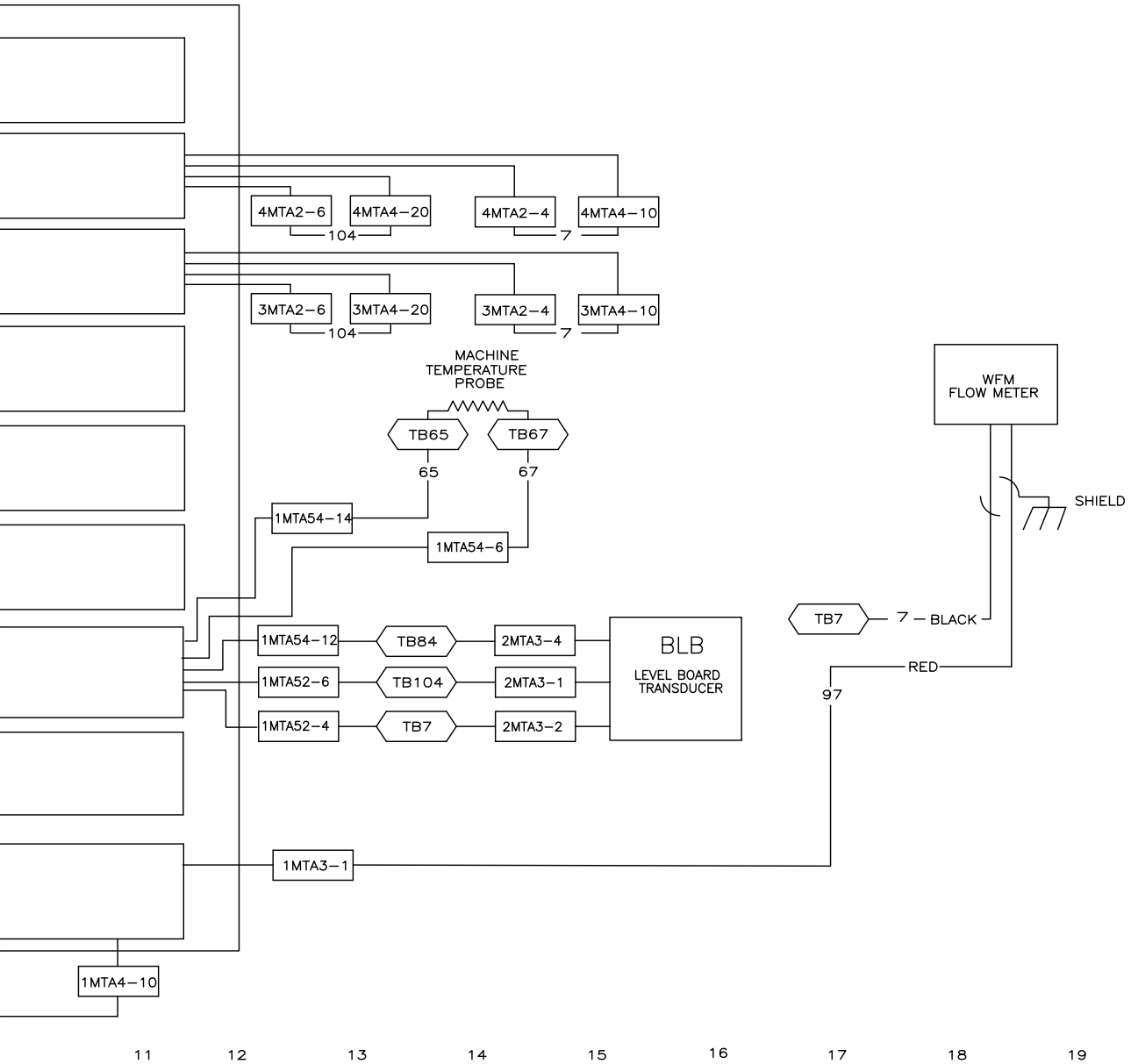
TB122

MILTRAC

TB123

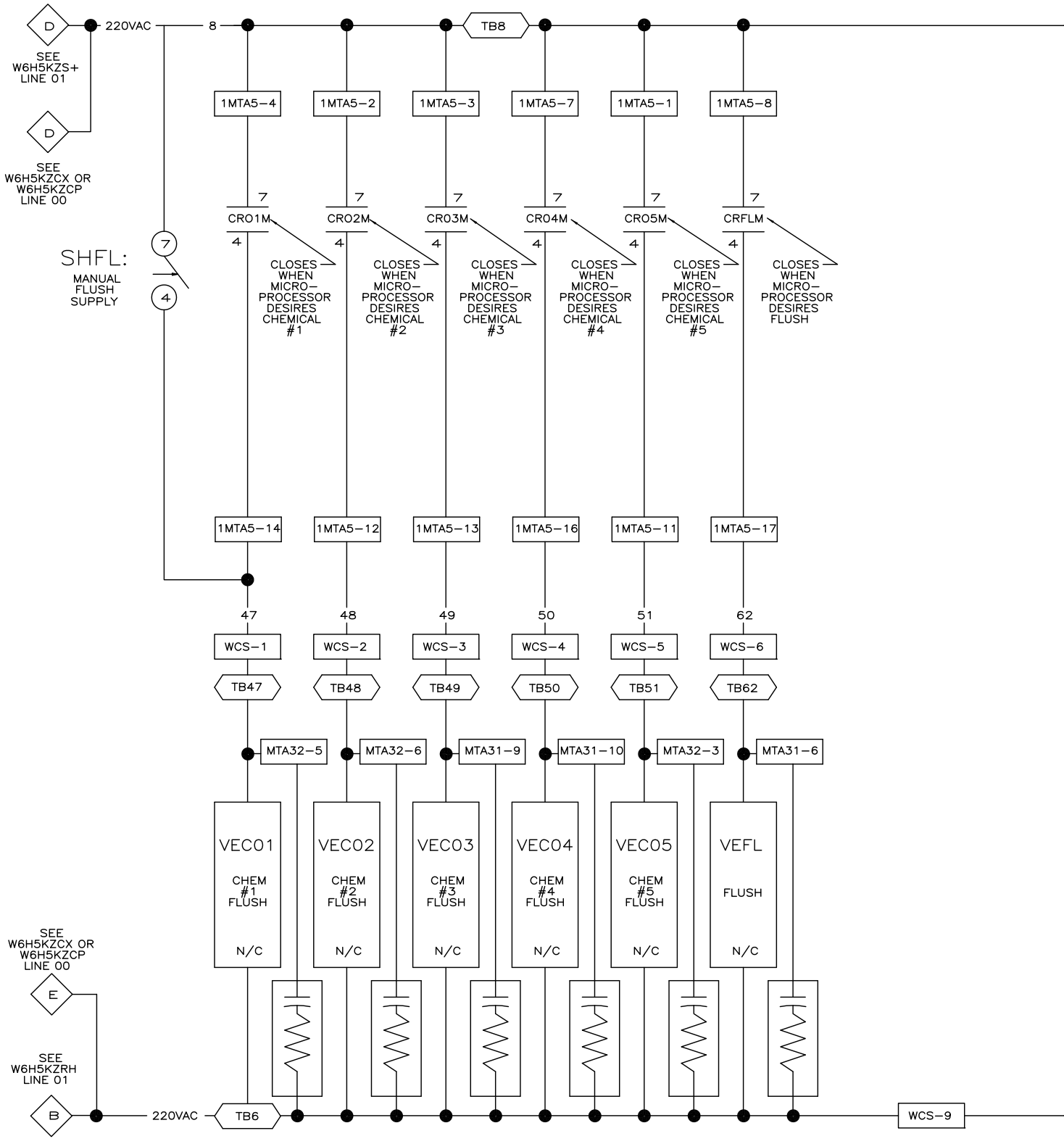
NOTES:

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



W6H5KZBW
MILTOUCH−EXTM DRYELL
SCHEMATIC: BOARD TO BOARD WIRING

PELLERIN MILNOR CORPORATION


D
220VAC
8
TB8
SEE W6H5KZS+ LINE 01
D
SEE W6H5KZCX OR W6H5KZCP LINE 00
1MTA5–4
1MTA5–2
1MTA5–3
1MTA5–7
1MTA5–1
1MTA5–8
7
CRO1M
CRO2M
CRO3M
CRO4M
CRO5M
CRFLM
4
SHFL:
MANUAL FLUSH SUPPLY
CLOSES WHEN MICRO–PROCESSOR DESIRES CHEMICAL #1
CLOSES WHEN MICRO–PROCESSOR DESIRES CHEMICAL #2
CLOSES WHEN MICRO–PROCESSOR DESIRES CHEMICAL #3
CLOSES WHEN MICRO–PROCESSOR DESIRES CHEMICAL #4
CLOSES WHEN MICRO–PROCESSOR DESIRES CHEMICAL #5
CLOSES WHEN MICRO–PROCESSOR DESIRES FLUSH
1MTA5–14
1MTA5–12
1MTA5–13
1MTA5–16
1MTA5–11
1MTA5–17
47
48
49
50
51
62
WCS–1
WCS–2
WCS–3
WCS–4
WCS–5
WCS–6
TB47
TB48
TB49
TB50
TB51
TB62
MTA32–5
MTA32–6
MTA31–9
MTA31–10
MTA32–3
MTA31–6
VEC01
CHEM #1 FLUSH
N/C
VEC02
CHEM #2 FLUSH
N/C
VEC03
CHEM #3 FLUSH
N/C
VEC04
CHEM #4 FLUSH
N/C
VEC05
CHEM #5 FLUSH
N/C
VEFL
FLUSH
N/C
SEE W6H5KZCX OR W6H5KZCP LINE 00
E
SEE W6H5KZRH LINE 01
B
220VAC
TB6
WCS–9
LITHO IN U.S.A.
00
01
02
03
04
05
06
07
08
W6H3NZCF
2015172B

NOTES:

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

7

4

SHMF:
MANUAL FLUSH SOAP CHUTE

63

TB63

VECFL
FLUSH SOAP SHUTE
N/C

MTA32–8 — MTA32–9 — MTA32–10

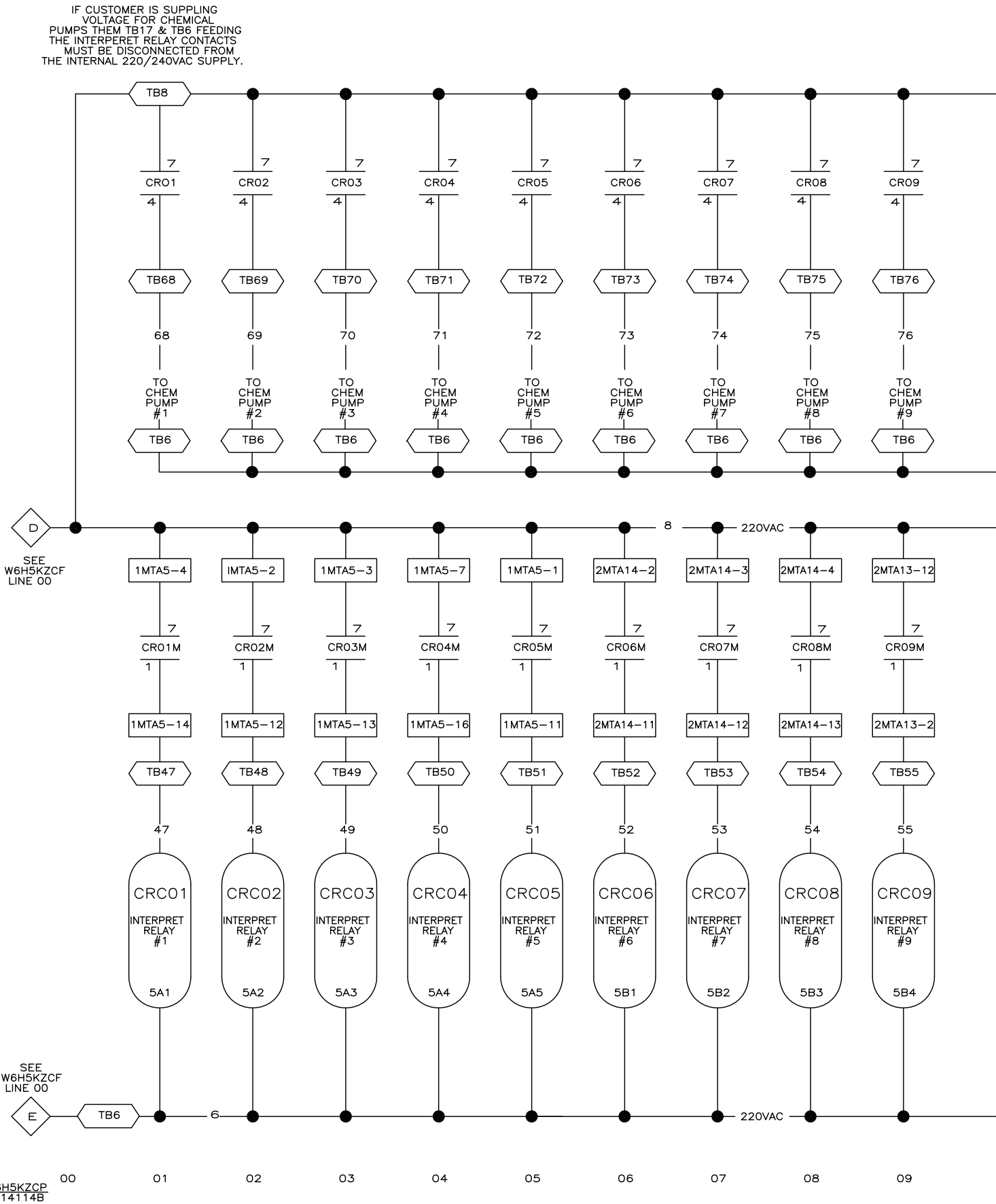
W6H5KZCF

MILTOUCH–EX™ CONTROLS

SCHEMATIC: FLUSHING SUPPLIES

220V1P50HZ/240V1P60HZ

PELLERIN MILNOR CORPORATION

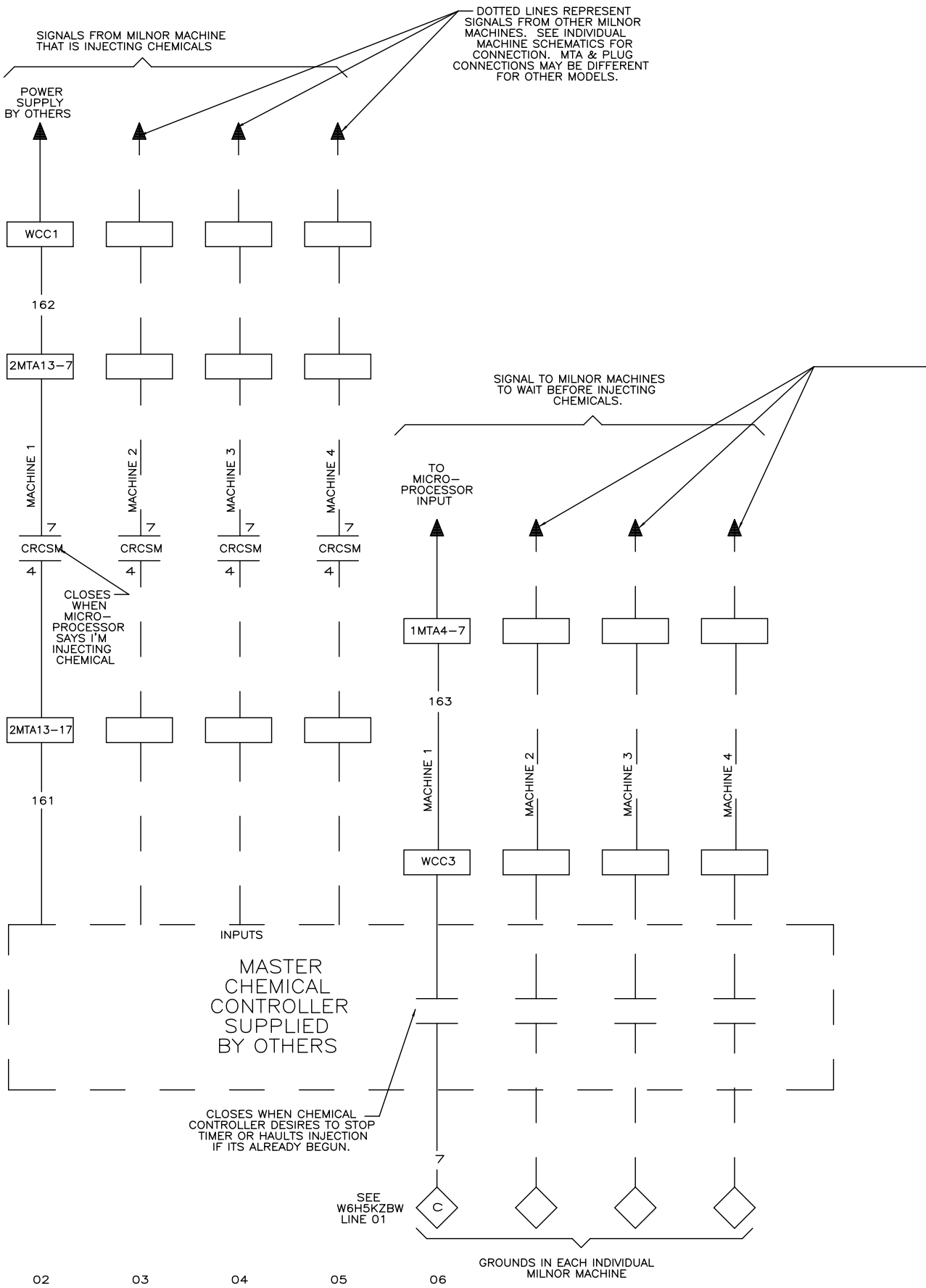

IF CUSTOMER IS SUPPLING VOLTAGE FOR CHEMICAL PUMPS THEM TB17 & TB6 FEEDING THE INTERPERET RELAY CONTACTS MUST BE DISCONNECTED FROM THE INTERNAL 220/240VAC SUPPLY.
TB8
CR01
CR02
CR03
CR04
CR05
CR06
CR07
CR08
CR09
TB68
TB69
TB70
TB71
TB72
TB73
TB74
TB75
TB76
68
69
70
71
72
73
74
75
76
TO CHEM PUMP #1
TO CHEM PUMP #2
TO CHEM PUMP #3
TO CHEM PUMP #4
TO CHEM PUMP #5
TO CHEM PUMP #6
TO CHEM PUMP #7
TO CHEM PUMP #8
TO CHEM PUMP #9
TB6
D
SEE W6H5KZCF LINE 00
8
220VAC
1MTA5-4
IMTA5-2
1MTA5-3
1MTA5-7
1MTA5-1
2MTA14-2
2MTA14-3
2MTA14-4
2MTA13-12
CR01M
CR02M
CR03M
CR04M
CR05M
CR06M
CR07M
CR08M
CR09M
1MTA5-14
1MTA5-12
1MTA5-13
1MTA5-16
1MTA5-11
2MTA14-11
2MTA14-12
2MTA14-13
2MTA13-2
TB47
TB48
TB49
TB50
TB51
TB52
TB53
TB54
TB55
47
48
49
50
51
52
53
54
55
CRC01 INTERPRET RELAY #1 5A1
CRC02 INTERPRET RELAY #2 5A2
CRC03 INTERPRET RELAY #3 5A3
CRC04 INTERPRET RELAY #4 5A4
CRC05 INTERPRET RELAY #5 5A5
CRC06 INTERPRET RELAY #6 5B1
CRC07 INTERPRET RELAY #7 5B2
CRC08 INTERPRET RELAY #8 5B3
CRC09 INTERPRET RELAY #9 5B4
SEE W6H5KZCF LINE 00
E
TB6
6
220VAC
00
01
02
03
04
05
06
07
08
09
W6H5KZCP
2014114B

W6H5KSCP

MILTOUCH–EX™ DRYELL

SCHEMATIC: LIQUID SUPPLY–INTERPRET RELAYS

220V1P50HZ/240V1P60HZ



W6H5KZCS
2014114B

W6H5KZCS

MILTOUCH–EX™ DRYELL

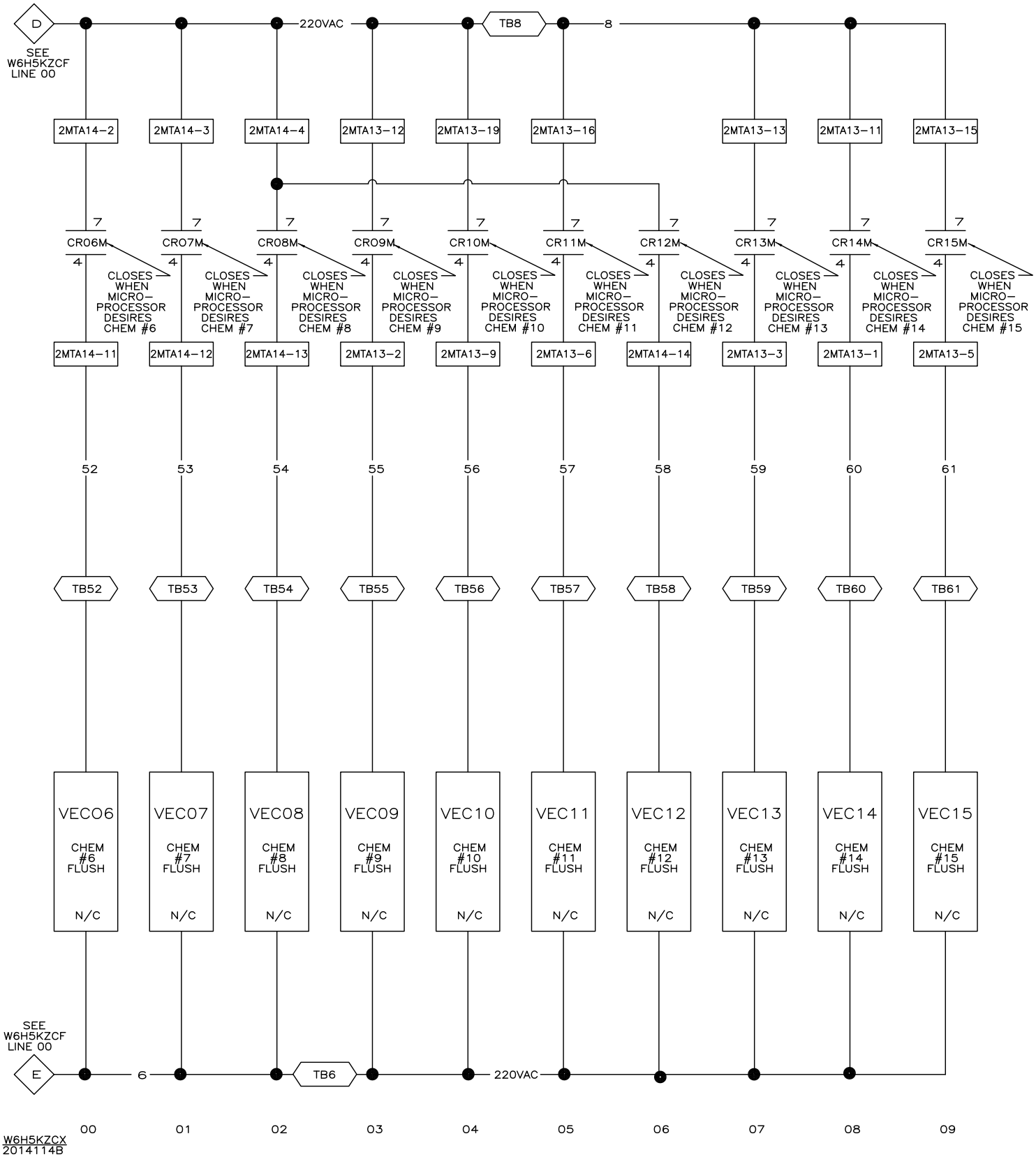
SCHEMATIC: CHEMICAL SAVE (OPTIONAL)

PELLERIN MILNOR CORPORATION

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

NOTES:

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


D
SEE W6H5KZCF LINE 00
220VAC
TB8
8
2MTA14–2
2MTA14–3
2MTA14–4
2MTA13–12
2MTA13–19
2MTA13–16
2MTA13–13
2MTA13–11
2MTA13–15
7
4
CR06M
CRO7M
CR08M
CR09M
CR10M
CR11M
CR12M
CR13M
CR14M
CR15M
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
CLOSES WHEN MICRO–PROCESSOR DESIRES CHEM #15
2MTA14–11
2MTA14–12
2MTA14–13
2MTA13–2
2MTA13–9
2MTA13–6
2MTA14–14
2MTA13–3
2MTA13–1
2MTA13–5
52
53
54
55
56
57
58
59
60
61
TB52
TB53
TB54
TB55
TB56
TB57
TB58
TB59
TB60
TB61
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
VEC15 CHEM #15 FLUSH N/C
SEE W6H5KZCF LINE 00
E
6
TB6
220VAC
00
01
02
03
04
05
06
07
08
09
W6H5KZCX
2014114B

W6H5KZCX

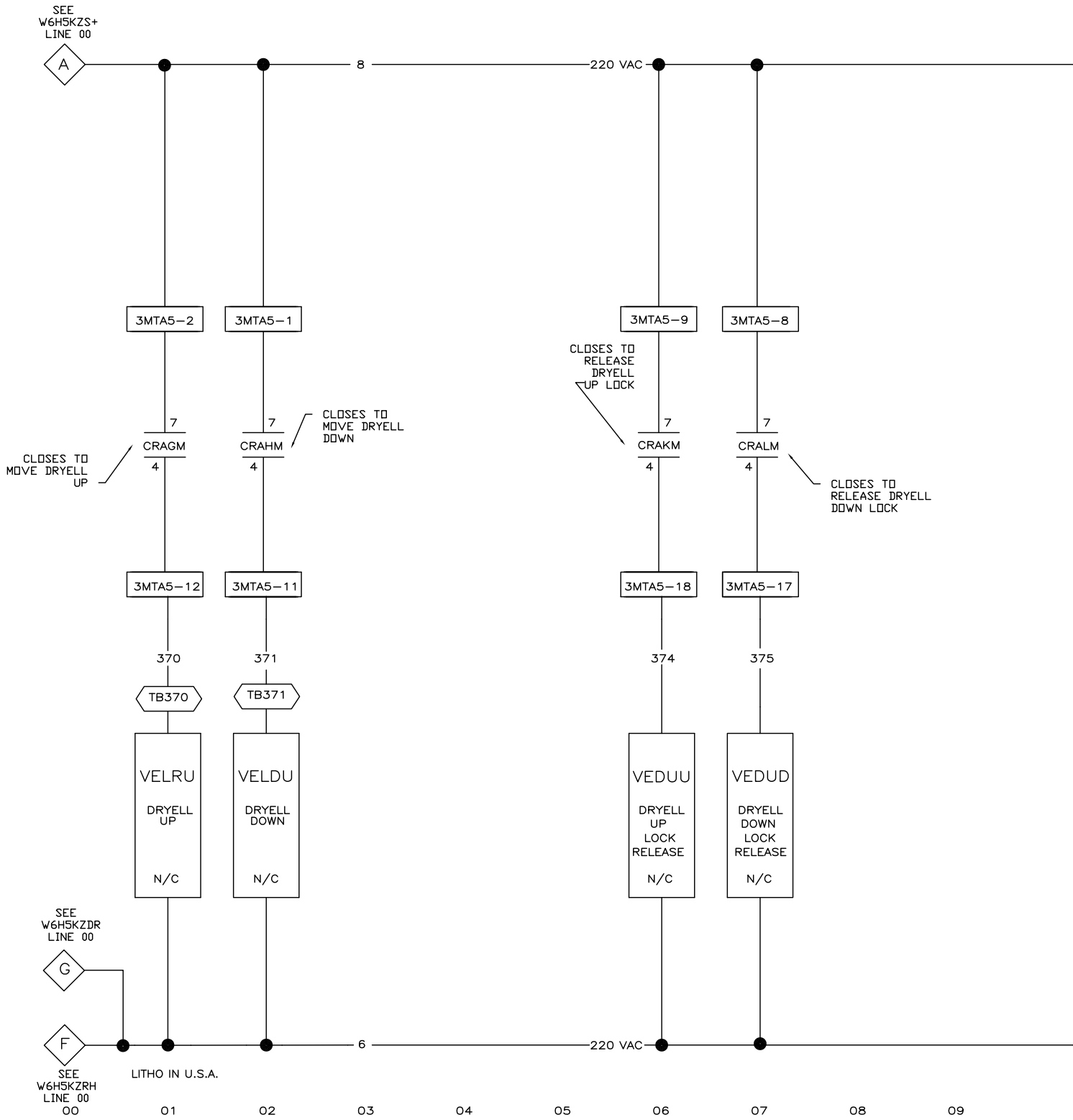
MILTOUCH-EX™ DRYELL

SCHEMATIC: CENTRAL LIQUID SUPPLY FLUSH 6 THRU 15

W6H5KZCX
2014114B

10 11 12 13

W6H5KSCX
2013126B



W6H5KZDE
2014144B

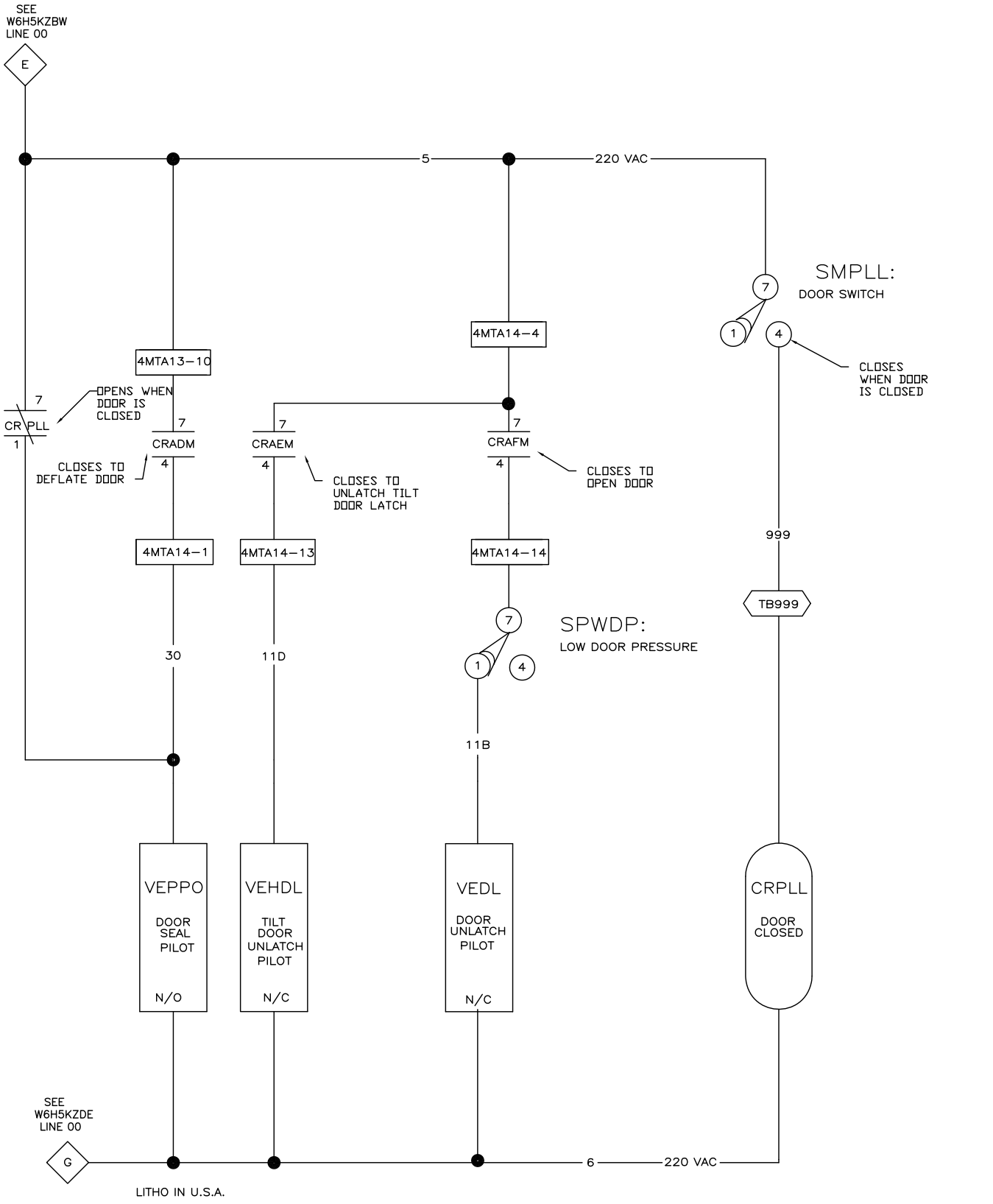
W6H5KSDE

MILTOUCH–EX™ DRYELL

SCHEMATIC:DRYELL CONTROLS

220V1P50HZ/240V1P60HZ

PELLERIN MILNOR CORPORATION



W6H5KZDR
2014114B

W6F5KZDR

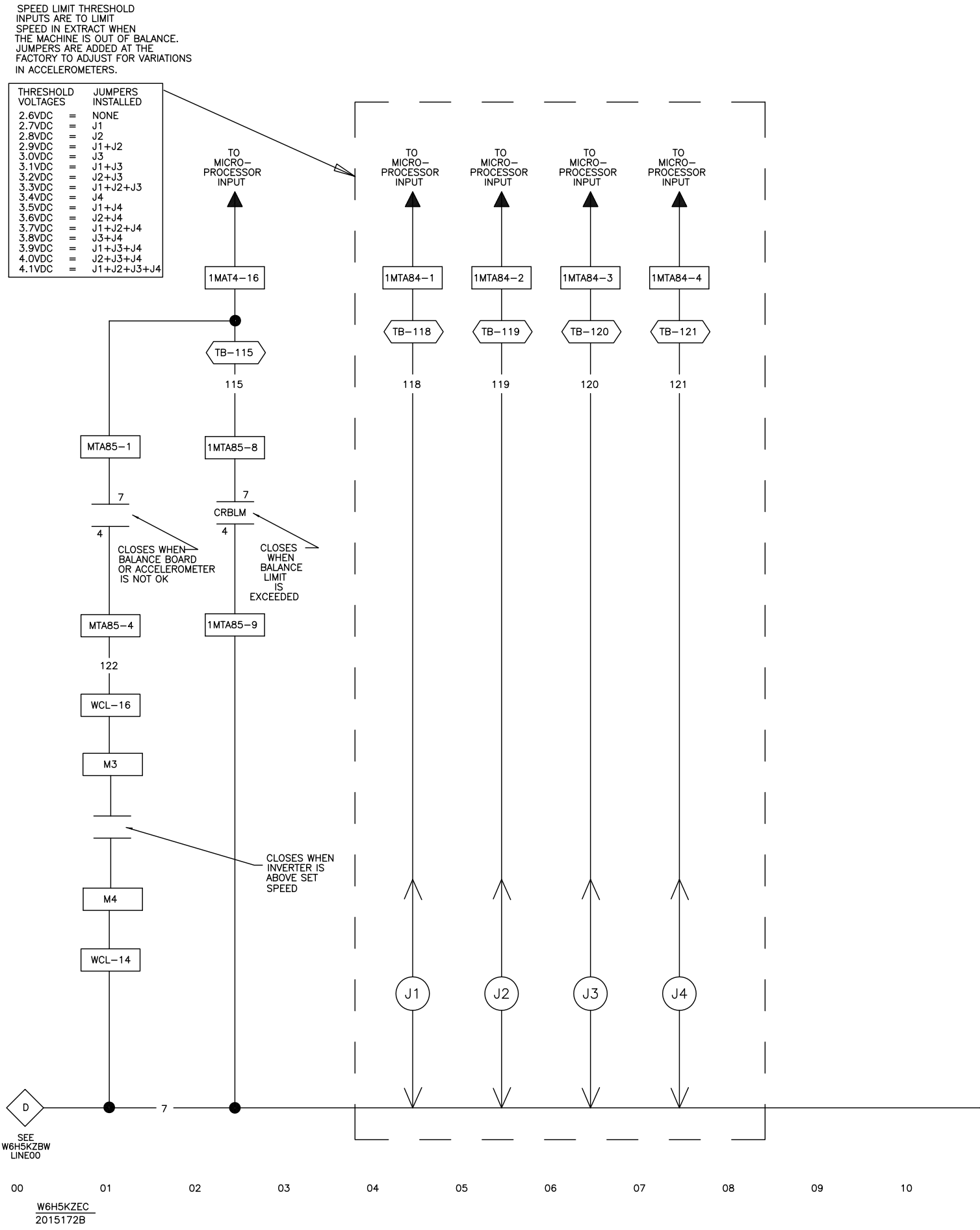
MILTOUCH-EX™ CONTROLS

SCHEMATIC:DOOR

220V1P50HZ/240V1P60HZ

PELLERIN MILNOR CORPORATION

10 11 12 13 14 15 16


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
1MAT4–16
TB–115
115
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
122
WCL–16
M3
CLOSES WHEN INVERTER IS ABOVE SET SPEED
M4
WCL–14
TO MICRO–PROCESSOR INPUT
1MTA84–1
TB–118
118
1MTA84–2
TB–119
119
1MTA84–3
TB–120
120
1MTA84–4
TB–121
121
J1
J2
J3
J4
D
SEE W6H5KZBW LINE00
00
01
02
03
04
05
06
07
08
09
10
W6H5KZEC
2015172B

W6H5KZEC
2015172B

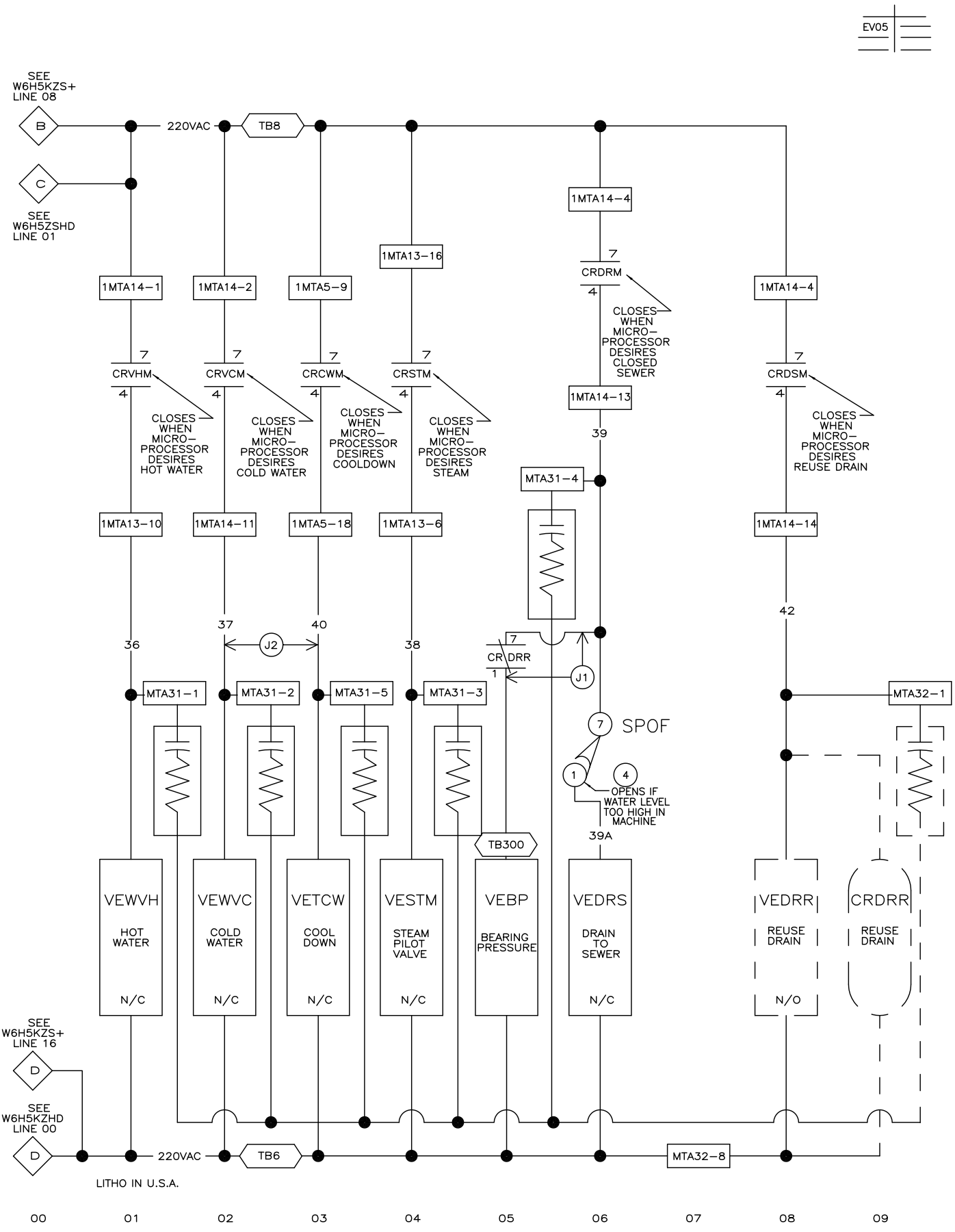
W6H5KZEC

MILTOUCH–EX™ DRYELL

SCHEMATIC: EXTRACT SPEED LIMIT CONTROL

PELLERIN MILNOR CORPORATION

W6H5KZEC
2015172B



W6H5KZEV
2016176B

W6H5KZEV

MILTOUCH–EX™ DRYELL

SCHEMATIC: ELECTRICAL VALVES

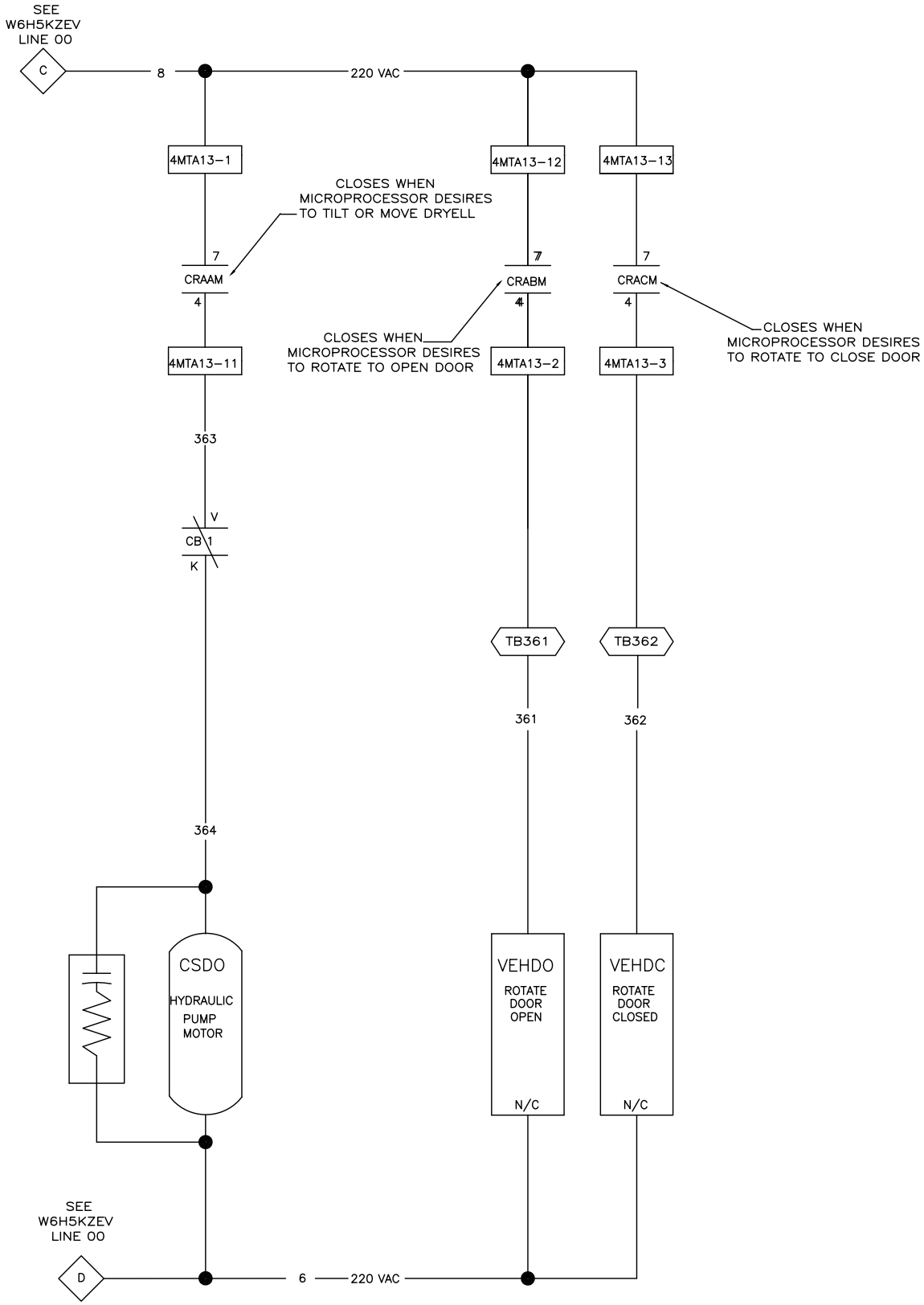
220V1P50HZ/240V1P60HZ

PELLERIN MILNOR CORPORATION

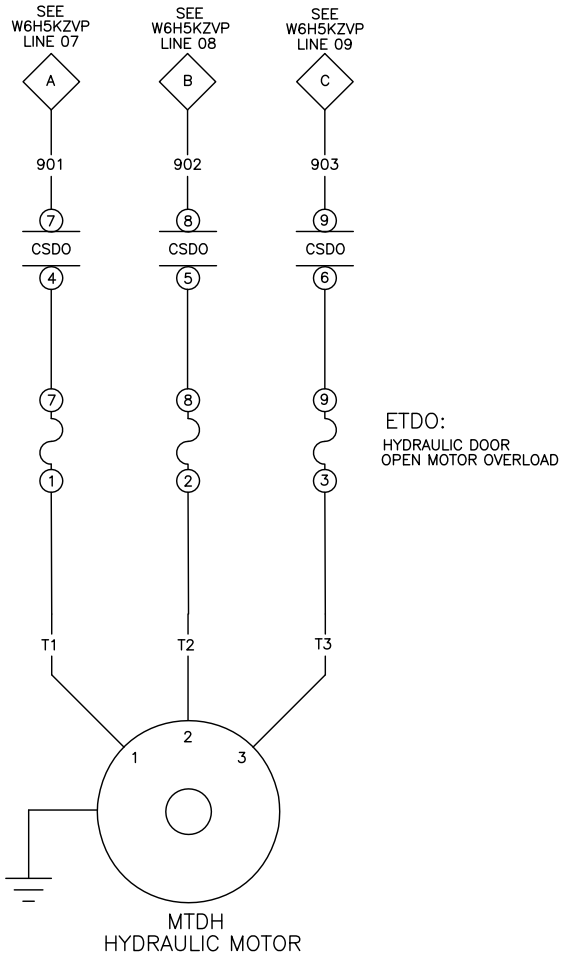
NOTE:
REMOVE (J1) FOR DRAIN TO REUSE OPTION.

NOTE:
REMOVE (J2) IF MACHINE IS EQUIPPED
WITH SEPERATE COOLDOWN WATER VALVE.

10 11 12 13 14 15 16



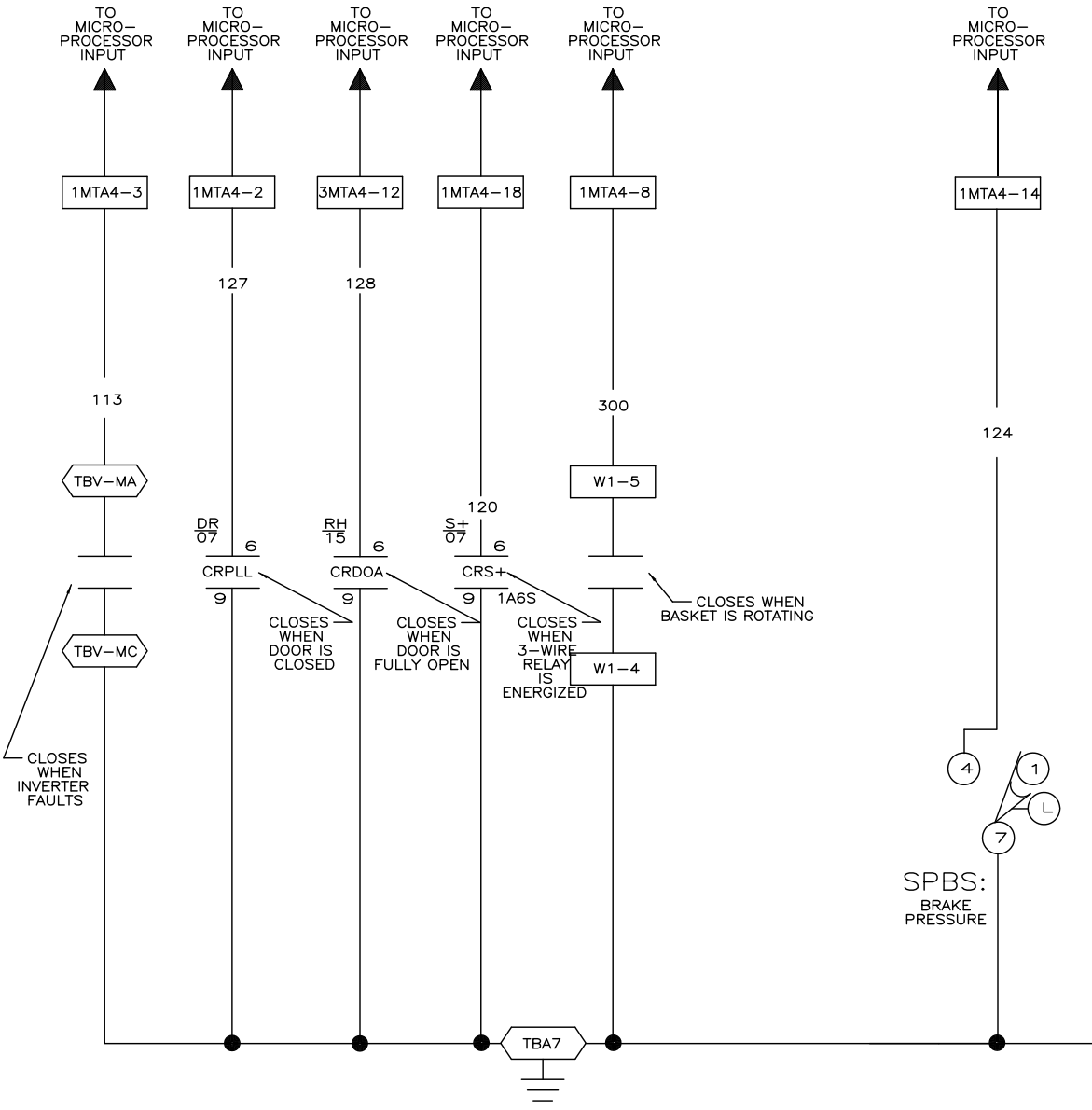
W6H5KZHD
2014144B



ETDO:
HYDRAULIC DOOR
OPEN MOTOR OVERLOAD

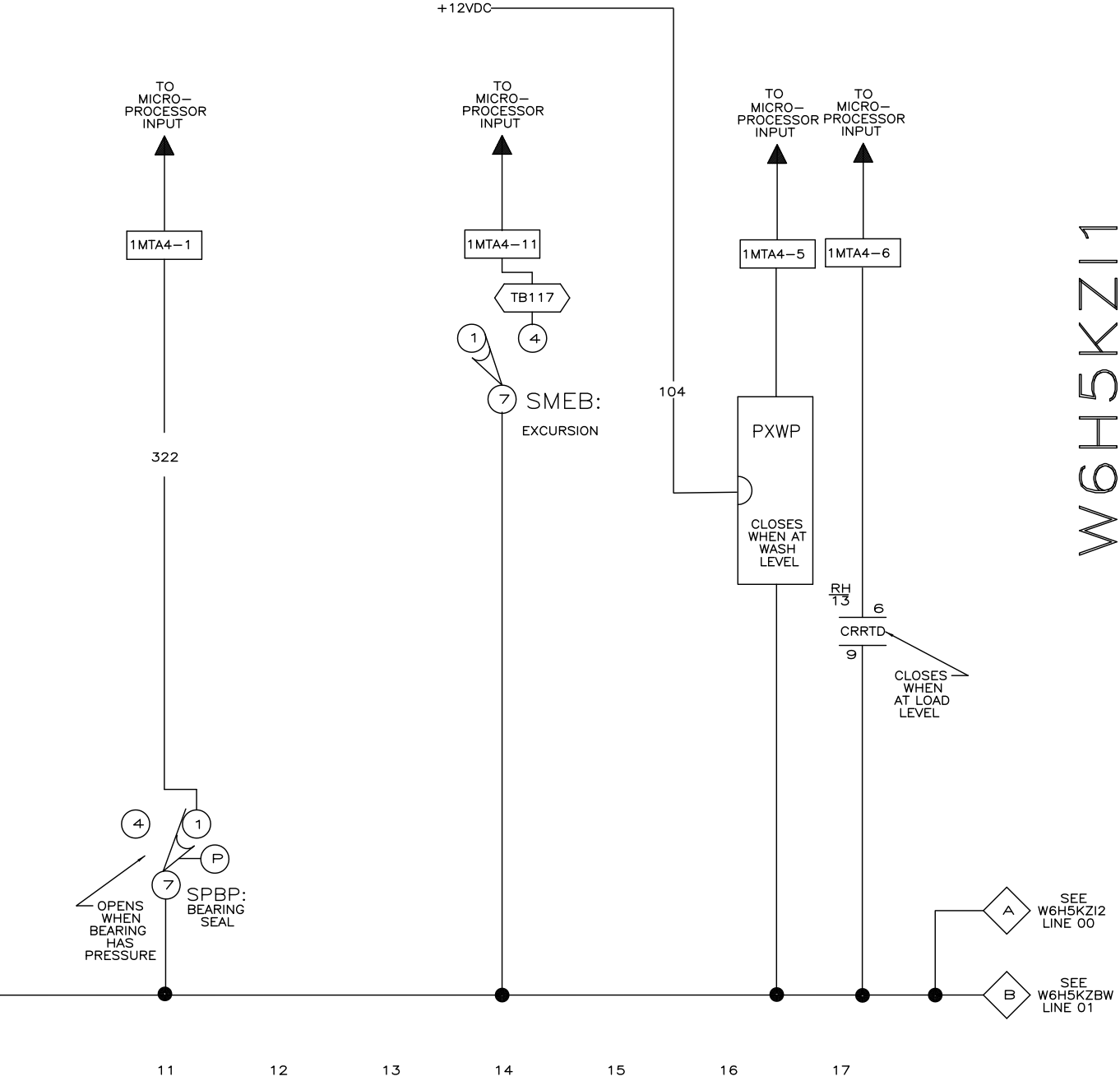
W6H5KZHD
MILTOUCH-EX™ DRYELL
SCHEMATIC; HYDRAULIC DOOR
220V1P50HZ/240V1P60HZ
PELLERIN MILNOR CORPORATION

10 11 12 13 14 15 16

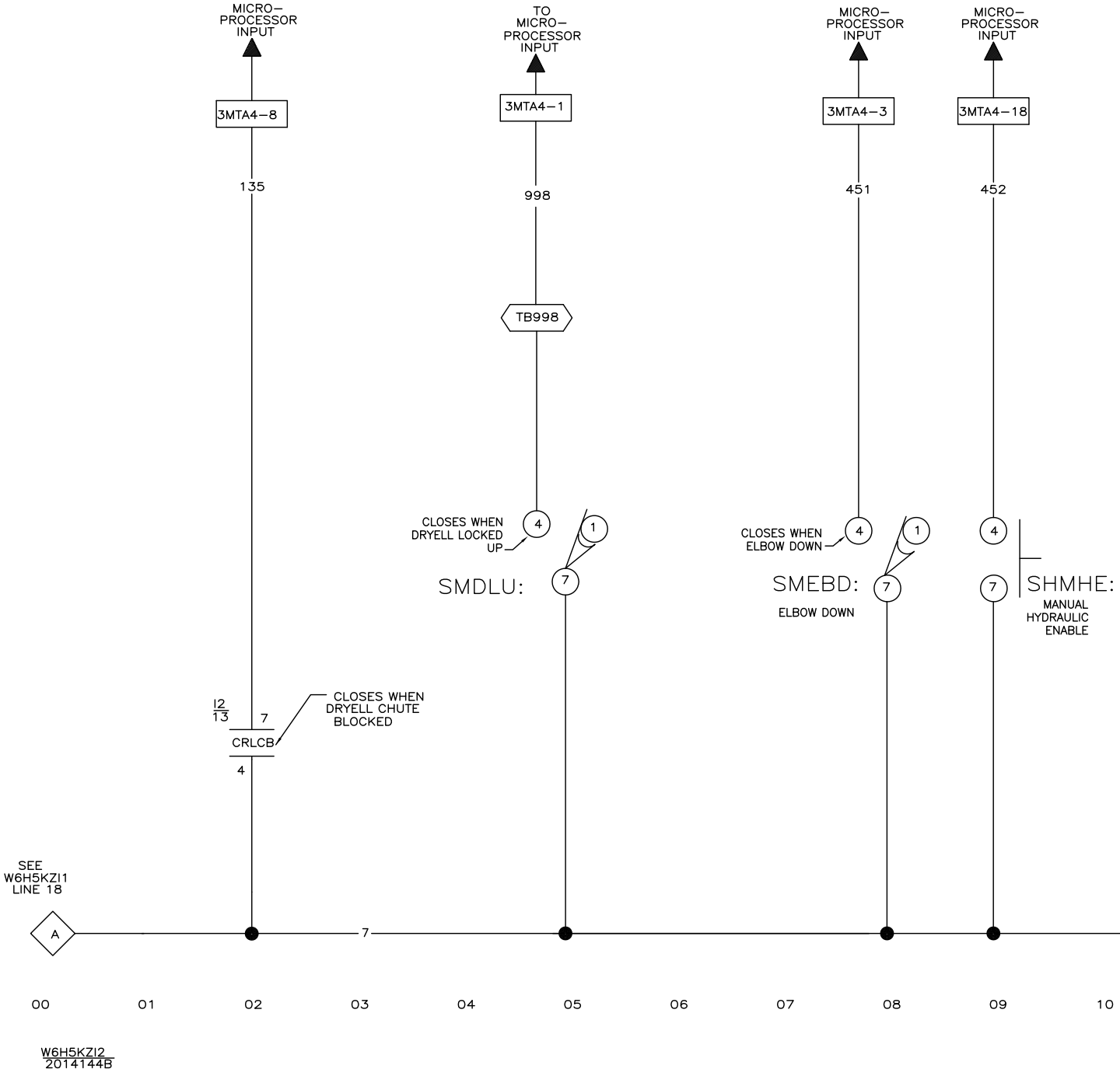


W6H5KZ1
2014144B

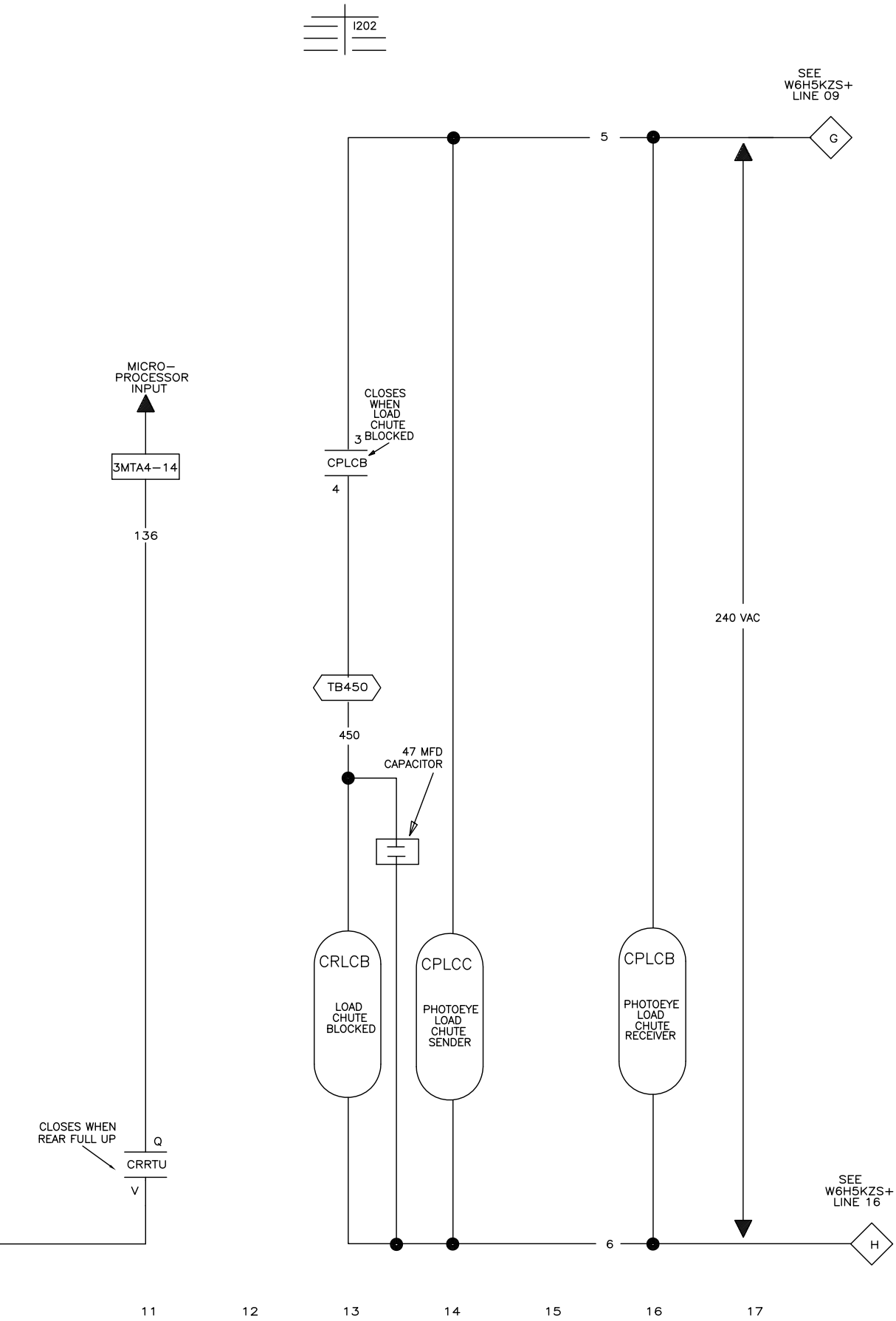
1. 1MTA3 AND 1MTA4 ARE LOCATED ON BI0–1 (8 OUTPUT–16 INPUT BOARD).
2. 2MTA4 IS LOCATED ON BI0–2 (8 OUTPUT–16 INPUT BOARD).
3. TBR, TBP, AND TB3 (DISPENSER SOLENOID BAR) ARE LOCATED IN LOW VOLTAGE CONTROL BOX.
4. W1 IS LOCATED ON SENSING BOARD).



W6H5KZI1
MILTOUCH–EXTM DRYELL
SCHEMATIC: MICROPROCESSOR INPUTS
PELLERIN MILNOR CORPORATION



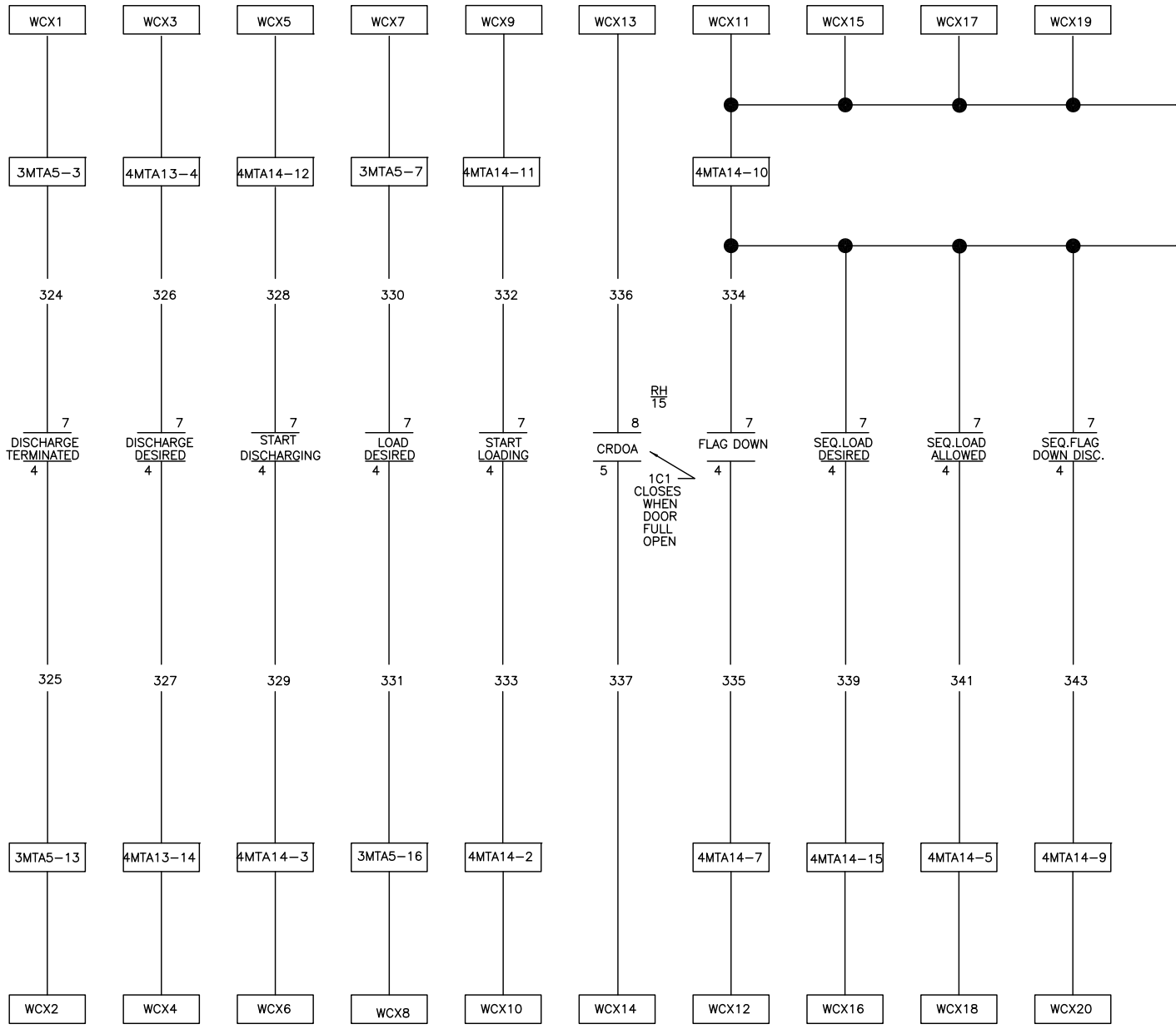
W6H5KZI2
2014144B



W6H5KZI2
2014144B

W6H5KZI2
MILTOUCH–EX™ DRYELL
SCHEMATIC: MICROPROCESSOR INPUTS
PELLERIN MILNOR CORPORATION

W6H5KZI2
2014144B

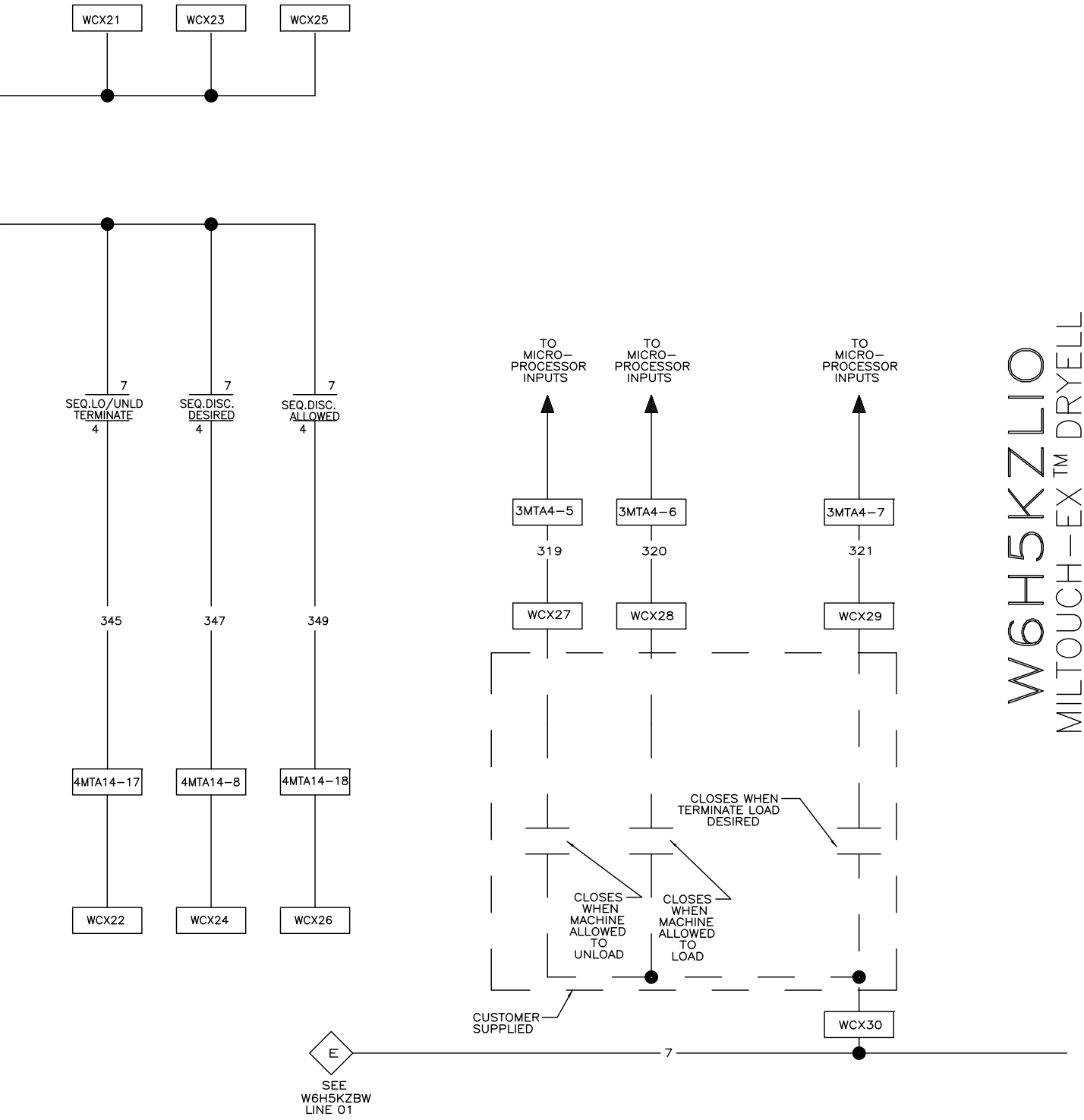


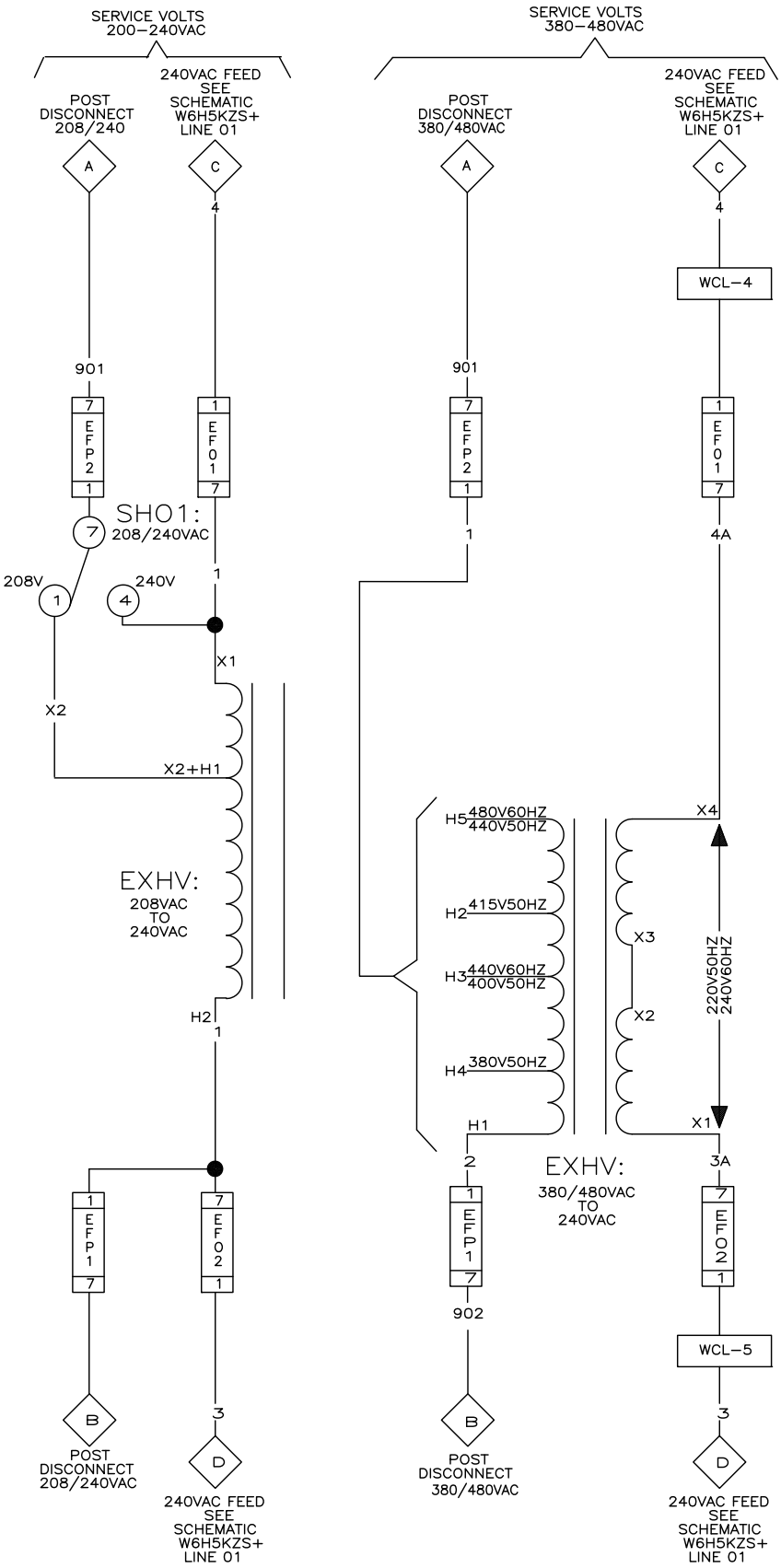
00 01 02 03 04 05 06 07 08 09 10

W6H5KZLIO
2014114B

W6H5KZLIO
MILTOUCH–EX™ DRYELL
SCHEMATIC: AUTOMATIC LOADING INPUTS/OUTPUTS

PELLERIN MILNOR CORPORATION





W6H5KZLV
2015172B

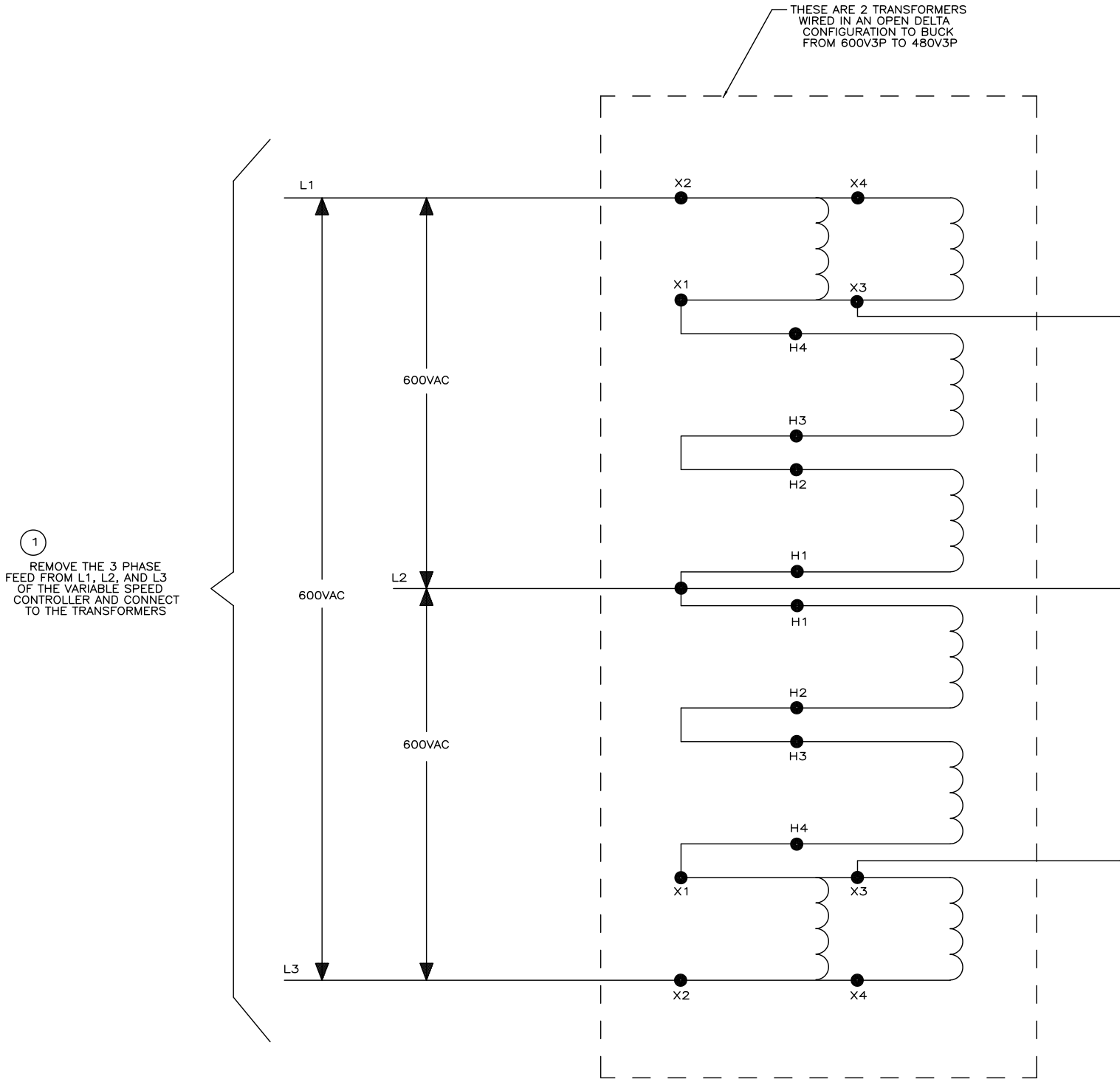
W6H5KZLV

MILTOUCH—EX™ DRYELL

SCHEMATIC:CONTROL CIRCUIT TRANSFORMER
220V1P50HZ/240V1P60HZ

PELLERIN MILNOR CORPORATION

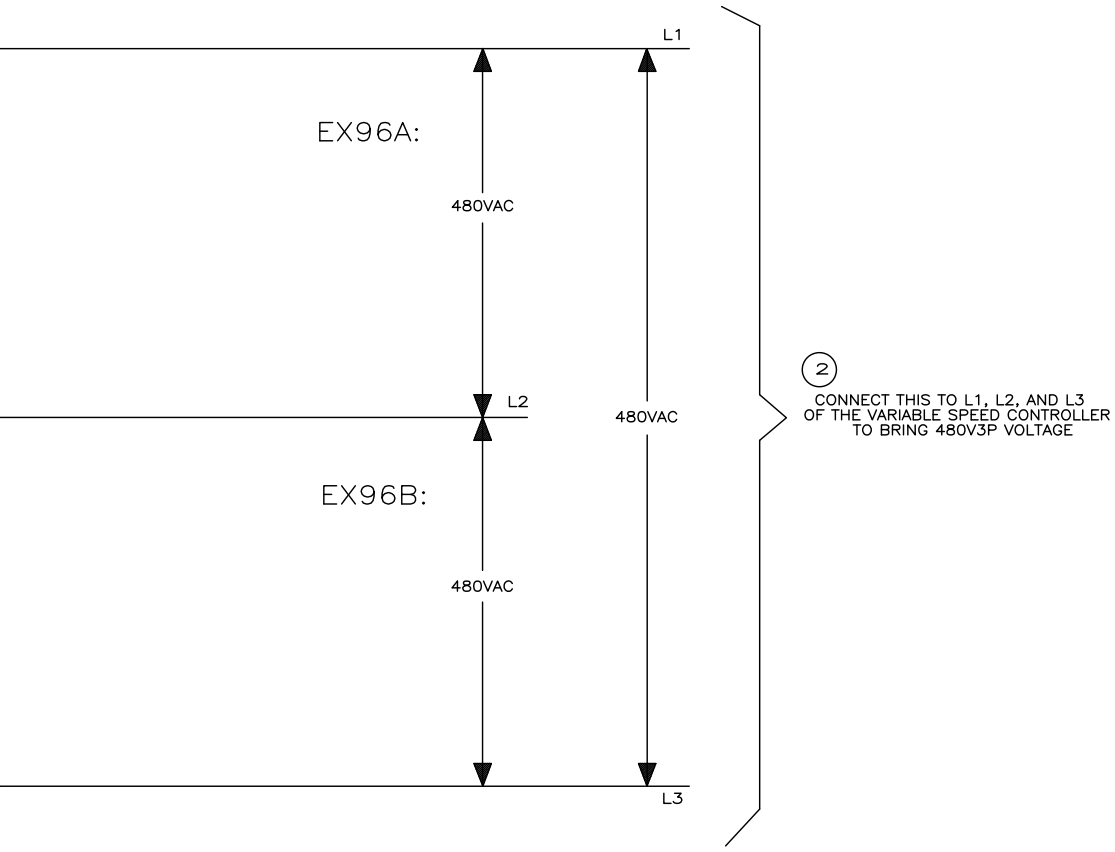
09 10 11 12 13



00 01 02 03 04 05 06 07 08 09 10

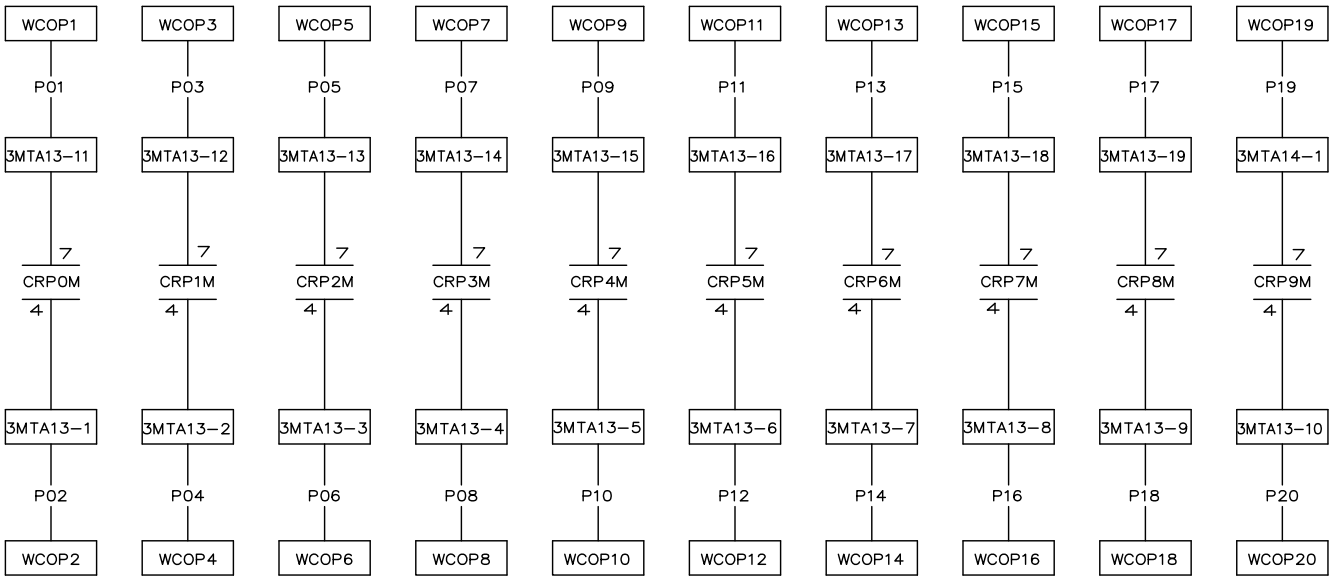
W6H5KZMT6
2014114B

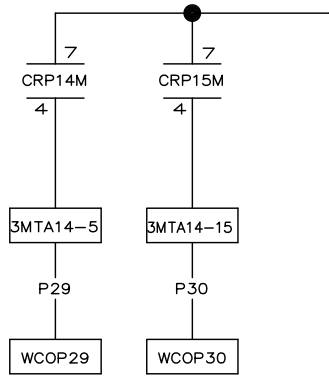
INPUT (SUPPLY SYSTEM)	DESIRED OUTPUT CONNECTION	
DELTA 3 WIRE	WYE 3 OR 4 WIRE	DO NOT USE
OPEN DELTA 3 WIRE	WYE 3 OR 4 WIRE	DO NOT USE
WYE 3 OR 4 WIRE	CLOSED DELTA 3 WIRE	DO NOT USE
WYE 4 WIRE	WYE 3 OR 4 WIRE	OK
WYE 3 OR 4 WIRE	OPEN DELTA 3 WIRE	OK
CLOSED DELTA 3 WIRE	OPEN DELTA 3 WIRE	OK



W6H5KZMT6
MILTOUCH–EX™ DRYELL
SCHEMATIC: 600V MACHINES
600V TO 480 VOLT STEP DOWN
PELLERIN MILNOR CORPORATION

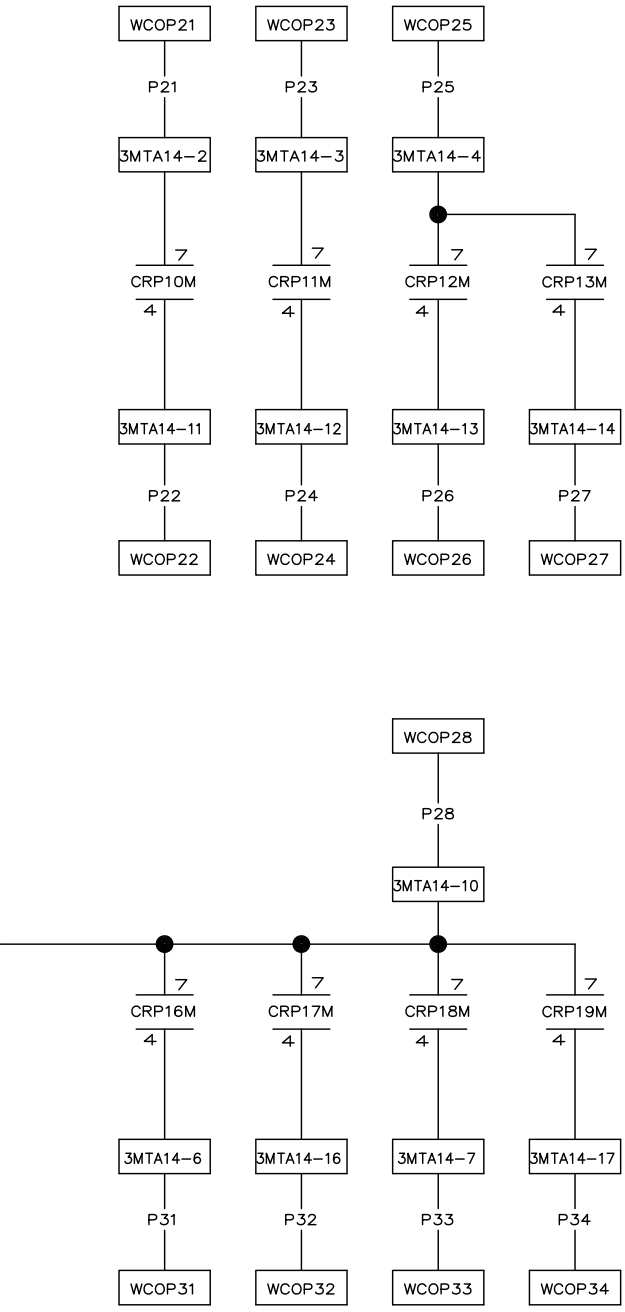
11 12 13 14 15 16 17





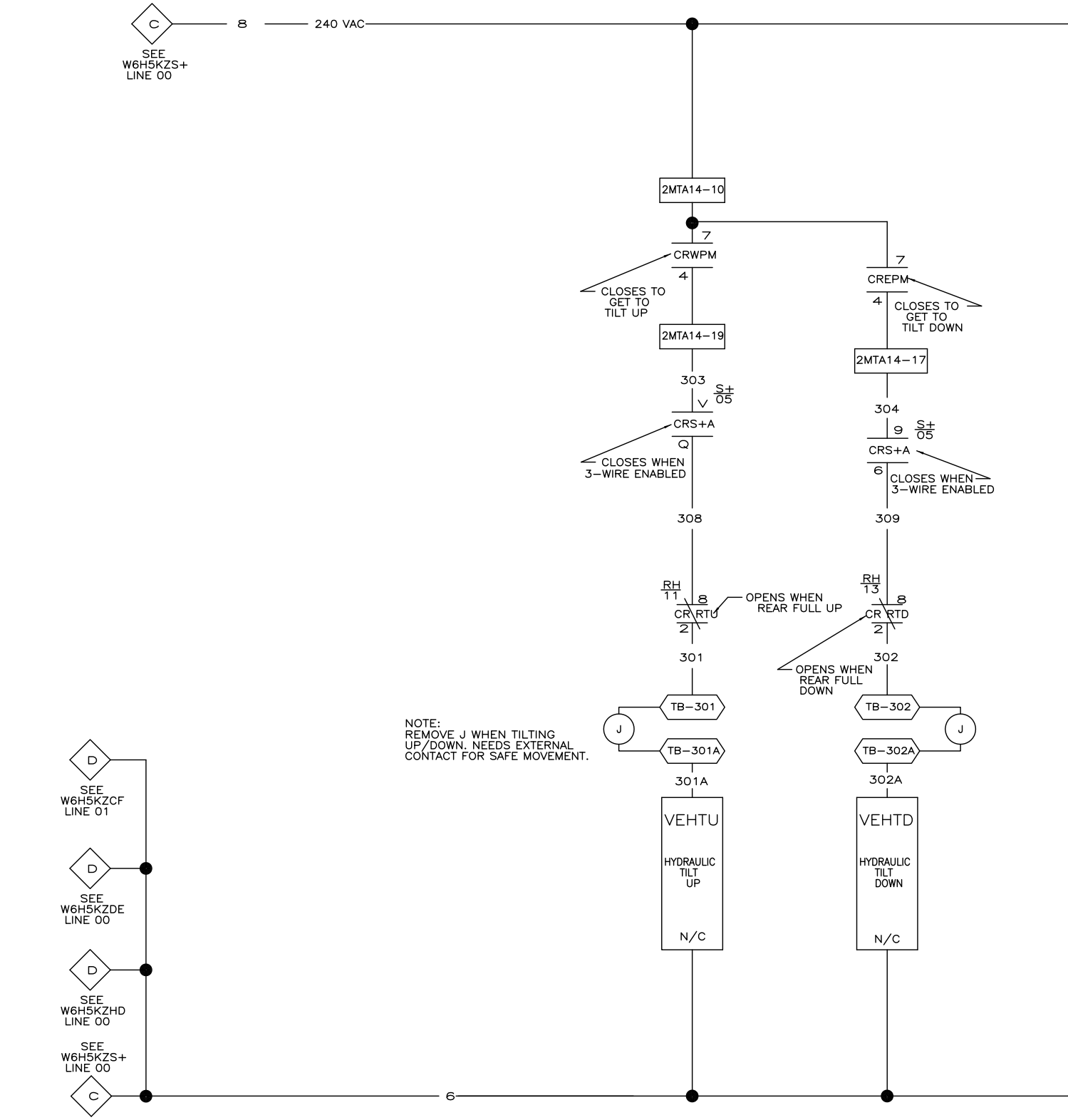
00 01 02 03 04 05 06 07 08 09 10

W6H5KZOP
2015172B



W6H5KZOP
MILTOUCH–EX™ DRYELL
SCHEMATIC: 20 OPTIONAL PROGRAMABLE OUTPUTS

11 12 13 14 15 16 17

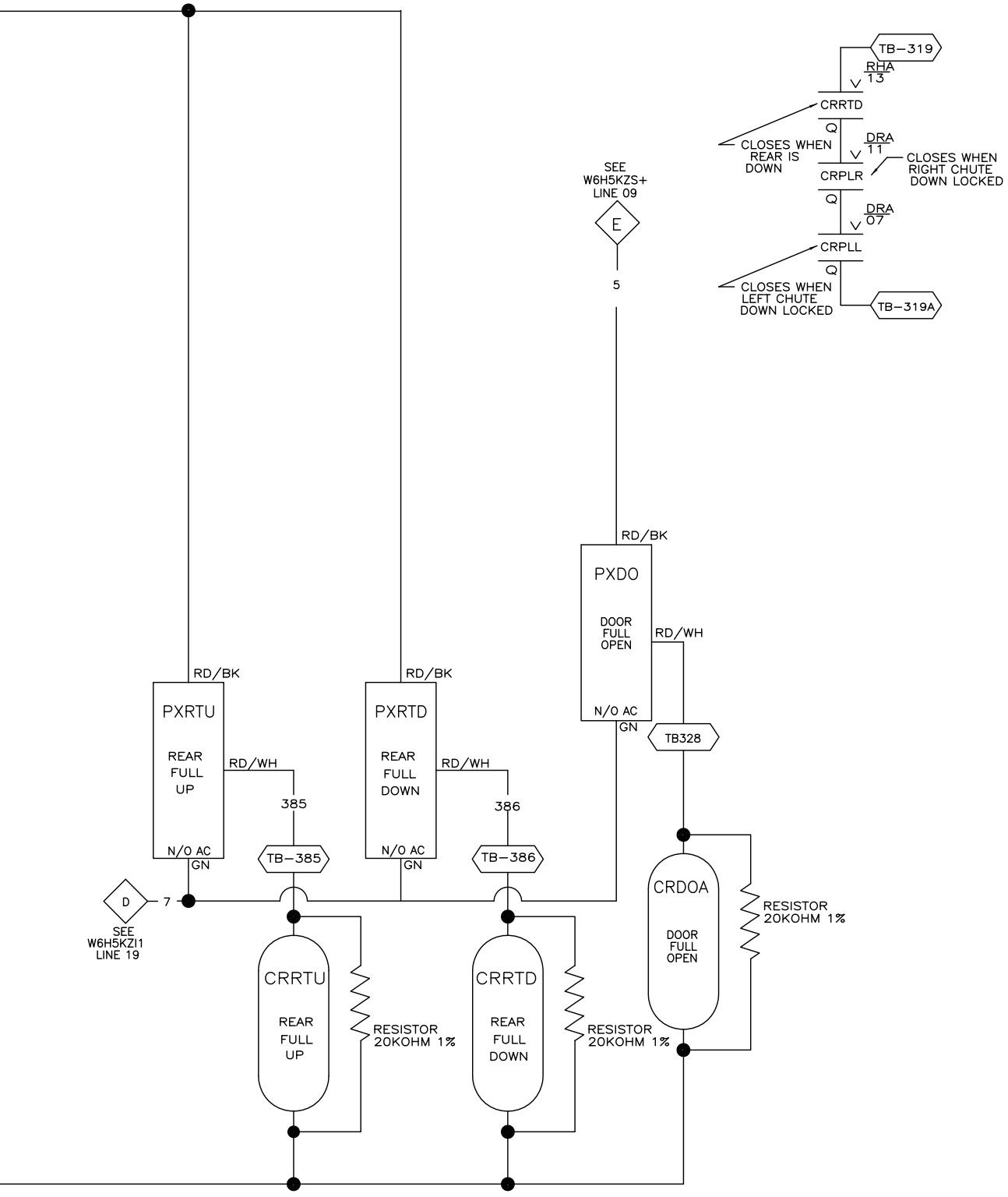


W6H5KZRH
2016135B

I2A11

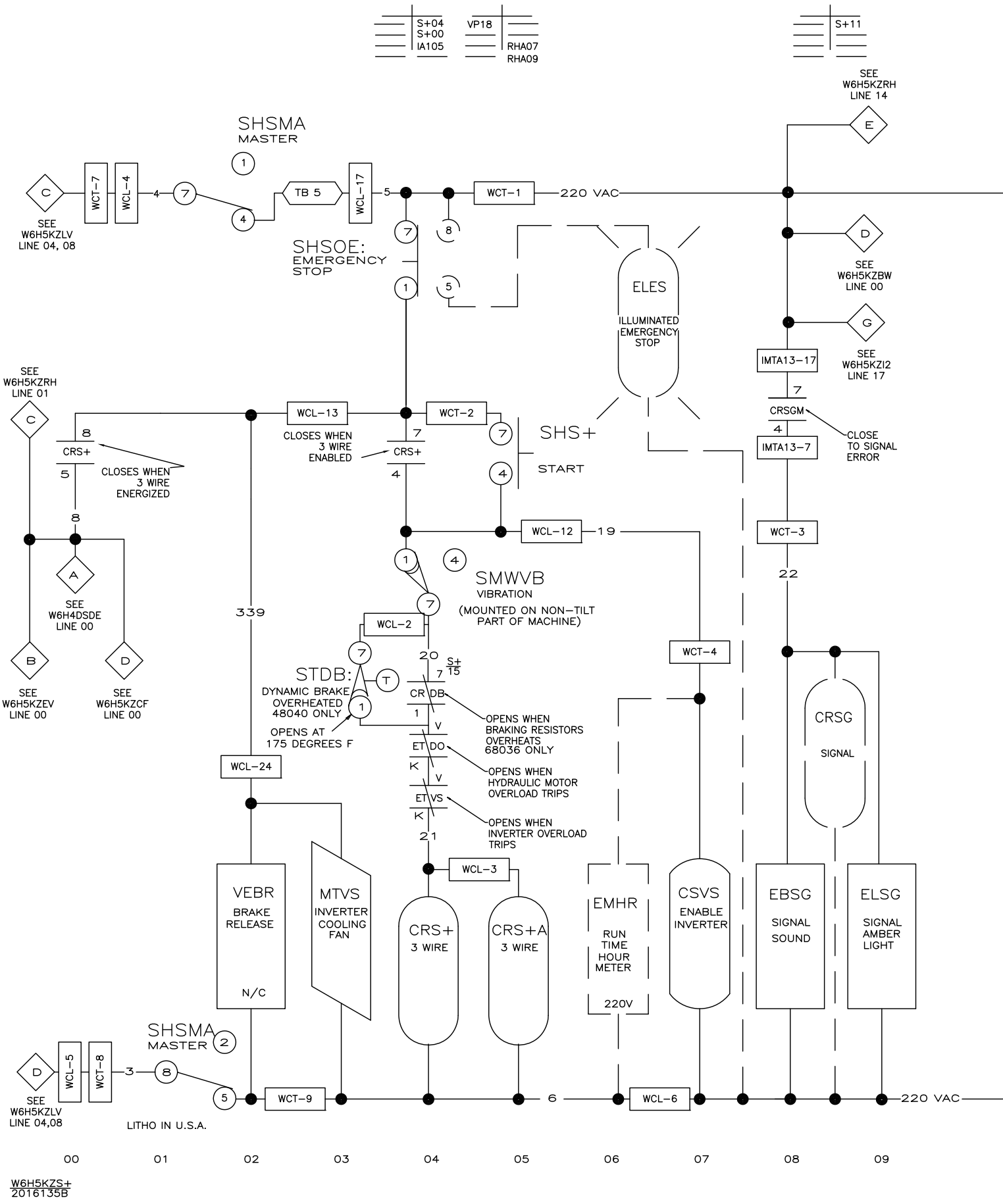
I1A17
RHA16

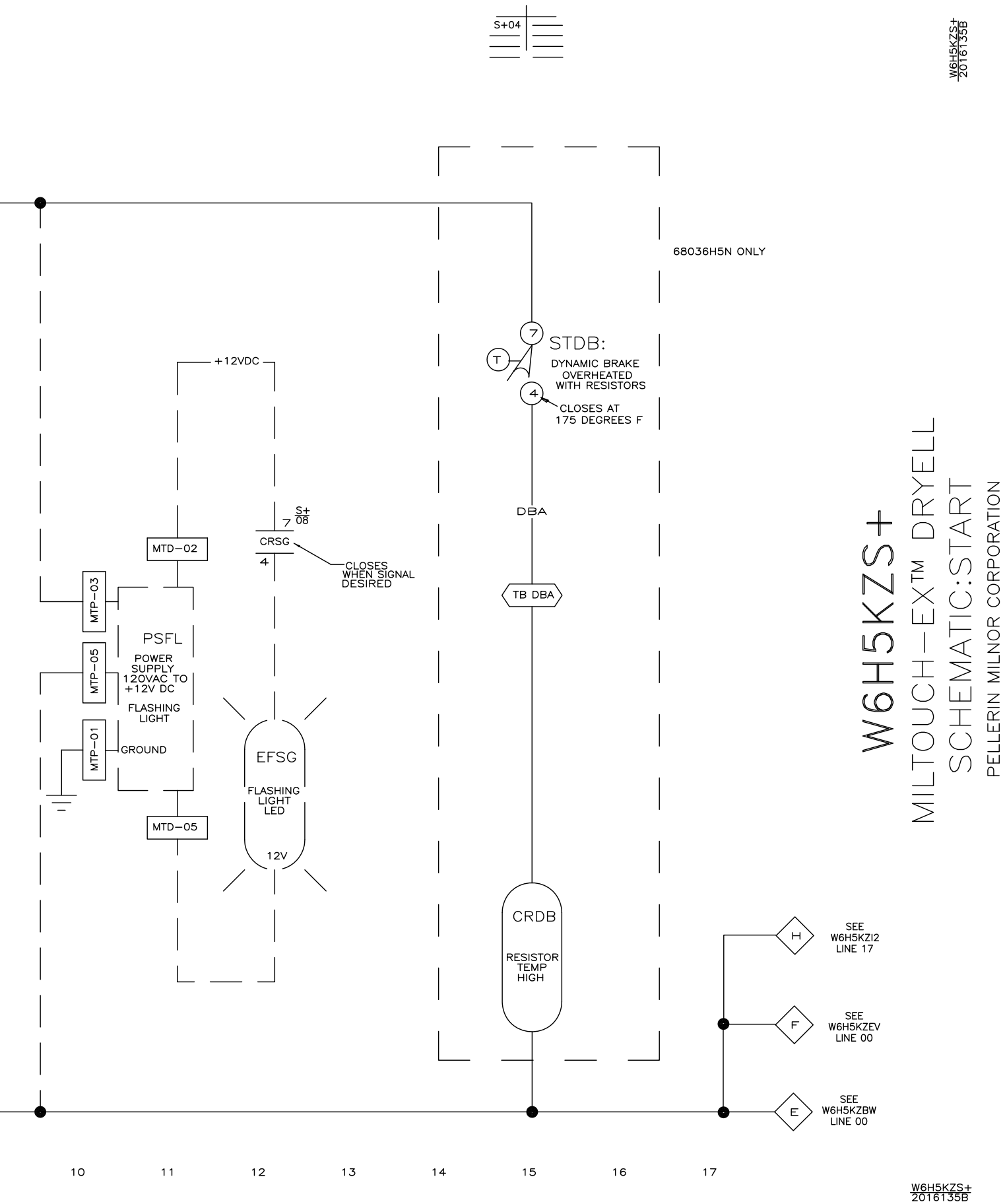
IOA06
I1A04

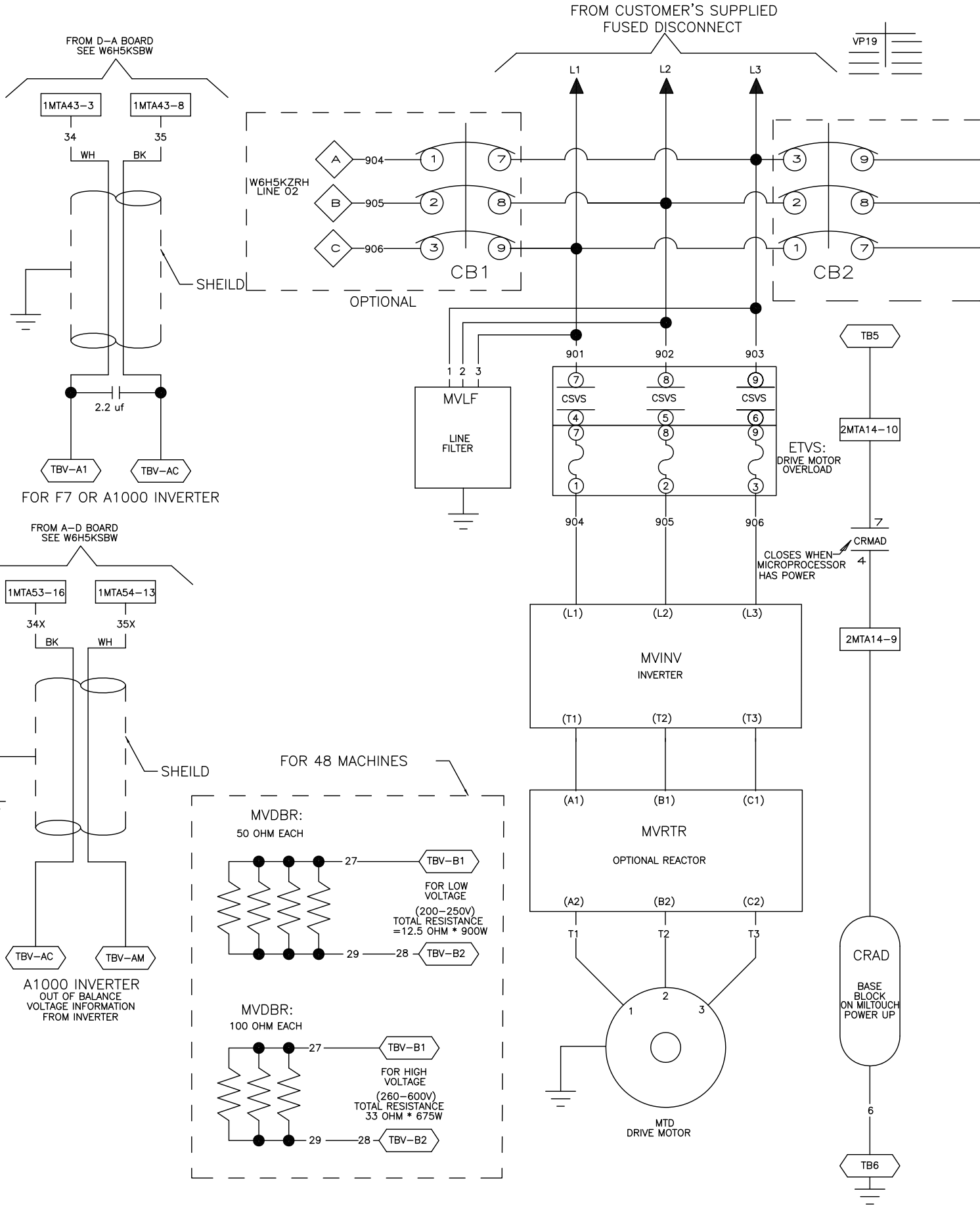


10 11 12 13 14 15 16 17 18 19

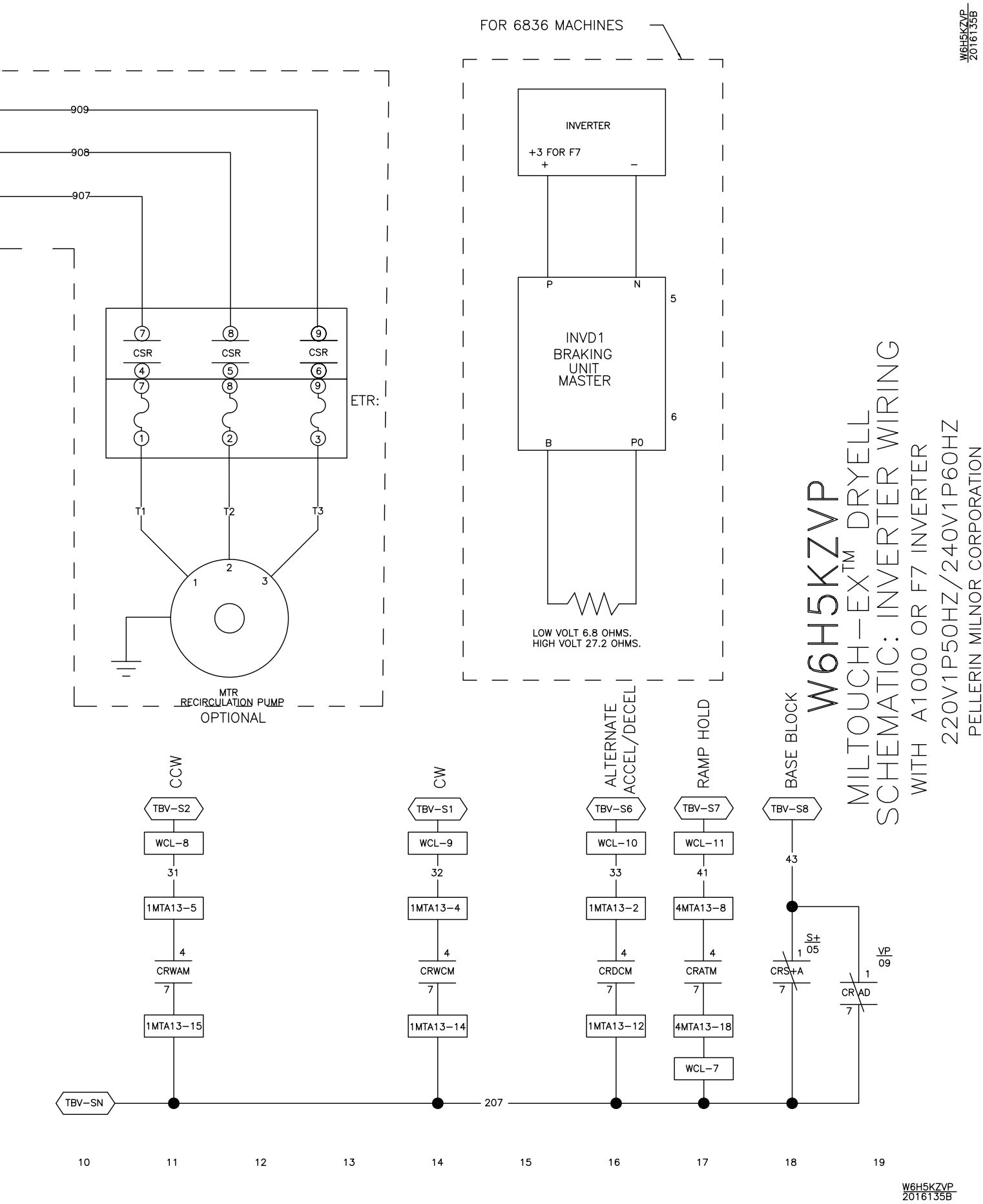
W6H5KZRH
MILTOUCH-EX™ DRYELL
SCHEMATIC: RAISE HOUSE
220V1P50HZ/240V1P60HZ
PELLERIN MILNOR CORPORATION


S+04
S+00
IA105
VP18
RHA07
RHA09
S+11
SEE W6H5KZRH LINE 14
SHSMA MASTER
SEE W6H5KZLV LINE 04, 08
WCT-7
WCL-4
TB 5
WCL-17
WCT-1
220 VAC
SHSOE: EMERGENCY STOP
ELES ILLUMINATED EMERGENCY STOP
SEE W6H5KZBW LINE 00
SEE W6H5KZI2 LINE 17
IMTA13-17
CRSGM
CLOSE TO SIGNAL ERROR
IMTA13-7
SEE W6H5KZRH LINE 01
WCL-13
CLOSES WHEN 3 WIRE ENABLED
WCT-2
CRS+
CLOSES WHEN 3 WIRE ENERGIZED
SHS+ START
WCL-12
19
WCT-3
22
SEE W6H4DSDE LINE 00
SEE W6H5KZEV LINE 00
SEE W6H5KZCF LINE 00
339
SMWVB VIBRATION (MOUNTED ON NON-TILT PART OF MACHINE)
WCL-2
STDB: DYNAMIC BRAKE OVERHEATED 48040 ONLY
OPENS AT 175 DEGREES F
CR DB
OPENS WHEN BRAKING RESISTORS OVERHEATS 68036 ONLY
ET DO
OPENS WHEN HYDRAULIC MOTOR OVERLOAD TRIPS
ET VS
OPENS WHEN INVERTER OVERLOAD TRIPS
WCT-4
CRSG SIGNAL
WCL-24
WCL-3
VEBR BRAKE RELEASE N/C
MTVS INVERTER COOLING FAN
CRS+ 3 WIRE
CRS+A 3 WIRE
EMHR RUN TIME HOUR METER 220V
CSVS ENABLE INVERTER
EBSG SIGNAL SOUND
ELSG SIGNAL AMBER LIGHT
SHSMA MASTER
SEE W6H5KZLV LINE 04,08
WCL-5
WCT-8
WCT-9
WCL-6
220 VAC
LITHO IN U.S.A.
00
01
02
03
04
05
06
07
08
09
W6H5KZS+
2016135B


S+04
W6H5KZS+
2016135B
68036H5N ONLY
7
T
STDB:
DYNAMIC BRAKE
OVERHEATED
WITH RESISTORS
4
CLOSES AT
175 DEGREES F
+12VDC
DBA
S+
08
7
CRSG
4
CLOSES
WHEN SIGNAL
DESIRED
MTD–02
MTP–03
MTP–05
MTP–01
PSFL
POWER
SUPPLY
120VAC TO
+12V DC
FLASHING
LIGHT
GROUND
MTD–05
EFSG
FLASHING
LIGHT
LED
12V
TB DBA
CRDB
RESISTOR
TEMP
HIGH
H
SEE
W6H5KZI2
LINE 17
F
SEE
W6H5KZEV
LINE 00
E
SEE
W6H5KZBW
LINE 00
10
11
12
13
14
15
16
17
W6H5KZS+
MILTOUCH–EX™ DRYELL
SCHEMATIC:START
PELLERIN MILNOR CORPORATION
W6H5KZS+
2016135B



W6H5KZVP
2016135B


W6H5KZVP
2016135B
FOR 6836 MACHINES
909
908
907
INVERTER
+3 FOR F7
+
−
P
N
5
INVD1
BRAKING
UNIT
MASTER
6
B
P0
LOW VOLT 6.8 OHMS.
HIGH VOLT 27.2 OHMS.
7
8
9
CSR
CSR
CSR
4
5
6
7
8
9
1
2
3
ETR:
T1
T2
T3
1
2
3
MTR
RECIRCULATION PUMP
OPTIONAL
MILTOUCH−EX™ DRYELL
SCHEMATIC: INVERTER WIRING
WITH A1000 OR F7 INVERTER
220V1P50HZ/240V1P60HZ
PELLERIN MILNOR CORPORATION
CCW
CW
ALTERNATE
ACCEL/DECEL
RAMP HOLD
BASE BLOCK
TBV−S2
TBV−S1
TBV−S6
TBV−S7
TBV−S8
WCL−8
WCL−9
WCL−10
WCL−11
31
32
33
41
43
1MTA13−5
1MTA13−4
1MTA13−2
4MTA13−8
4
4
4
4
CRWAM
CRWCM
CRDCM
CRATM
7
7
7
7
1MTA13−15
1MTA13−14
1MTA13−12
4MTA13−18
WCL−7
S+
05
1
CRS+A
7
VP
09
1
CR AD
7
TBV−SN
207
10
11
12
13
14
15
16
17
18
19
W6H5KZVP
2016135B