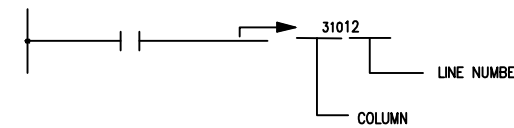


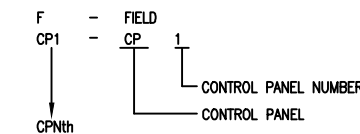
ABBREVIATIONS		SCHEMATIC SYMBOL
ALARM HORN	WH	
AMMETER	AM	
BATTERY	BATT	
CAPACITOR	C	
CENTRAL PROCESSING UNIT	PC	
CIRCUIT BREAKER	CB	
CONNECTOR	CON	
CONTACTOR POWER	PC	
CONTROL RELAY	CR	
COUNTER	CNT	
DIODE	D	
DISCONNECT	DIS	
DRIVE VFD & DC	VFD	
ENCODER	ENC	
FLUORESCENT LIGHT	FLT	
FUSE	FU	
GROUND	GND	
GROUND FAULT INTERRUPT	GFI	
JUMPER		
LIGHT EMITTING DIODE	LED	
LIMIT SWITCH [N.O.]	LS	
LIMIT SWITCH [N.C.]	LS	
LIMIT SWITCH [N.O. HELD CLOSED]	LS	
LIMIT SWITCH [N.C. HELD OPEN]	LS	
MOTOR	MT	
MOTOR STARTER	MS	
PHOTO-ELECTRIC SENSOR	PE	
PILOT LIGHT	PL	
POTENTIOMETER	POT	
POWER SUPPLY	PU	
PRESSURE SWITCH [N.O.]	PS	
PROGRAMABLE LOGIC CONTROLLER	PLC	
PROXIMITY SENSOR	PX	
PUSH BUTTON [N.O.]	PB	
PUSH BUTTON [N.C.]	PB	
PUSH BUTTON ILLUMINATED	PBPL	
RELAY CONTACT [N.O.]	CR	
RELAY CONTACT [N.C.]	CR	

ABBREVIATIONS		SCHEMATIC SYMBOL
RESISTOR	R	
SELECTOR SWITCH [N.O.]	SS	
SELECTOR SWITCH [N.C.]	SS	
SAFETY RELAY	SR	
SOLID STATE RELAY	SSR	
SOLENOID VALVE	SV	
TERMINAL BLOCK	TB	
THERMAL OVERLOAD	OL	
TEMPERATURE SWITCH	TS	
TRANSFORMER	T	
ULTRASONIC SENSOR	USS	
VACUUM SWITCH	VS	
VOLTMETER	VM	
BEACON LIGHT	BL	

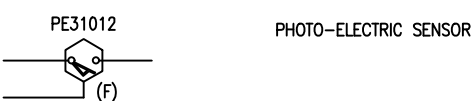
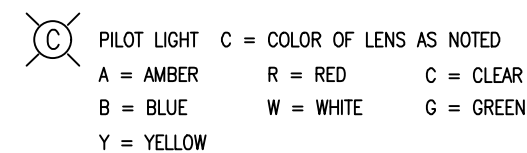
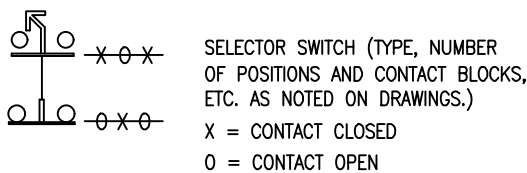
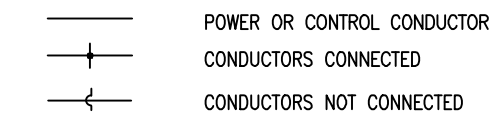
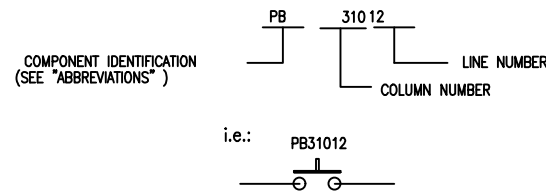
LINE NUMBER REFERENCES



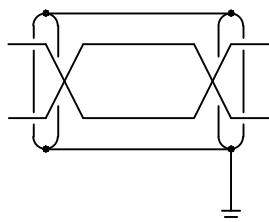
LOCATION CODE



COMPONENT IDENTIFICATION



SHIELDED CABLE (GROUNDED END)



SH	FILENAME
1	COVER PAGE
2	SYSTEM LAYOUT
3	CASE PACKER LAYOUT
4	ORIENTER LAYOUT
5	CASE PACKER PANEL LAYOUT
6	ORIENTER PANEL LAYOUT
7	HMI PANEL LAYOUT
8	PUSHBUTTON PANEL LAYOUT
9	CASE PACKER 480VAC POWER DIST
10	ORIENTER 480VAC POWER DIST
11	CP VFD WIRING
12	ORIENTER VFD WIRING
13	CASE PACKER SERVO WIRING
14	ORIENTER SERVO WIRING
15	CP HIGH POWER INTEGRATION
16	120VAC POWER DIST
17	PC WIRING
18	CASE PACKER 24VDC POWER DIST
19	CASE PACKER SAFETY WIRING
20	CASE PACKER GUARD DOOR WIRING
21	ORIENTER 24VDC POWER DIST
22	ORIENTER SAFETY WIRING
23	ORIENTER GUARD DOOR WIRING
24	CASE REJECT LC SAFETY RELAY
25	CASE REJECT LIGHT CURTAIN
26	LIVE OUTPUTS - B1,S1-2
27	LIVE OUTPUTS - B1,S3-5
28	E-STOP OUTPUTS - B1,S6-7
29	INPUTS - B1,S8-9
30	INPUTS - B1,S10-12
31	INPUTS - B1,S13-15
32	INPUTS - B1,S16-18
33	INPUTS - B1,S
34	LIVE OUTPUTS - B5,S1-2
35	LIVE OUTPUTS - B5,S3
36	E-STOP OUTPUTS - B5,S4-5
37	INPUTS - B5,S6-7
38	INPUTS - B5,S8-10
39	INPUTS - B5,S11-12
40	CASE PACKER PNEUMATICS
41	ORIENTER PNEUMATICS
42	CP SERVO STRING
43	ORIENTER SERVO STRING

NOTE: PANEL TO BE UL APPROVED AND LABELED
NOTE: ALL WIRE 18 GA. UNLESS OTHERWISE NOTED
NOTE: WIRE COLORS ARE AS FOLLOWS UNLESS OTHERWISE NOTED
480 VAC - BLACK; 120/280 VAC RED (NEUTRAL-WHITE)
DC - BLUE; DC COMMON - BLUE/WHITE
(CP1) CASE PACKER MAIN ELECTRICAL ENCLOSURE
(CP2) ORIENTER MAIN ELECTRICAL ENCLOSURE
(HMI) HMI OPERATOR STATION

Alexandria, MN www.aagard.com 320-763-6043

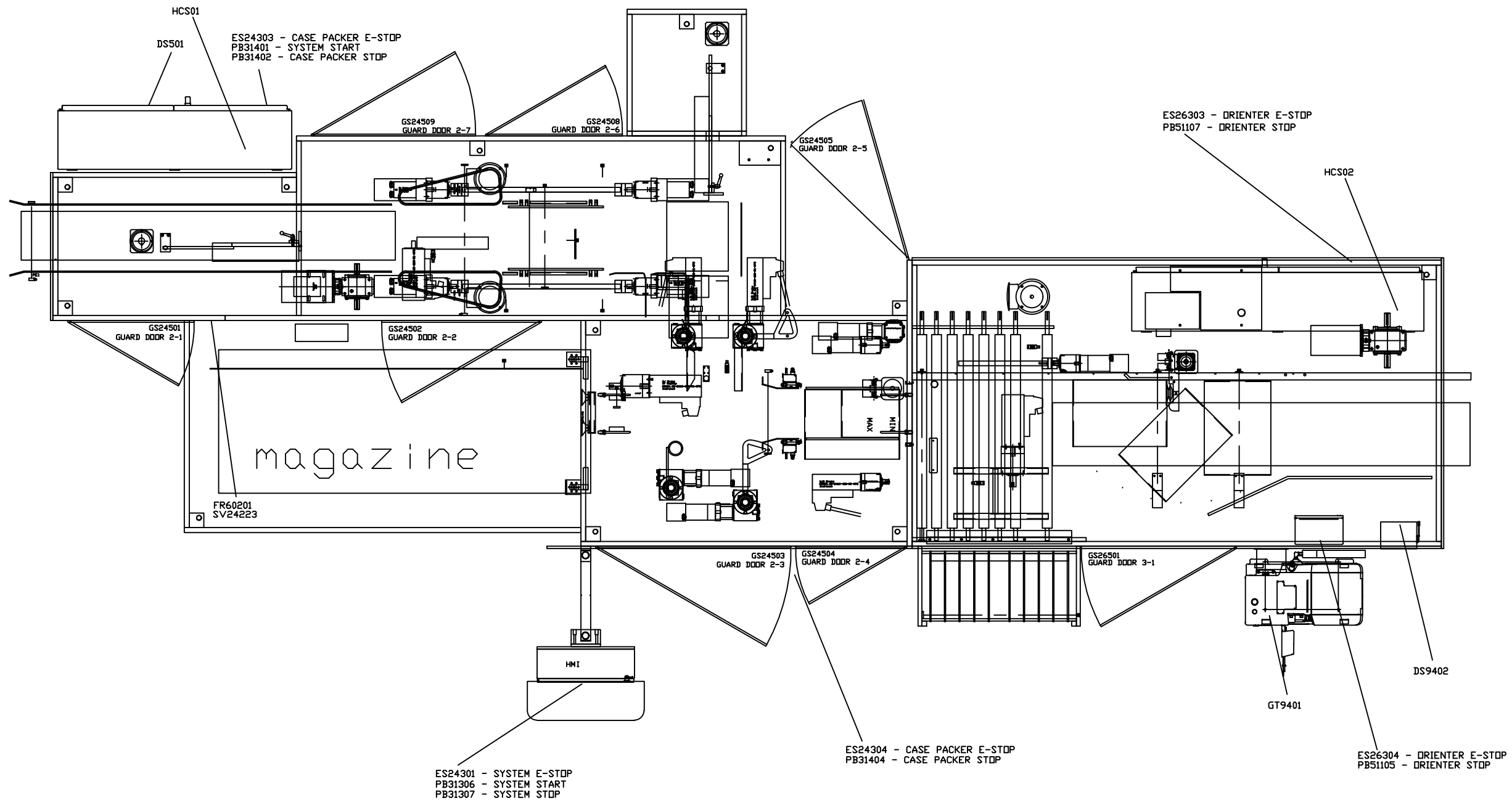
SERIAL # 120 DATE MFG. 02/09

POWER 480 VAC, 3Ø, 60 Hz, 17.1 FLA

SCCR 25 KA RMS SYM 480 VMAX

Largest Motor 6.6 A

DWG BY: PML	 3711 IOWA STREET ALEXANDRIA, MN 56308 (320) 763-6043 FAX (320) 763-7859	TITLE: 120 GMI RH KDGP & ORIENTER
REV: 3		DATE: 02/17/09
		DRAWING NO: COVER PAGE



DWG BY:

PML

REV:

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ALEXANDRIA, MN 56308
(320) 763-6043
FAX (320) 763-7859

TITLE:

120 GMI RH KDGP & ORIENTER

DATE:

02/17/09

SHEET:

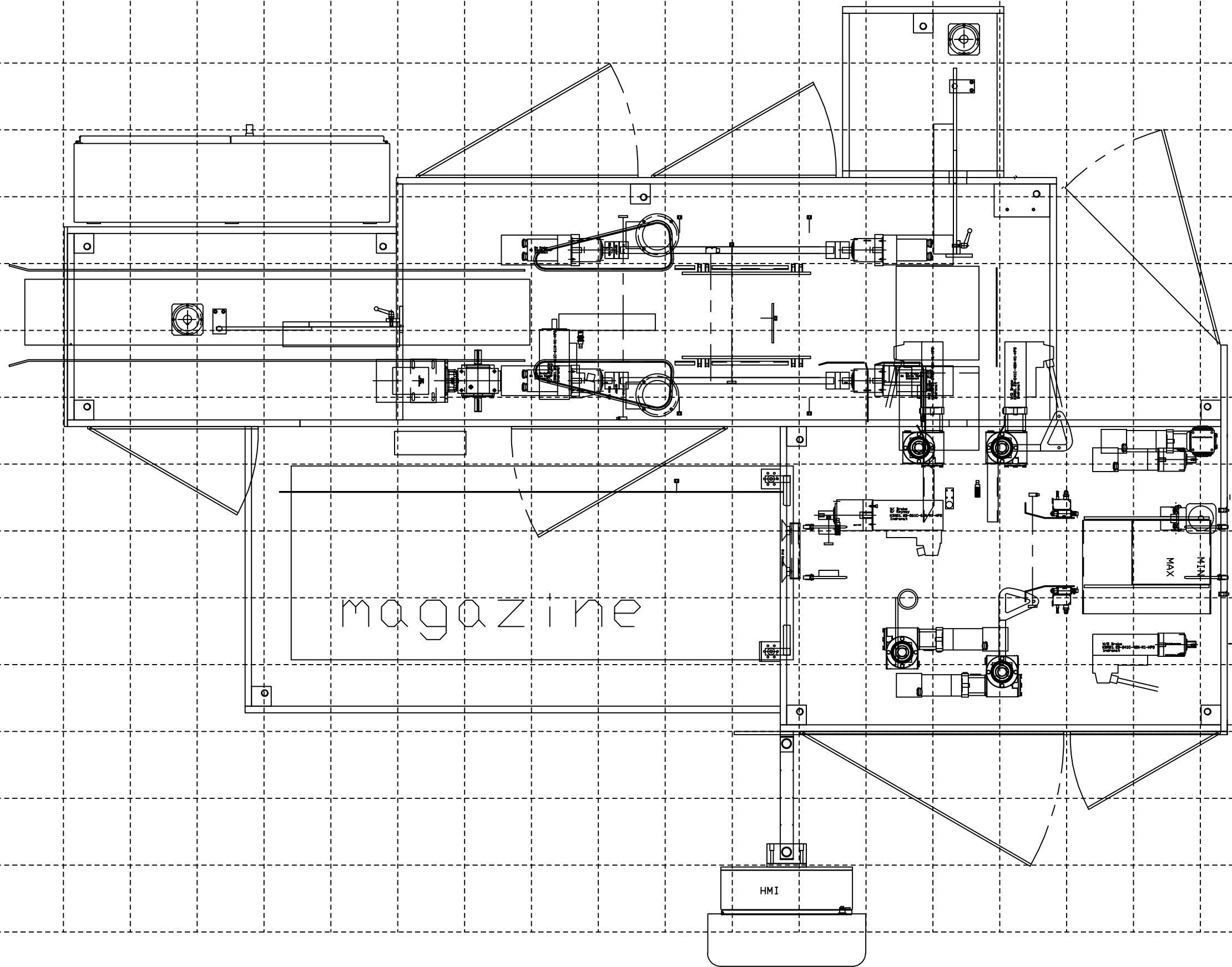
2 OF 43

DRAWING NO:

SYSTEM LAYOUT

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19

A
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K
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N



DEVICE	LOCATION
CS31606	D15
CS31607	D15
CS31801	G12
CS31901	I19
CS31902	I17
MT1303	F7
MT1403	D10
MT1406	F10
PS31201	G5
PE31002	D13
PE31003	D11
PE31004	G13
PE31005	G11
PE31104	H13
PE31702	G10
PE31703	D11
PE31704	E12
PE31707	D12
PE31803	H11
PE31903	H15
PE31904	H16
PE31905	F15
PE51401	I19
PE51402	H19
PX31001	F9
PX31006	E4
PX31007	B15
PX31102	G14
PX31103	I16
PX31908	D16
REG30401	G12
REG30805	F17
REG30806	J16
REG30807	H16
REG30808	K17
SM01	F9
SM02	D9
SM03	D14
SM04	F9
SM05	F14
SM06	E3
SM07	A15
SM08	F15
SM09	F16
SM10	K15
SM11	J15
SM12	H18
SM13	I17

DEVICE	LOCATION
SM14	G18
SM15	G17
SM16	J17
SM17	G18
SM18	J17
SV24223	G5
SV30306	G11
SV30307	G18
SV30308	H13
SV30401	G11
SV30402	G18
SV30403	I15
SV30406	G18
SV30407	G18
SV30408	I6
SV30703	D15
SV30705	G11
SV30707	G11
SV30801	G18
SV30805	H16
SV30806	J16
SV30807	H16
SV30808	J16
XF10002	D3
VS31708	G13
VS31806	I16

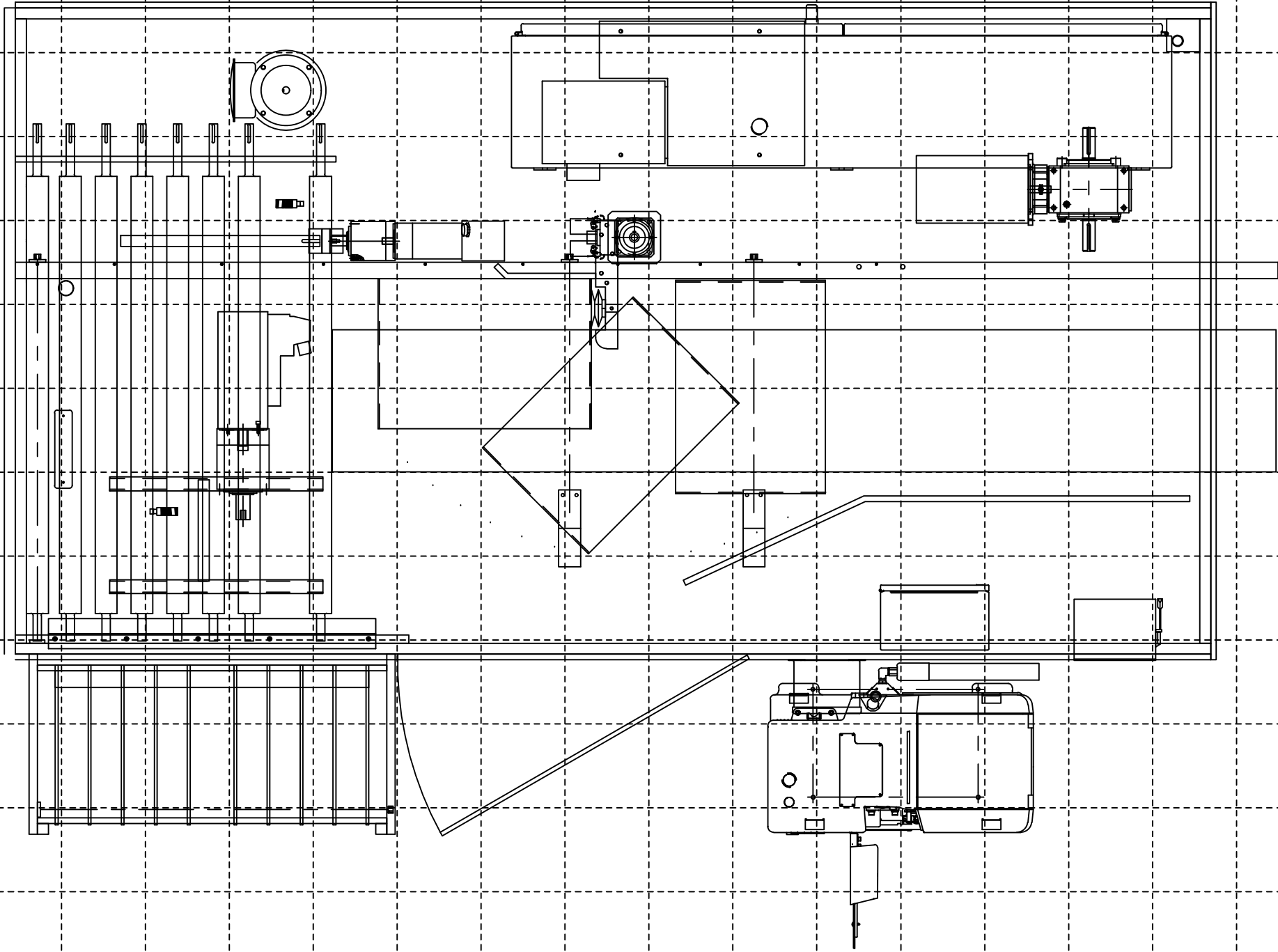
DWG BY:
PML
REV:
3

Aagard
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ALEXANDRIA, MN 56308
(320) 763-6043
FAX (320) 763-7859

TITLE:
120 GMI RH KDPC & ORIENTER
DATE: 02/17/09 SHEET: 3 OF 43
DRAWING NO:
CASE PACKER LAYOUT

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19

A
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DEVICE	LOCATION
CS51507	F4
MT807	C12
MT1502	B4
PE51503	D1
PE51504	J5
PE51505	D8
PE51506	D10
PE51508	J5
PX51001	C4
PX51002	G3
SM19	D6
SM20	E4
SM21	D8
SV50201	C8
SV50703	C7
VS31202	A4
VS51305	D8

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REV:

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TITLE:

120 GMI RH KDCP & ORIENTER

DATE:

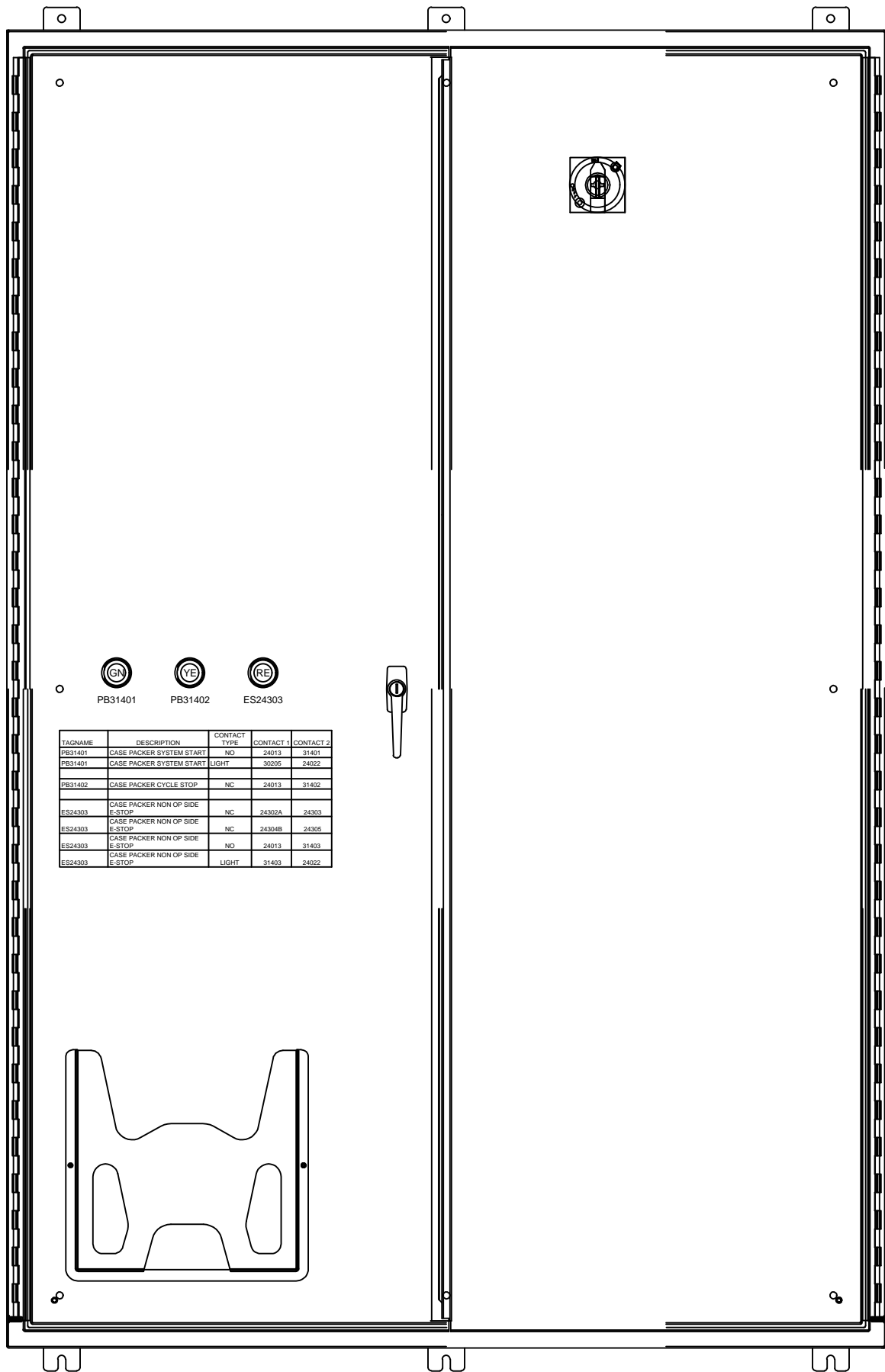
02/17/09

SHEET:

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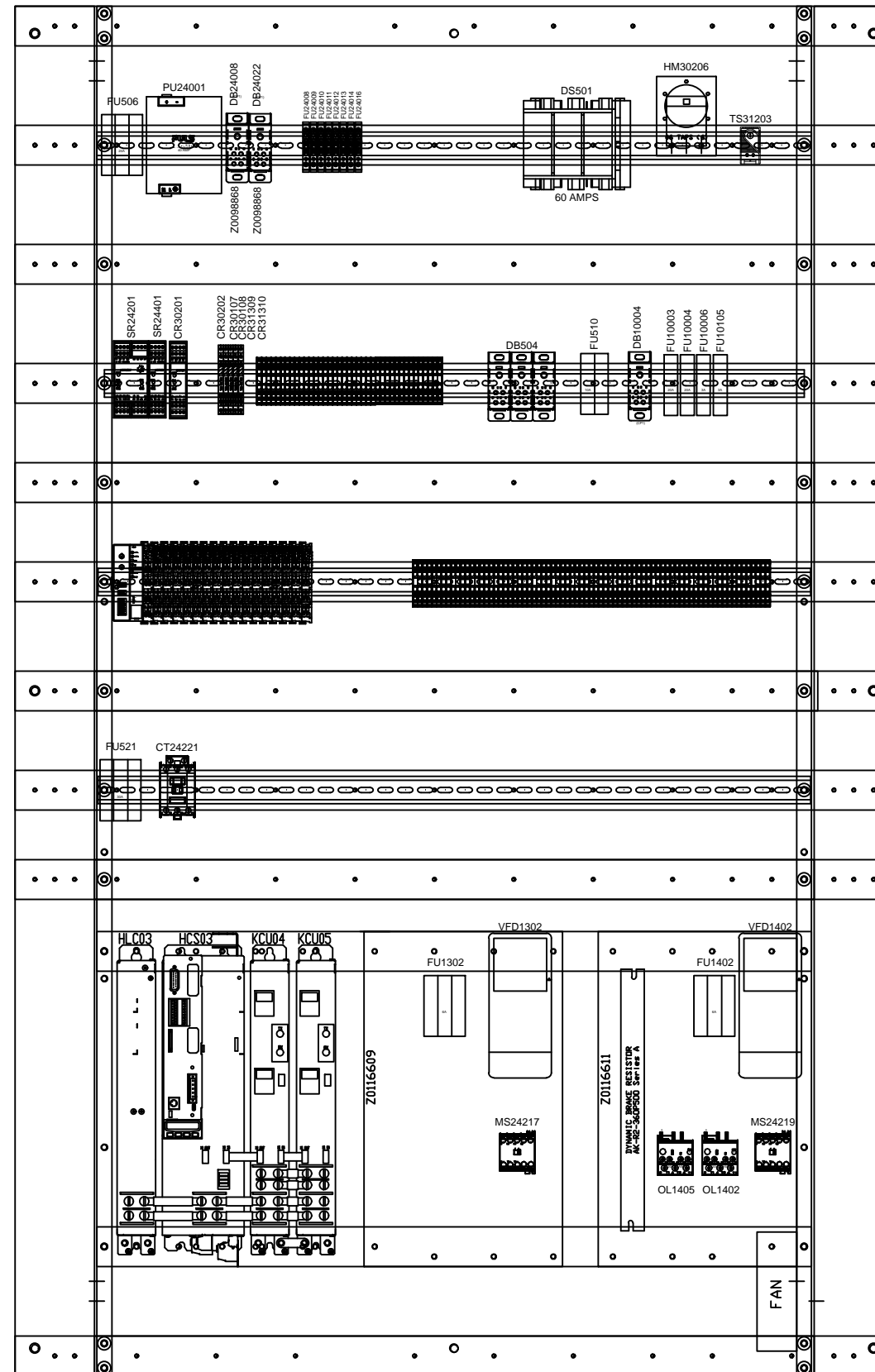
DRAWING NO:

ORIENTER LAYOUT



 PB31401
  PB31402
  ES24303

TAGNAME	DESCRIPTION	CONTACT TYPE	CONTACT 1	CONTACT 2
PE31401	CASE PACKER SYSTEM START	NO	24013	31401
PE31402	CASE PACKER SYSTEM START	LIGHT	30205	24022
PE31402	CASE PACKER CYCLE STOP	NC	24013	31402
ES24303	CASE PACKER NON OP SIDE E-STOP	NC	24302A	24303
ES24303	CASE PACKER NON OP SIDE E-STOP	NC	24304B	24305
ES24303	CASE PACKER NON OP SIDE E-STOP	NO	24013	31403
ES24303	CASE PACKER NON OP SIDE E-STOP	LIGHT	31403	24022



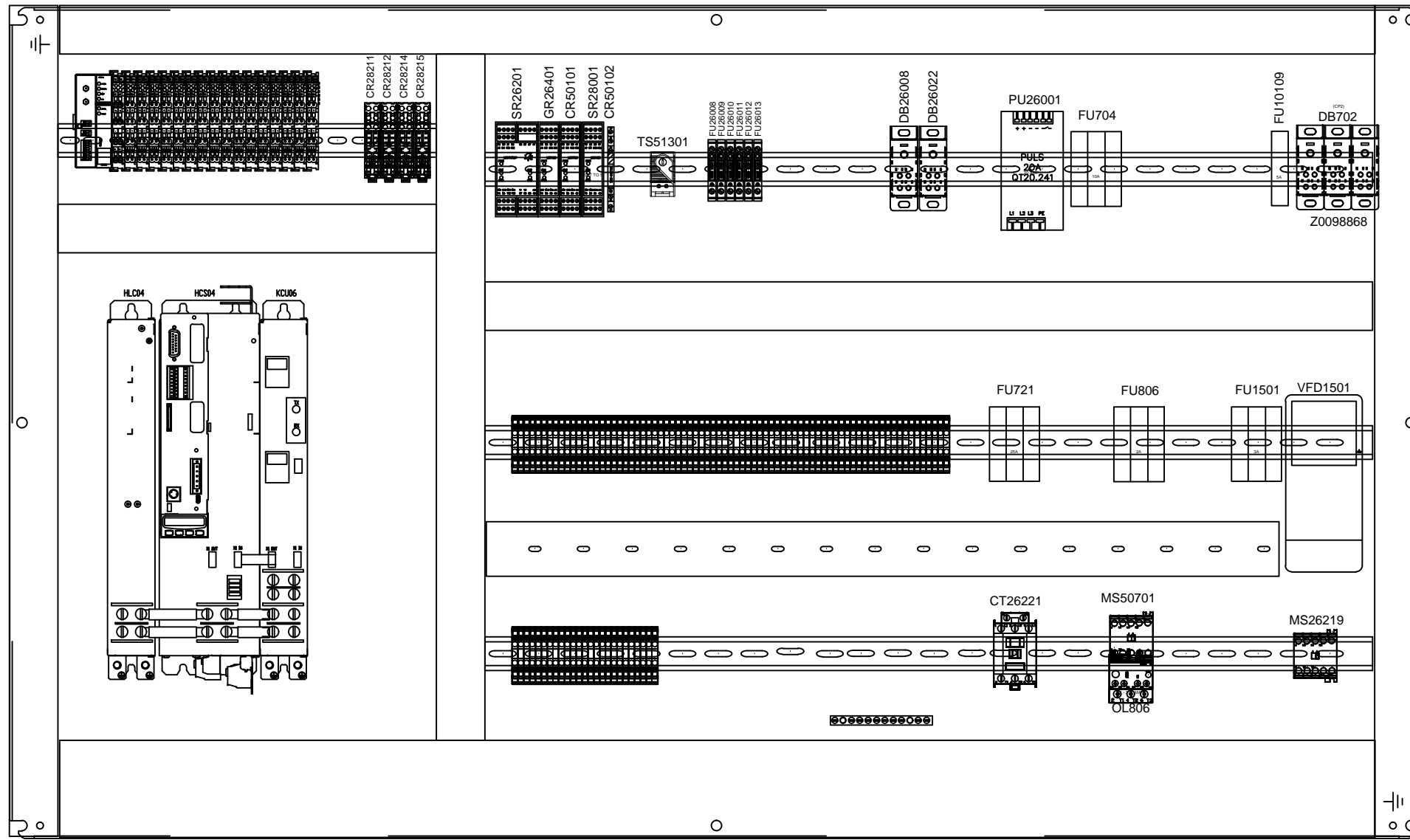
TAG	CATALOG	DESC
BRK1409	Z0095308	BREAKING RESISTOR
CR30107	Z0019843	RELAY - TYPE HL
CR30108	Z0019843	RELAY - TYPE HL
CR30201	Z0117800	SOFTWARE E-STOP RELAY
CR30202	Z0019843	RELAY - TYPE HL
CR31309	Z0019843	RELAY - TYPE HL
CR31310	Z0019843	RELAY - TYPE HL
CT24221	Z0016803	CONTACTOR
DB24008	Z0098868	POWER DISTRIBUTION BLOCK
DB24022	Z0098868	POWER DISTRIBUTION BLOCK
DB504	Z0098868	DISTRIBUTION BLOCK
DS501	Z0007466	DISCONNECT SWITCH, FUSED
DS501	Z0100664	SUB ASSEMBLY ITEM
DS501	Z0016788	SUB ASSEMBLY ITEM
DS501	Z0055134	SUB ASSEMBLY ITEM
FU10003	KLDR020	FUSE - CLASS CC
FU10004	KLDR020	FUSE - CLASS CC
FU10006	CCMR003	FUSE - CLASS CC
FU10105	CCMR003	FUSE - CLASS CC
FU1302	CCMR006	FUSE - CLASS CC
FU1302	CCMR002	FUSE - CLASS CC
FU1402	CCMR006	FUSE - CLASS CC
FU24008	257005	FUSE - ATO
FU24009	257010	FUSE - ATO
FU24010	257005	FUSE - ATO
FU24011	257005	FUSE - ATO
FU24012	257005	FUSE - ATO
FU24013	257005	FUSE - ATO
FU24014	257010	FUSE - ATO
FU24015	257005	FUSE - ATO
FU506	KLKR020	FUSE - CLASS CC
FU510	KLDR010	FUSE - CLASS CC
FU521	KLDR030	FUSE - CLASS CC
FU610	KLDR030	FUSE - CLASS CC
HCS03	Z0119414	SERVO POWER SUPPLY
HLC03	Z0103629	DC BUS CAPACITOR
HM30206	Z0061974	HOUR METER
KCU04	Z0103615	SERVO BREAKOUT MODULE
KCU05	Z0103615	SERVO BREAKOUT MODULE
LT10006	Z0031947	Fluorescent Light ALF16M12 12" w/Manual Switch
MS24217	Z0117898	MINI CONTACTOR, DC 3 POWER POLES
MS24219	Z0117898	MINI CONTACTOR, DC 3 POWER POLES
OL1402	Z0079263	OVERLOAD RELAY MANUAL RESET
OL1405	Z0079263	OVERLOAD RELAY MANUAL RESET
PB30205	Z0005435	PUSH BUTTON - MOMENTARY, NEMA 4/13
PB31402	Z0004653	PUSH BUTTON - MUSHROOM, NEMA 4/13
PB31404	Z0004653	PUSH BUTTON - MUSHROOM, NEMA 4/13
PLC	Z0030412	BUS COUPLER
PLC30101	Z0030430	OUTPUT MODULE
PLC30201	Z0030430	OUTPUT MODULE
PLC30301	Z0030430	OUTPUT MODULE
PLC30401	Z0030430	OUTPUT MODULE
PLC30501	Z0094854	ANALOG OUTPUT MODULE
PLC30601	Z0031496	POWER MODULE
PLC30701	Z0030430	OUTPUT MODULE
PLC30801	Z0030430	OUTPUT MODULE
PLC30901	Z0031496	POWER MODULE
PLC31001	Z0030414	INPUT MODULE
PLC31101	Z0030414	INPUT MODULE
PLC31201	Z0030414	INPUT MODULE
PLC31301	Z0030414	INPUT MODULE
PLC31401	Z0030414	INPUT MODULE
PLC31501	Z0030414	INPUT MODULE
PLC31601	Z0030414	INPUT MODULE
PLC31701	Z0030414	INPUT MODULE
PLC31801	Z0030414	INPUT MODULE
PLC31901	Z0030414	INPUT MODULE
PLC32001	Z0030414	INPUT MODULE
PLC32101	Z0030431	END TERMINAL
PU24001	Z0067481	24VDC POWER SUPPLY
SR24201	Z0014223	SAFETY RELAY
SR24401	Z0091532	GUARD RELAY
TS31203	Z0056338	TEMPERATURE CONTROL SWITCH
VFD1302	Z0025617	VARIABLE FREQUENCY DRIVE
VFD1402	Z0025617	VARIABLE FREQUENCY DRIVE

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REV:
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TITLE:
120 GMI RH KDCP & ORIENTER
DATE:
02/17/09
SHEET:
5 OF 43
DRAWING NO:
CASE PACKER PANEL LAYOUT

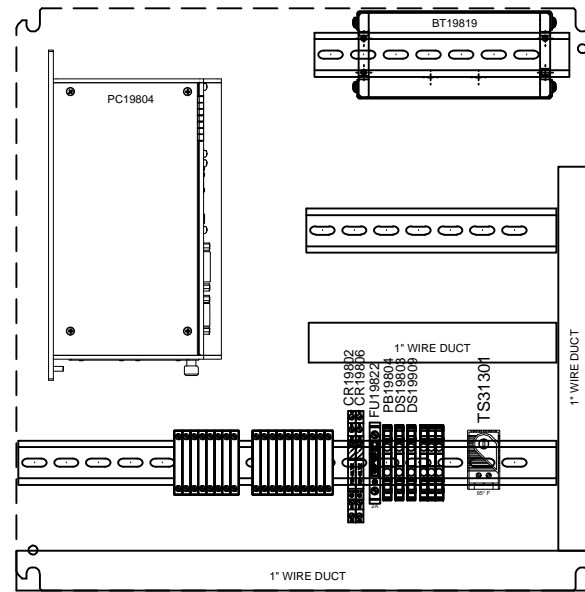
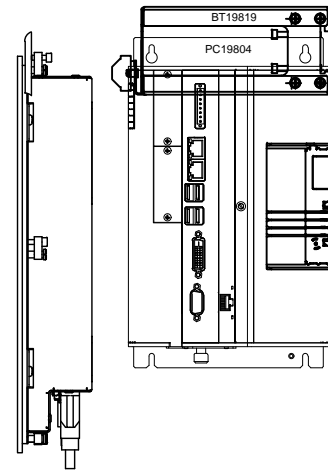
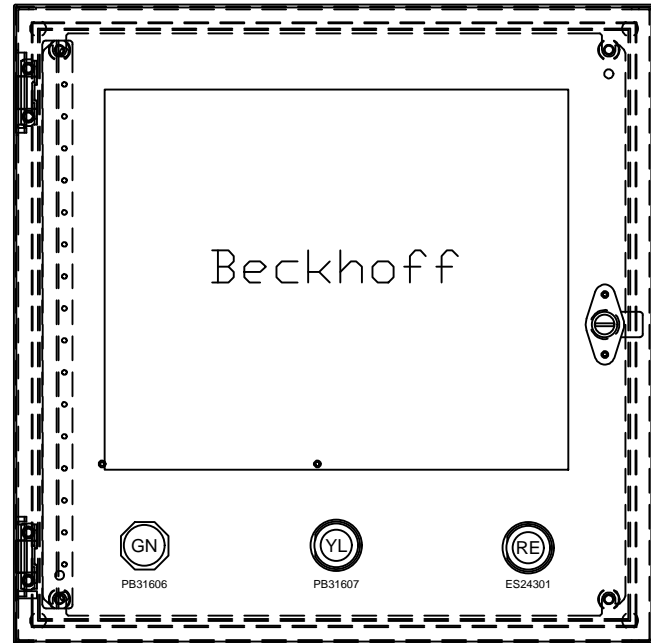


TAGNAME	DESCRIPTION	CONTACT TYPE	CONTACT 1	CONTACT 2
PB51107	ORIENTER NON OP SIDE CYCLE STOP	NC	26013	51107
ES26304	ORIENTER NON OP SIDE E-STOP	NC	26305	26306
ES26304	ORIENTER NON OP SIDE E-STOP	NC	26303A	26304A
ES26304	ORIENTER NON OP SIDE E-STOP	NO	26013	51108
ES26304	ORIENTER NON OP SIDE E-STOP	LIGHT	51108	26022

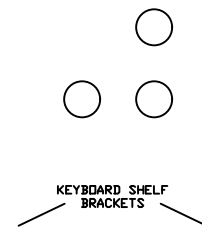
TAG	CATALOG	DESC
CR50101	Z0117800	SOFTWARE E-STOP SAFETY RELAY
CR50102	Z0019843	RELAY - TYPE HL
CR28211	1009031	RELAY SAFETY CONTROL DPDT 24V DC
CR28212	1009031	RELAY SAFETY CONTROL DPDT 24V DC
CR28214	1009031	RELAY SAFETY CONTROL DPDT 24V DC
CR28215	1009031	RELAY SAFETY CONTROL DPDT 24V DC
DB26008	Z0098868	POWER DISTRIBUTION BLOCK
DB26022	Z0098868	POWER DISTRIBUTION BLOCK
DB702	Z0098868	DISTRIBUTION BLOCK
ES26304	Z0004654	EMERGENCY STOP PB
FU704	KLKR010	FUSE - CLASS CC
FU721	KLDR030	FUSE - CLASS CC
FU806	CCMR003	FUSE - CLASS CC
FU1501	CCMR006	FUSE - CLASS CC
FU10109	KLKR005	FUSE - CLASS CC
FU26008	257005	FUSE - ATO
FU26009	257010	FUSE - ATO
FU26010	257005	FUSE - ATO
FU26011	257005	FUSE - ATO
FU26012	257005	FUSE - ATO
FU26013	257005	FUSE - ATO
FU26014	257001	FUSE - ATO
HCS04	Z0119414	SERVO POWER SUPPLY
HLC04	Z0103629	DC BUS CAPACITOR
KCU06	Z0103615	SERVO BREAKOUT MODULE
MS26219	Z0117898	MINI CONTACTOR, DC 3 POWER POLES
MS50701	Z0117898	MINI CONTACTOR, DC 3 POWER POLES
OL806	Z0117907	OVERLOAD RELAY AUTO/MANUAL RESET
PB51107	Z0004653	PUSH BUTTON - MUSHROOM, NEMA 4/13
PLC50001	Z0030412	BUS COUPLER
PLC50101	Z0030430	OUTPUT SLICE
PLC50201	Z0030430	OUTPUT SLICE
PLC50301	Z0094854	ANALOG OUTPUT SLICE
PLC50601	Z0031496	POWER MODULE
PLC50701	Z0030430	OUTPUT SLICE
PLC50801	Z0030430	OUTPUT SLICE
PLC50901	Z0031496	POWER MODULE
PLC51001	Z0030414	INPUT MODULE
PLC51101	Z0030414	INPUT MODULE
PLC51201	Z0030414	INPUT MODULE
PLC51301	Z0030414	INPUT MODULE
PLC51401	Z0030414	INPUT MODULE
PLC51501	Z0030414	INPUT MODULE
PLC51601	Z0030414	INPUT MODULE
PLC51701	Z0030431	END TERMINAL
PU26001	Z0067481	POWER SUPPLY
SR26201	Z0014223	SAFETY RELAY
SR26401	Z0091532	GUARD DOOR SAFETY RELAY
SR28001	Z0259355	SAFETY RELAY
TS51301	Z0056338	TEMPERATURE CONTROL SWITCH
VFD1501	Z0025617	VARIABLE FREQUENCY DRIVE

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REV: 3		DATE: 02/17/09
		DRAWING NO: ORIENTER PANEL LAYOUT

CSD202010




TAGNAME	CAT	DESC1
BT19818	Z0089778	Battery Pack for 24 V Power Supply w/ integrated UPS
CR19802	Z0019843	Relay General Purpose SPDT SS Interchangeable
CR19806	Z0019843	Relay General Purpose SPDT SS Interchangeable
DS19803	Z0160186	Terminal Block, Knife DisconnectDouble Density,
DS19809	Z0160186	Terminal Block, Knife DisconnectDouble Density,
FU19822	Z0214118	Fuse Holder Automotive 1 pole LED Indication (24vdc)
PB19804	Z0131645	PC Reset Pushbutton
PC19804	1007982	Beckhoff SS PC C6930-0040
TS31301	Z0056338	Hoffman Temperature Control Switch

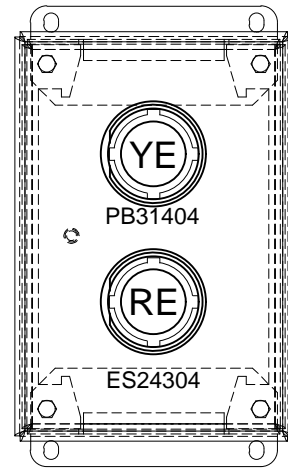


TAGNAME	DESCRIPTION	CONTACT TYPE	WIRE #	
			TERMINAL 1	TERMINAL 2
PB31606	SYSTEM START	N.O.	24013	31306
		LIGHT	30101	24022
PB31607	SYSTEM CYCLE STOP	N.C.	24013	31307
ES24301	SYSTEM EMERGENCY STOP	N.C.	24203	24302
		N.C.	24205	24304
		N.C.	26203	26301
		N.C.	26205	26303
		N.O.	24013	31308
		LIGHT	31308	24022

+

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REV: 3		DATE: 02/17/09	SHEET: 7 OF 43
		DRAWING NO: HMI PANEL LAYOUT	

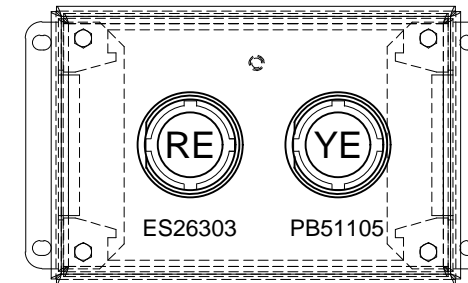
REMOTE CASE PACKER
CYCLE STOP & E-STOP



LOCATED ON CASE PACKER
OP SIDE NEAR COMPRESSION

TAGNAME	DESCRIPTION	CONTACT TYPE	CONTACT 1	CONTACT 2
PB31404	CASE PACKER CYCLE STOP	NC	24013	31404
ES24304	CASE PACKER OP SIDE E-STOP	NC	24303	24304A
ES24304	CASE PACKER OP SIDE E-STOP	NC	24305	24306
ES24304	CASE PACKER OP SIDE E-STOP	NO	24013	31405
ES24304	CASE PACKER OP SIDE E-STOP	LIGHT	31405	24022

ORIENTER REMOTE
CYCLE STOP & E-STOP



LOCATED ON ORIENTER
NEAR GLUE TANK

TAGNAME	DESCRIPTION	CONTACT TYPE	CONTACT 1	CONTACT 2
PB51105	ORIENTER OP SIDE CYCLE STOP	NC	26013	51105
ES26303	ORIENTER OP SIDE E-STOP	NC	26302	26303A
ES26303	ORIENTER OP SIDE E-STOP	NC	26304	26305
ES26303	ORIENTER OP SIDE E-STOP	NO	26013	51106
ES26303	ORIENTER OP SIDE E-STOP	LIGHT	51106	26022

DWG BY:

PML

REV:

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3711 IOWA STREET
ALEXANDRIA, MN 56308
(320) 763-6043
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TITLE:

120 GMI RH KDCP & ORIENTER

DATE:

02/17/09

SHEET:

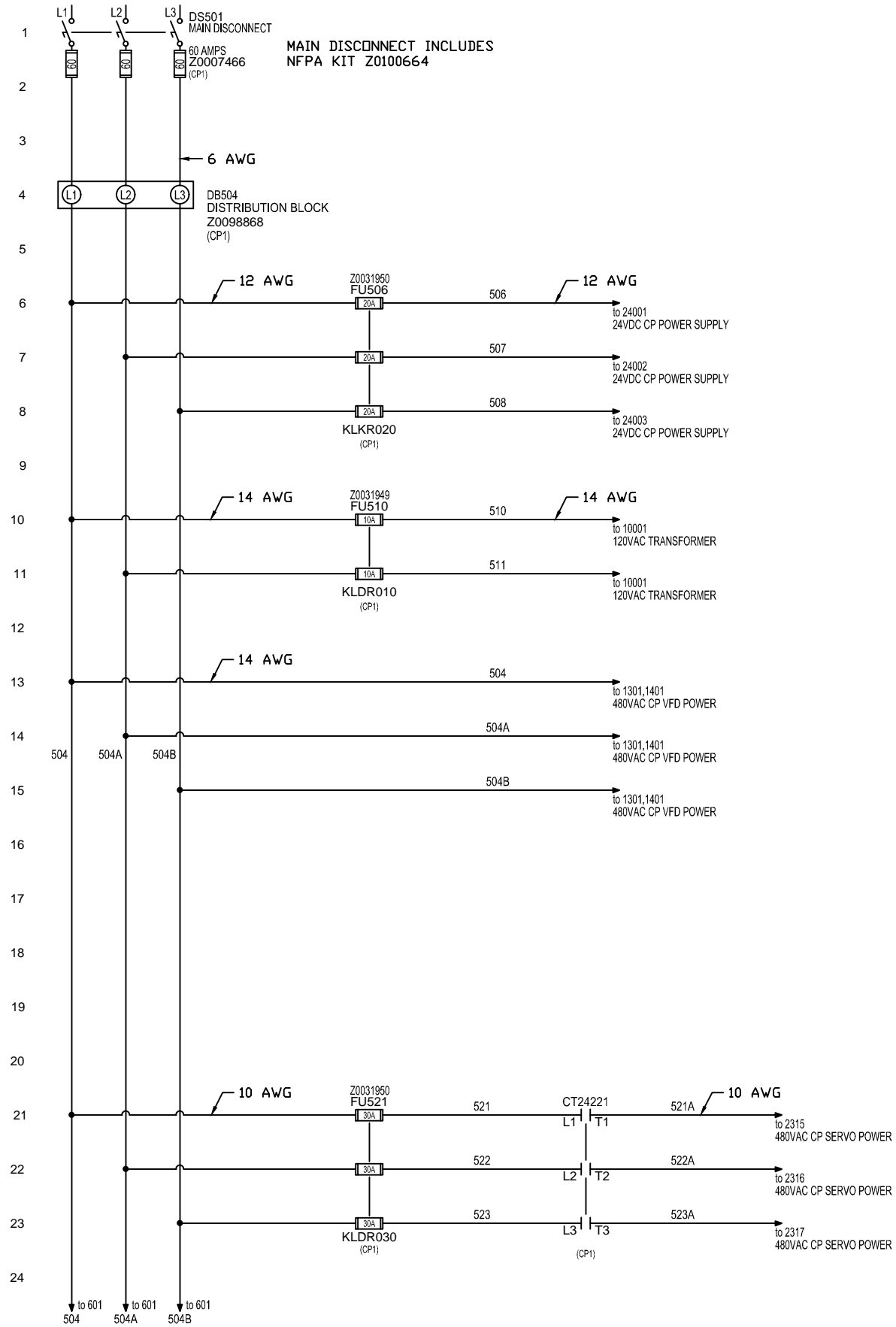
8 OF 43

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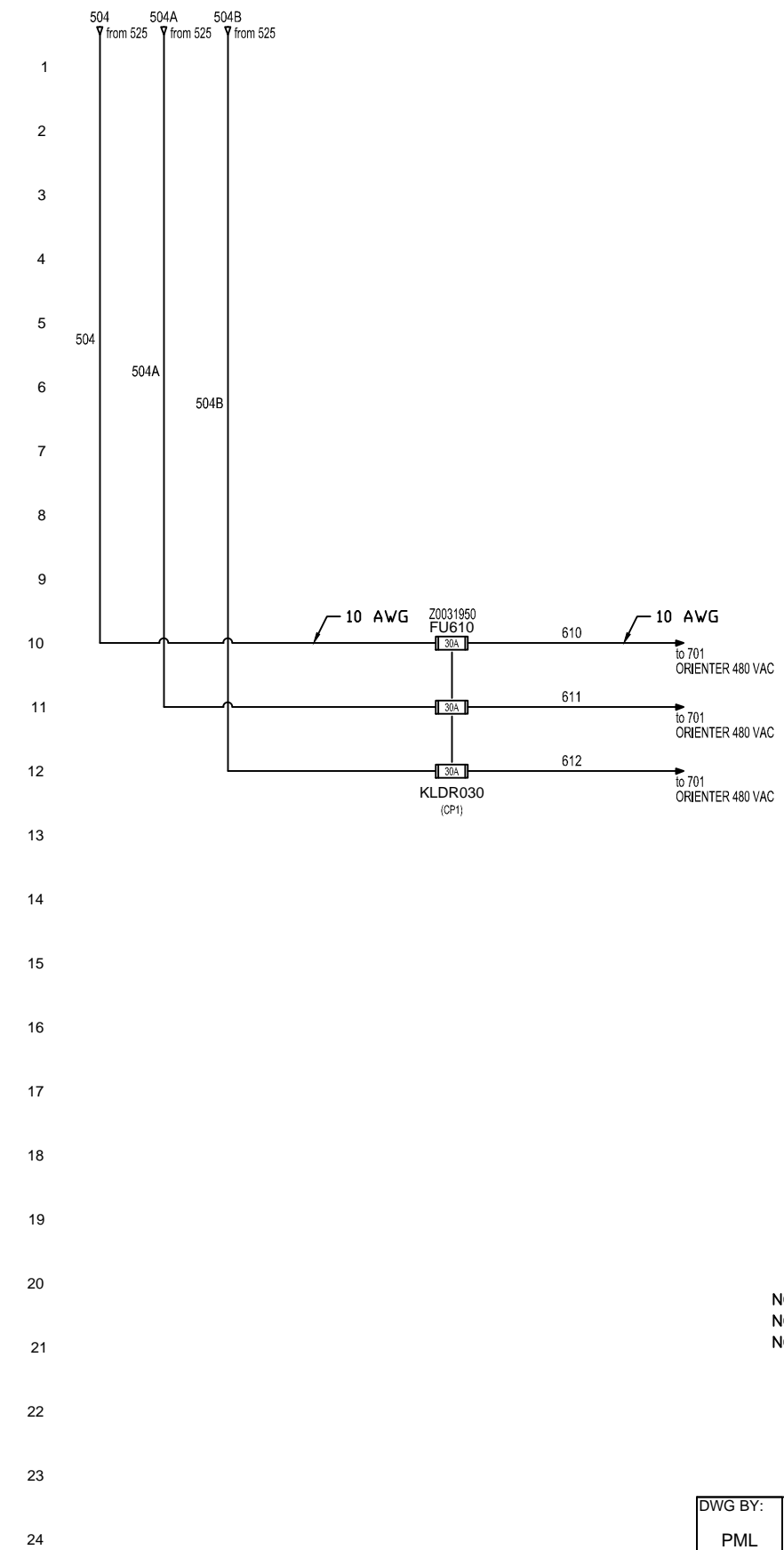
PUSHBUTTON PANEL LAYOUT

(5)

CUSTOMER SUPPLY
480 VAC, 3 PH,
60 HZ, 60 AMP



(6)

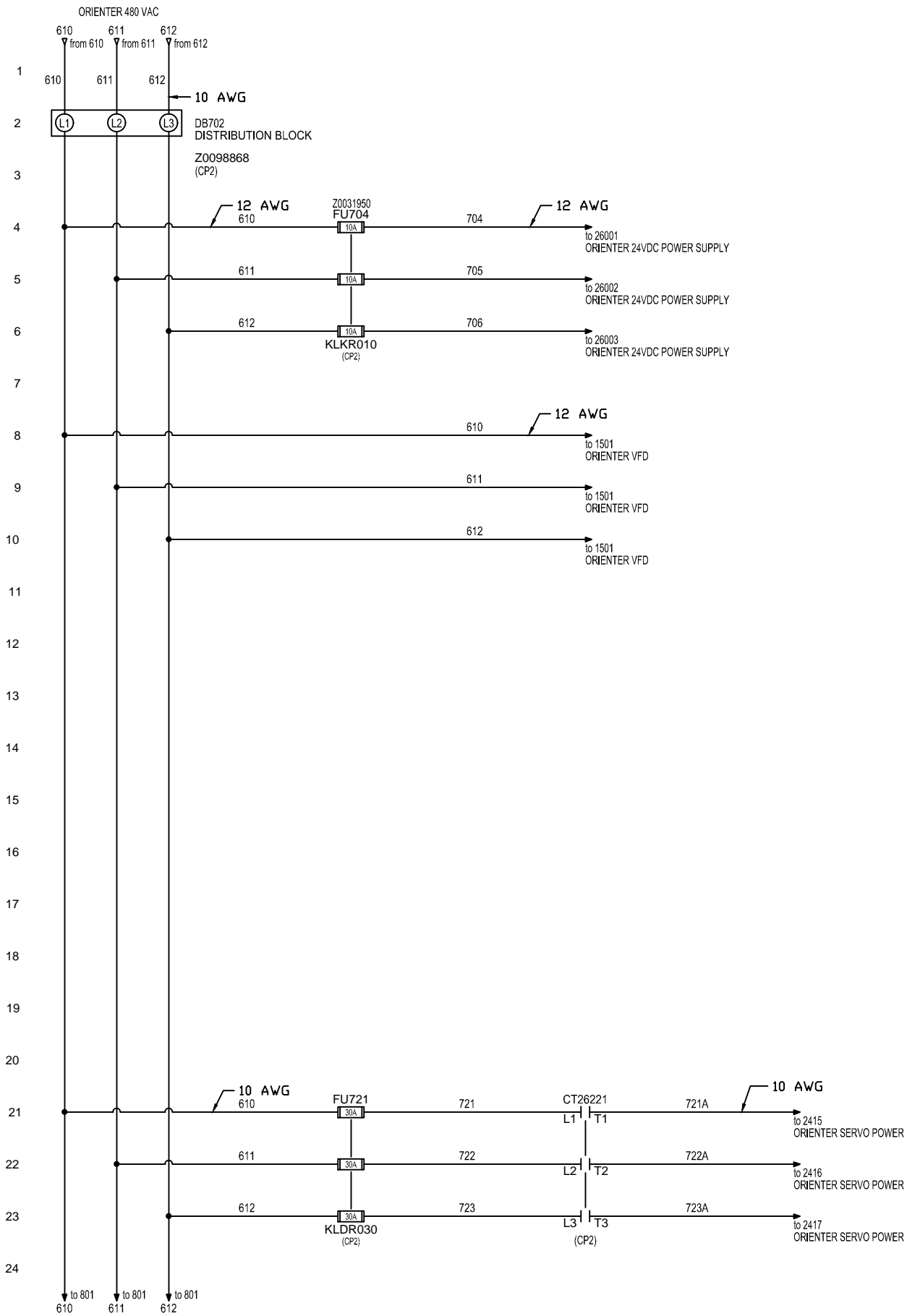


NOTE: PANEL TO BE UL APPROVED AND LABELED
 NOTE: ALL WIRE 18 GA. UNLESS OTHERWISE NOTED
 NOTE: WIRE COLORS ARE AS FOLLOWS UNLESS OTHERWISE NOTED
 480 VAC - BLACK; 120/280 VAC RED (NEUTRAL-WHITE)
 DC - BLUE; DC COMMON - BLUE/WHITE

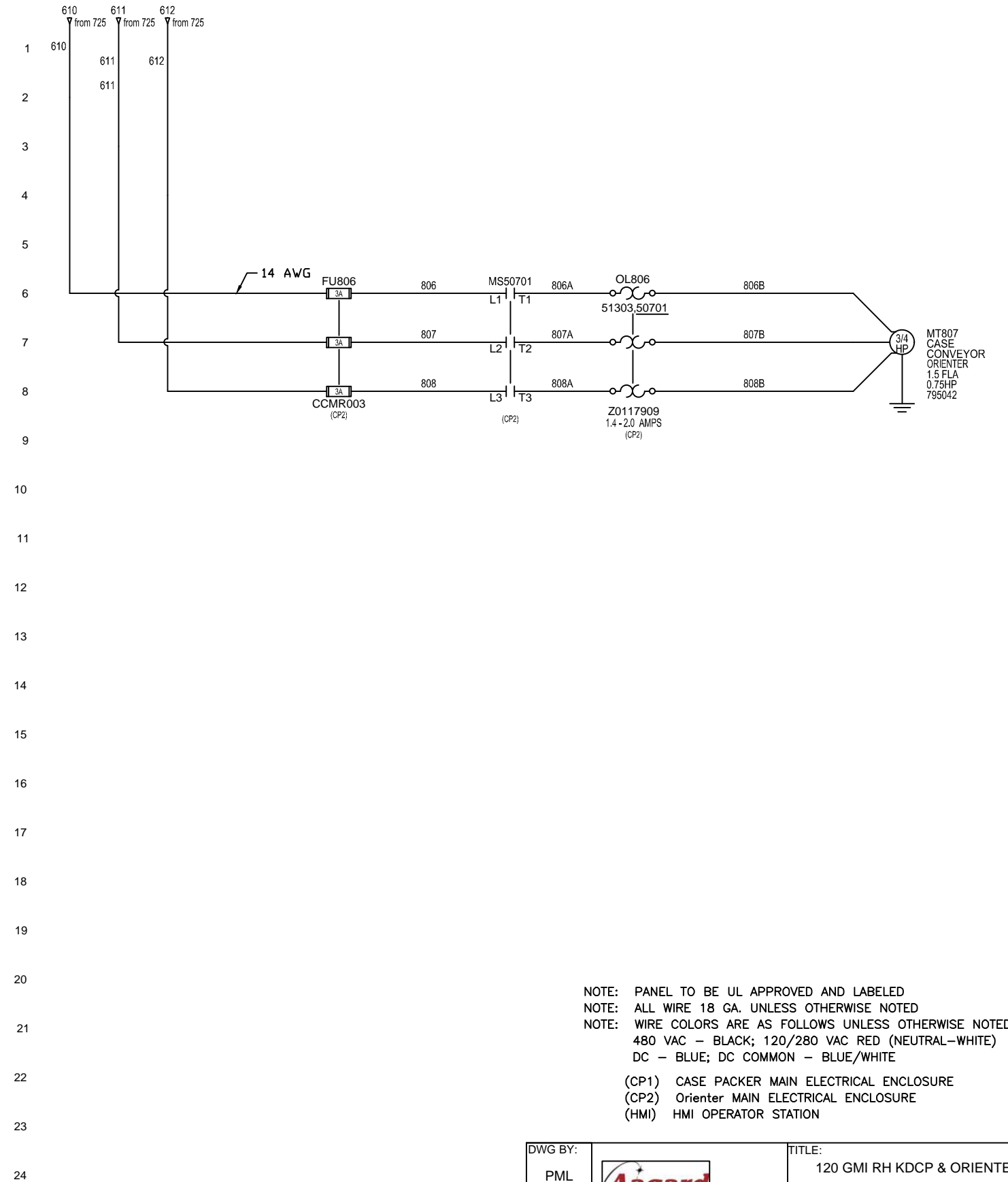
(CP1) CASE PACKER MAIN ELECTRICAL ENCLOSURE
 (CP2) ORIENTER MAIN ELECTRICAL ENCLOSURE
 (HMI) HMI OPERATOR STATION

DWG BY: PML		TITLE: 120 GMI RH KDCP & ORIENTER	
REV: 3		DATE: 02/17/09	SHEET: 9 OF 43
3711 IOWA STREET ALEXANDRIA, MN 56308 (320) 763-6043 FAX (320) 763-7859		DRAWING NO: CASE PACKER 480VAC POWER DIST	

(7)




(8)

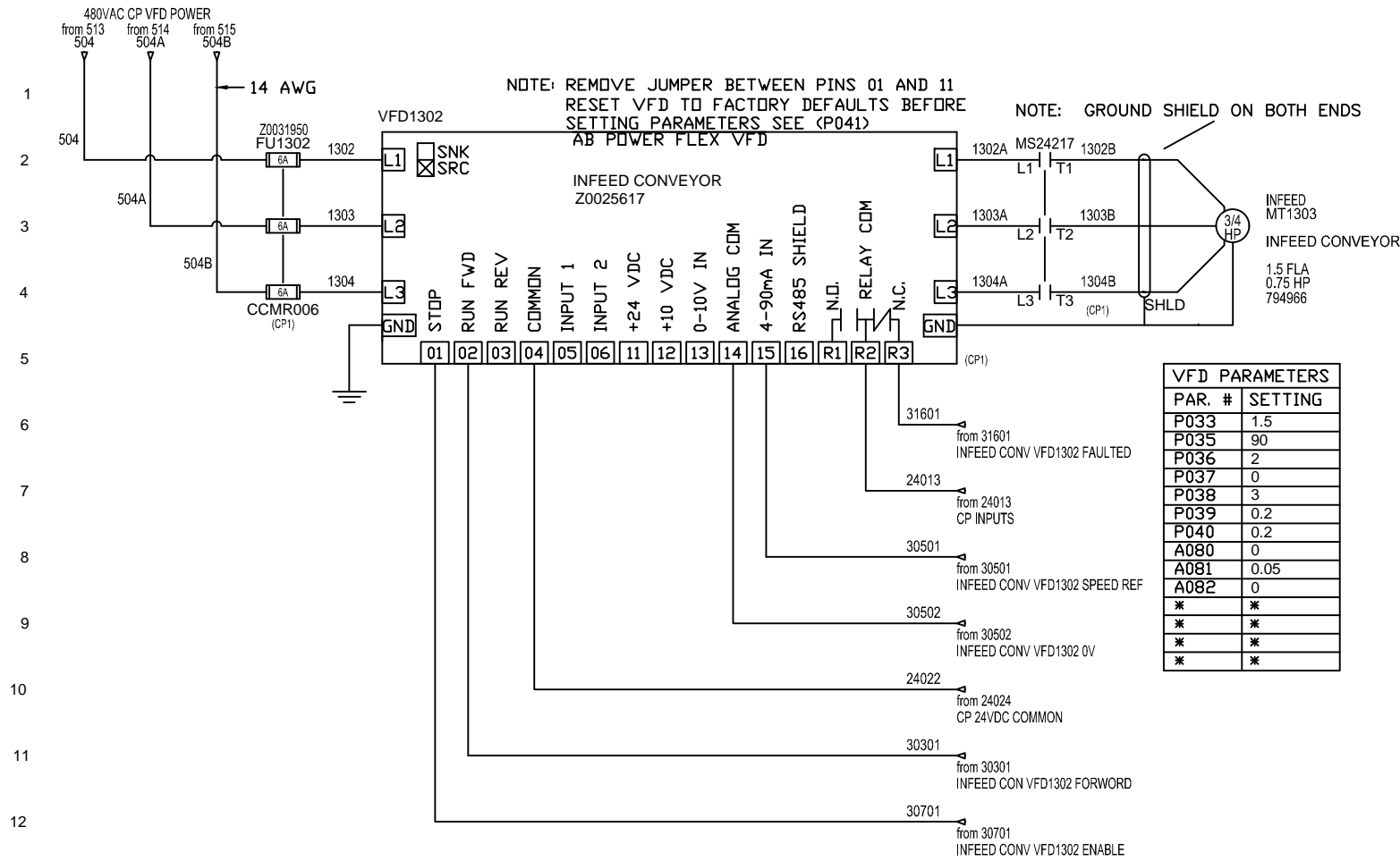


NOTE: PANEL TO BE UL APPROVED AND LABELED
 NOTE: ALL WIRE 18 GA. UNLESS OTHERWISE NOTED
 NOTE: WIRE COLORS ARE AS FOLLOWS UNLESS OTHERWISE NOTED
 480 VAC - BLACK; 120/280 VAC RED (NEUTRAL-WHITE)
 DC - BLUE; DC COMMON - BLUE/WHITE

(CP1) CASE PACKER MAIN ELECTRICAL ENCLOSURE
 (CP2) Orienter MAIN ELECTRICAL ENCLOSURE
 (HMI) HMI OPERATOR STATION

DWG BY: PML	 3711 IOWA STREET ALEXANDRIA, MN 56308 (320) 763-6043 FAX (320) 763-7859	TITLE: 120 GMI RH KDGP & ORIENTER	
REV: 3		DATE: 02/17/09	SHEET: 10 OF 43
		DRAWING NO: ORIENTER 480VAC POWER DIST	

(13)



NOTE: REMOVE JUMPER BETWEEN PINS 01 AND 11
RESET VFD TO FACTORY DEFAULTS BEFORE
SETTING PARAMETERS SEE (P041)

NOTE: GROUND SHIELD ON BOTH ENDS

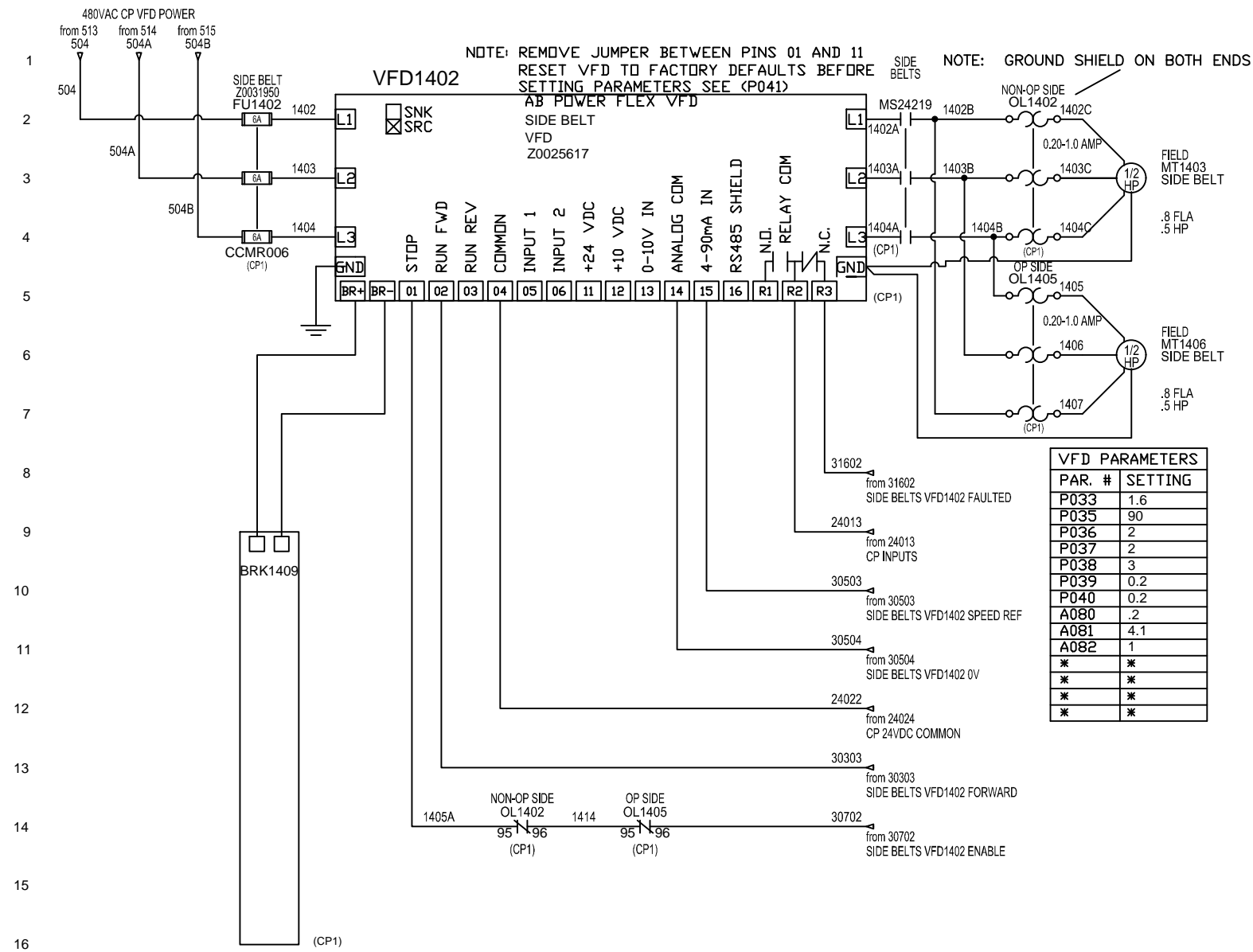
AB POWER FLEX VFD

INFEED CONVEYOR
Z0025617

MS24217
3/4 HP
1.5 FLA
0.75 HP
794966

PAR. #	SETTING
P033	1.5
P035	90
P036	2
P037	0
P038	3
P039	0.2
P040	0.2
A080	0
A081	0.05
A082	0
*	*
*	*
*	*
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(14)



NOTE: REMOVE JUMPER BETWEEN PINS 01 AND 11
RESET VFD TO FACTORY DEFAULTS BEFORE
SETTING PARAMETERS SEE (P041)

AB POWER FLEX VFD

SIDE BELT
VFD
Z0025617

MS24219
1/2 HP
0.20-1.0 AMP

FIELD
MT1403
SIDE BELT
.8 FLA
.5 HP


FIELD
MT1406
SIDE BELT
.8 FLA
.5 HP

PAR. #	SETTING
P033	1.6
P035	90
P036	2
P037	2
P038	3
P039	0.2
P040	0.2
A080	.2
A081	4.1
A082	1
*	*
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BRK1409
(CP1)
BRAKING RESISTOR

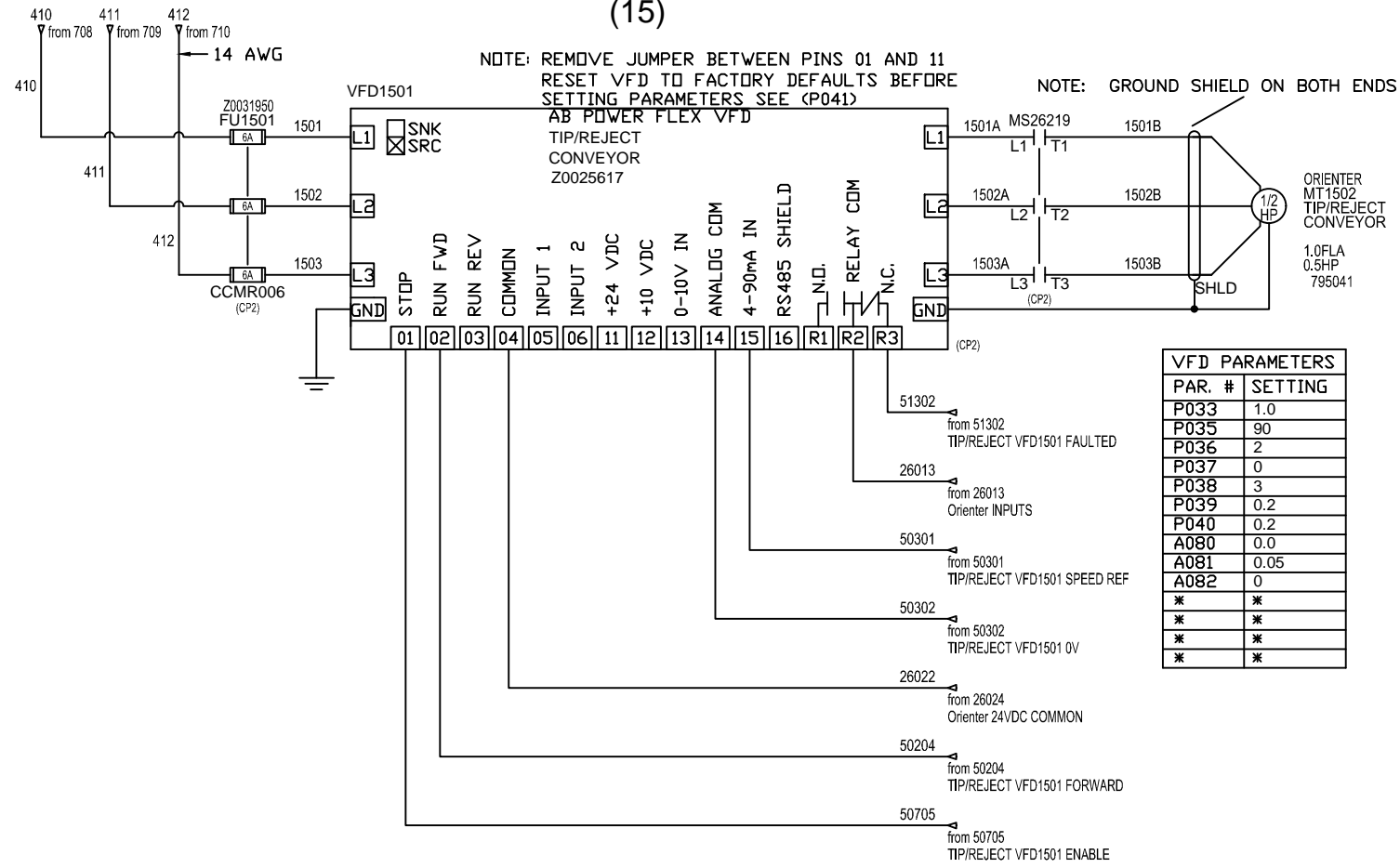
NOTE: PANEL TO BE UL APPROVED AND LABELED
NOTE: ALL WIRE 18 GA. UNLESS OTHERWISE NOTED
NOTE: WIRE COLORS ARE AS FOLLOWS UNLESS OTHERWISE NOTED
480 VAC - BLACK; 120/280 VAC RED (NEUTRAL-WHITE)
DC - BLUE; DC COMMON - BLUE/WHITE

(CP1) CASE PACKER MAIN ELECTRICAL ENCLOSURE
(CP2) ORIENTER MAIN ELECTRICAL ENCLOSURE
(HMI) HMI OPERATOR STATION

DWG BY: PML	 3711 IOWA STREET ALEXANDRIA, MN 56308 (320) 763-6043 FAX (320) 763-7859	TITLE: 120 GMI RH KDCCP & ORIENTER
REV: 3		DATE: 02/17/09
		DRAWING NO: CP VFD WIRING

(15)

(16)



NOTE: PANEL TO BE UL APPROVED AND LABELED
NOTE: ALL WIRE 18 GA. UNLESS OTHERWISE NOTED
NOTE: WIRE COLORS ARE AS FOLLOWS UNLESS OTHERWISE NOTED
480 VAC - BLACK; 120/280 VAC RED (NEUTRAL-WHITE)
DC - BLUE; DC COMMON - BLUE/WHITE

(CP1) CASE PACKER MAIN ELECTRICAL ENCLOSURE
(CP2) Orienter MAIN ELECTRICAL ENCLOSURE
(HMI) HMI OPERATOR STATION

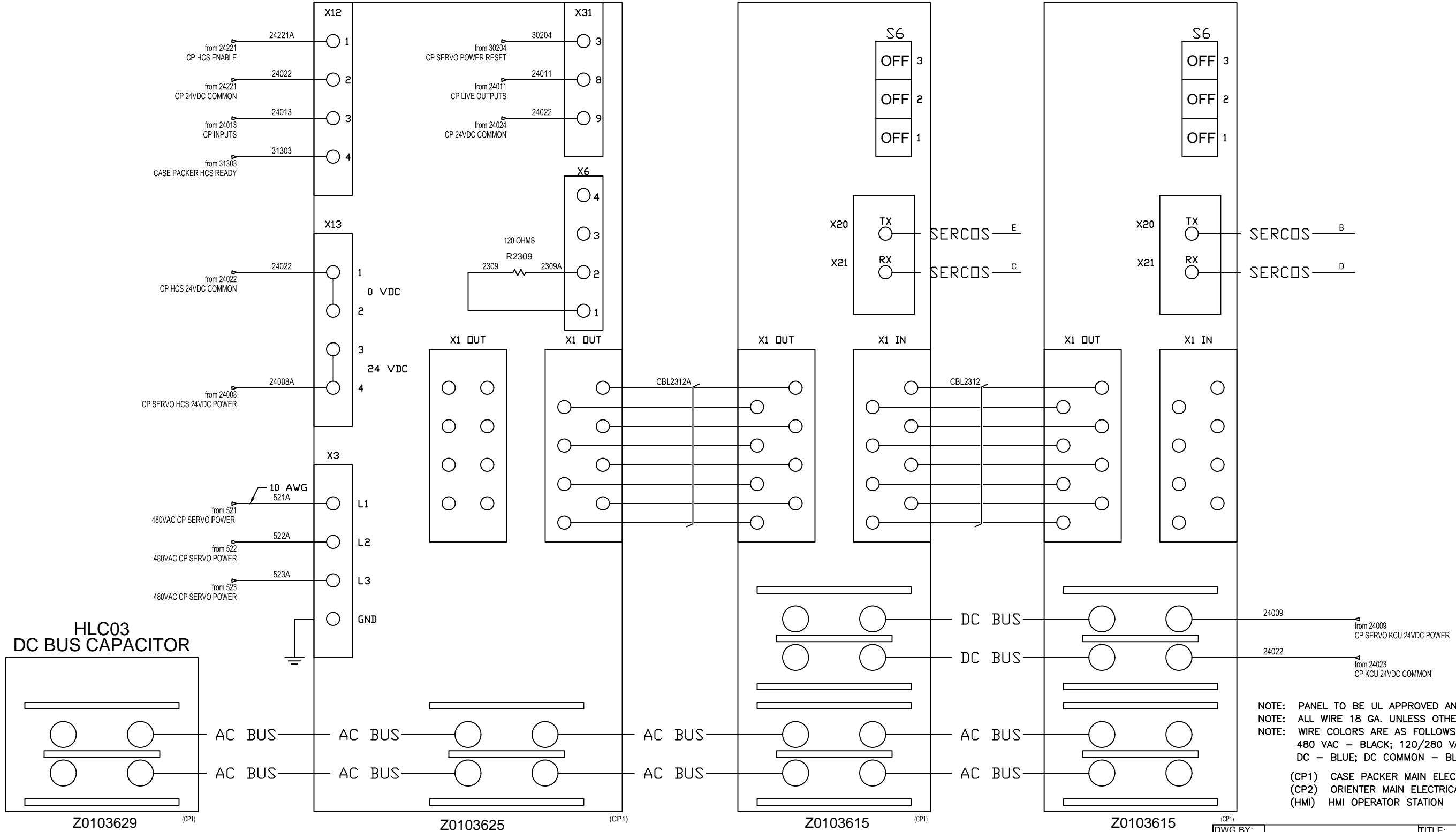
DWG BY: PML	 3711 IOWA STREET ALEXANDRIA, MN 56308 (320) 763-6043 FAX (320) 763-7859	TITLE: 120 GMI RH KDCP & ORIENTER	
REV: 3		DATE: 02/17/09	SHEET: 12 OF 43
		DRAWING NO: ORIENTER VFD WIRING	

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HCS03 CASE PACKER SERVO POWER CONVERTER


KCU04 CASE PACKER SERVO BREAKOUT MODULE

KCU05 CASE PACKER SERVO BREAKOUT MODULE



NOTE: PANEL TO BE UL APPROVED AND LABELED
 NOTE: ALL WIRE 18 GA. UNLESS OTHERWISE NOTED
 NOTE: WIRE COLORS ARE AS FOLLOWS UNLESS OTHERWISE NOTED
 480 VAC - BLACK; 120/280 VAC RED (NEUTRAL-WHITE)
 DC - BLUE; DC COMMON - BLUE/WHITE

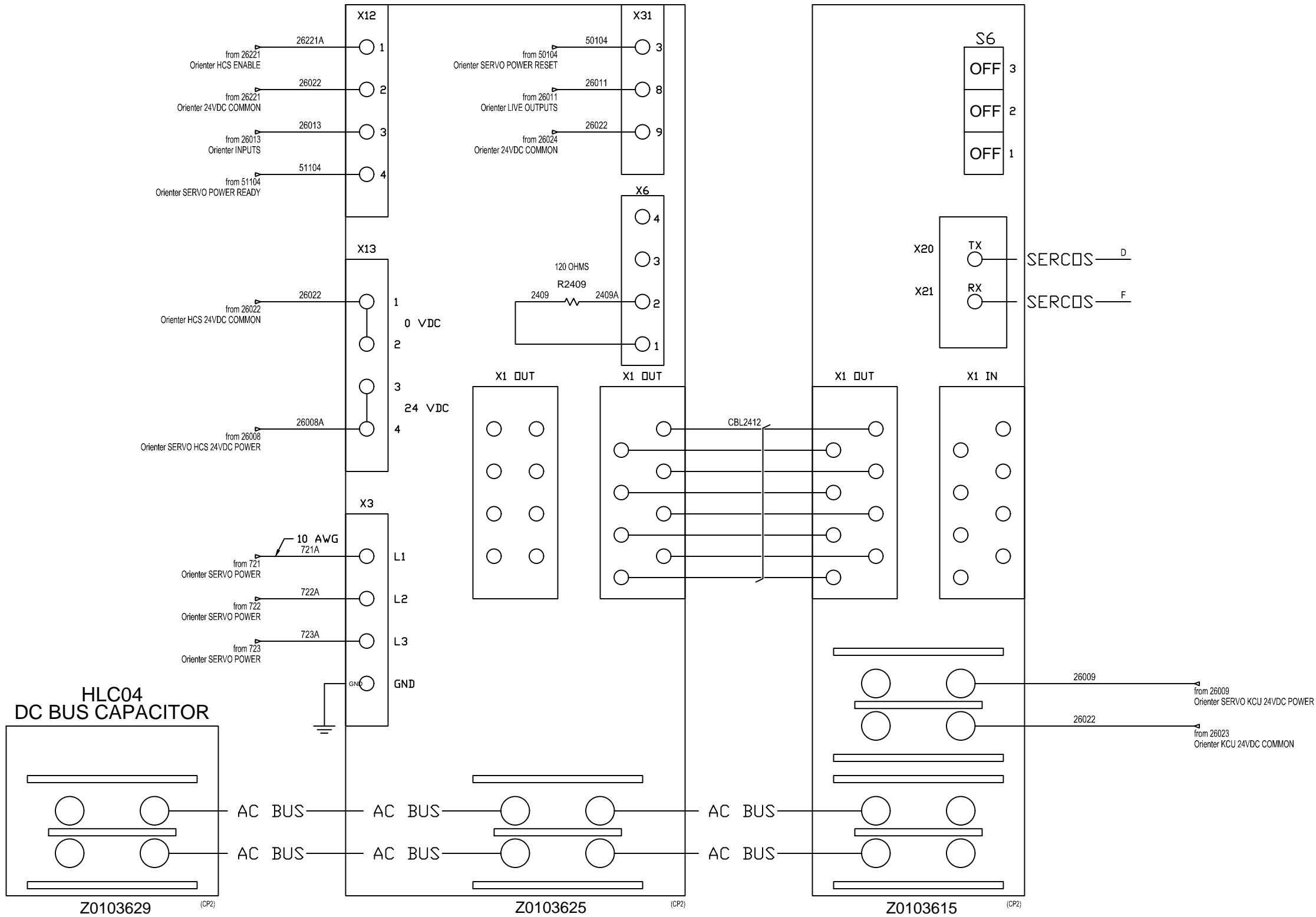
(CP1) CASE PACKER MAIN ELECTRICAL ENCLOSURE
 (CP2) ORIENTER MAIN ELECTRICAL ENCLOSURE
 (HMI) HMI OPERATOR STATION

DWG BY: PML	 3711 IOWA STREET ALEXANDRIA, MN 56308 (320) 763-6043 FAX (320) 763-7859	TITLE: 120 GMI RH KDCP & ORIENTER	
REV: 3		DATE: 02/17/09	SHEET: 13 OF 43
		DRAWING NO: CASE PACKER SERVO WIRING	

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HCS04 ORIENTER SERVO POWER CONVERTER

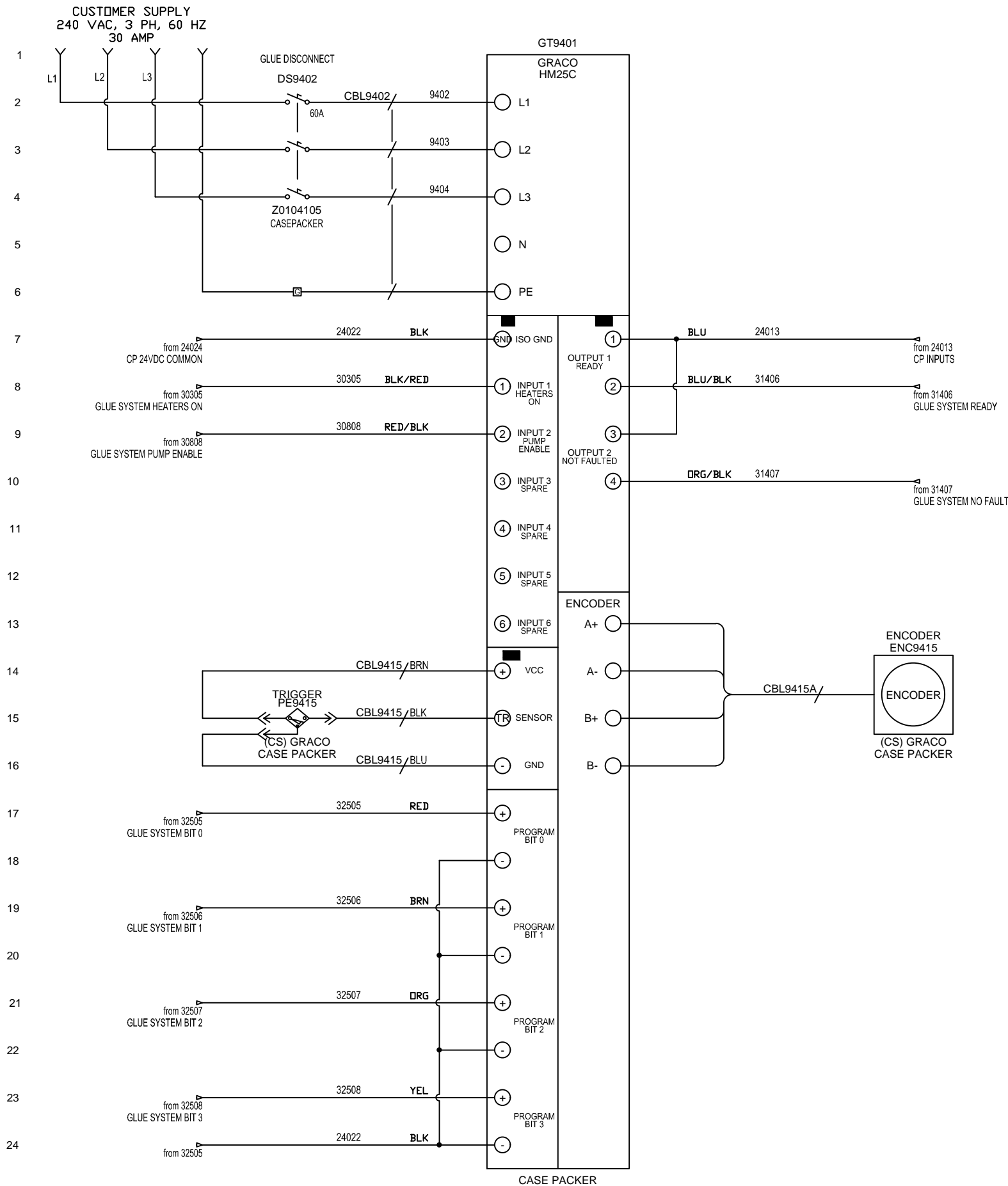
KCU06 ORIENTER BREAKOUT MODULE



NOTE: PANEL TO BE UL APPROVED AND LABELED
 NOTE: ALL WIRE 18 GA. UNLESS OTHERWISE NOTED
 NOTE: WIRE COLORS ARE AS FOLLOWS UNLESS OTHERWISE NOTED
 480 VAC - BLACK; 120/280 VAC RED (NEUTRAL-WHITE)
 DC - BLUE; DC COMMON - BLUE/WHITE

(CP1) CASE PACKER MAIN ELECTRICAL ENCLOSURE
 (CP2) Orienter MAIN ELECTRICAL ENCLOSURE
 (HMI) HMI OPERATOR STATION


DWG BY: PML	 3711 IOWA STREET ALEXANDRIA, MN 56308 (320) 763-6043 FAX (320) 763-7859	TITLE: 120 GMI RH KDCP & ORIENTER	
REV: 3		DATE: 02/17/09	SHEET: 14 OF 43
		DRAWING NO: ORIENTER SERVO WIRING	



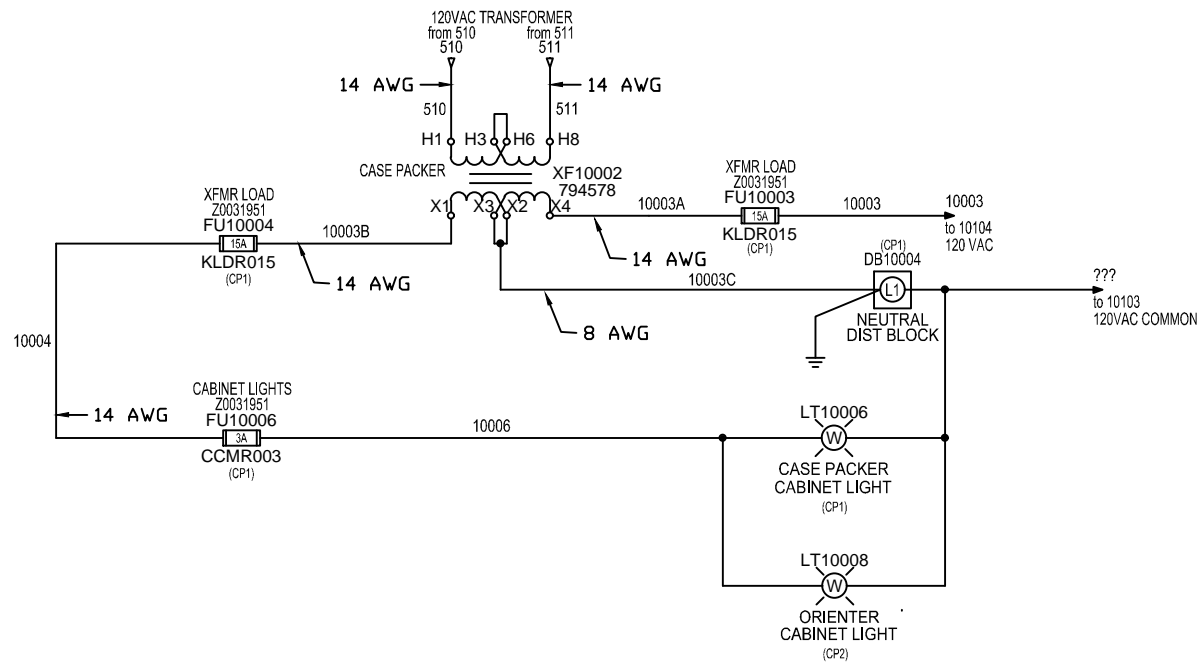
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NOTE: PANEL TO BE UL APPROVED AND LABELED
 NOTE: ALL WIRE 18 GA. UNLESS OTHERWISE NOTED
 NOTE: WIRE COLORS ARE AS FOLLOWS UNLESS OTHERWISE NOTED
 480 VAC - BLACK; 120/280 VAC RED (NEUTRAL-WHITE)
 DC - BLUE; DC COMMON - BLUE/WHITE

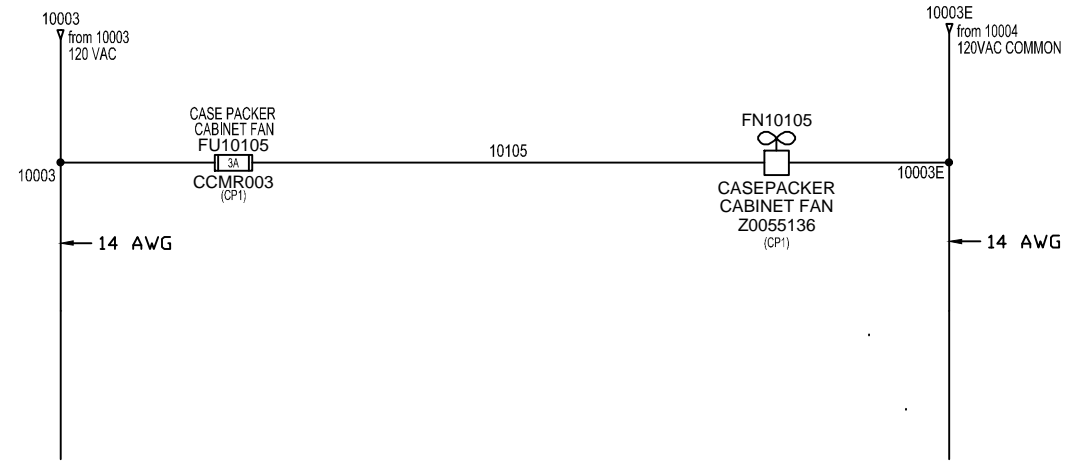
(CP1) CASE PACKER MAIN ELECTRICAL ENCLOSURE
 (CP2) ORIENTER MAIN ELECTRICAL ENCLOSURE
 (HMI) HMI OPERATOR STATION

DWG BY: PML	 3711 IOWA STREET ALEXANDRIA, MN 56308 (320) 763-6043 FAX (320) 763-7859	TITLE: 120 GMI RH KDGP & ORIENTER	
REV: 3		DATE: 02/17/09	SHEET: 15 OF 43
		DRAWING NO: CP HIGH POWER INTEGRATION	

(100)




(101)

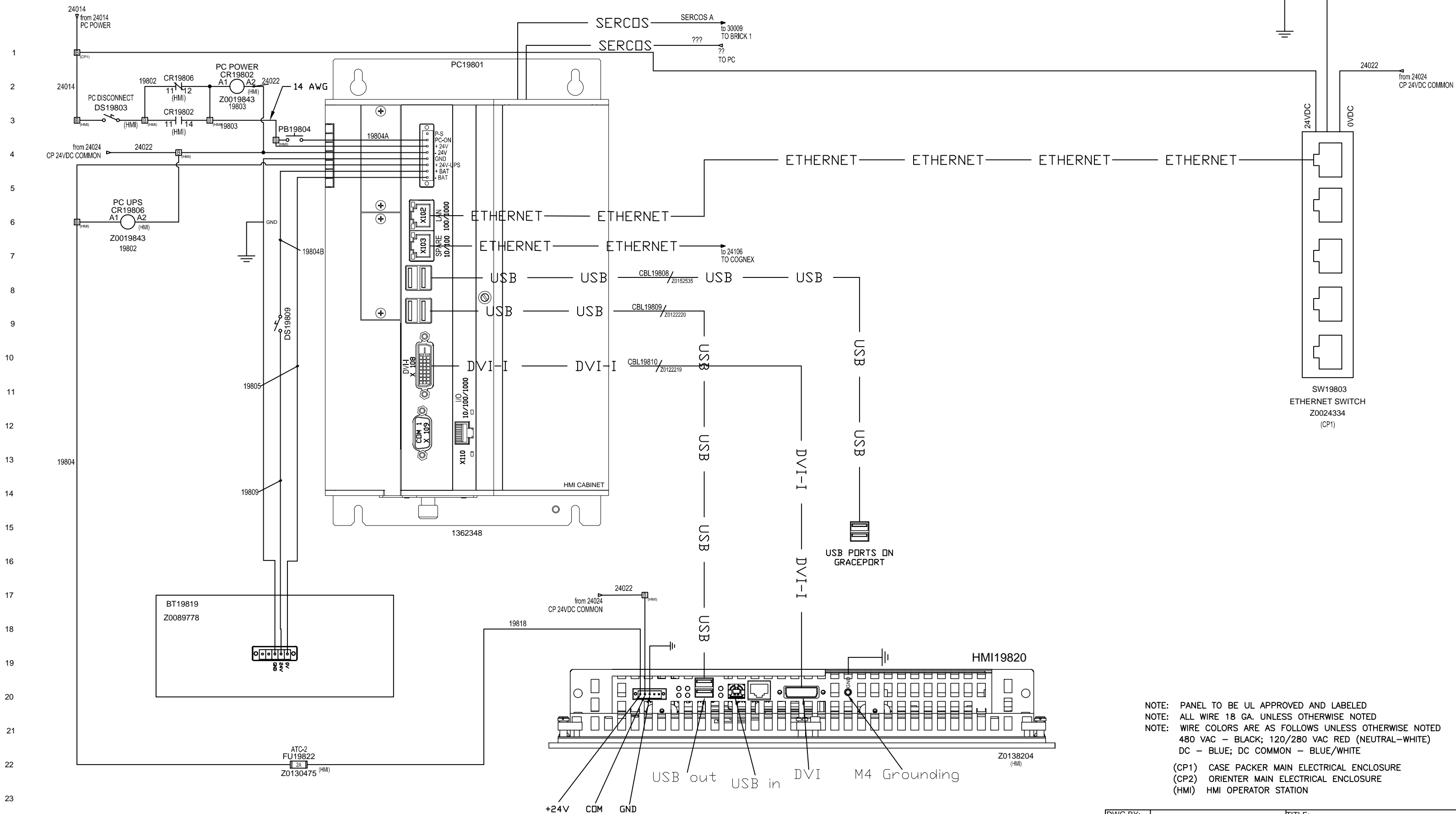



NOTE: PANEL TO BE UL APPROVED AND LABELED
 NOTE: ALL WIRE 18 GA. UNLESS OTHERWISE NOTED
 NOTE: WIRE COLORS ARE AS FOLLOWS UNLESS OTHERWISE NOTED
 480 VAC - BLACK; 120/280 VAC RED (NEUTRAL-WHITE)
 DC - BLUE; DC COMMON - BLUE/WHITE

(CP1) CASE PACKER MAIN ELECTRICAL ENCLOSURE
 (CP2) ORIENTER MAIN ELECTRICAL ENCLOSURE
 (HMI) HMI OPERATOR STATION

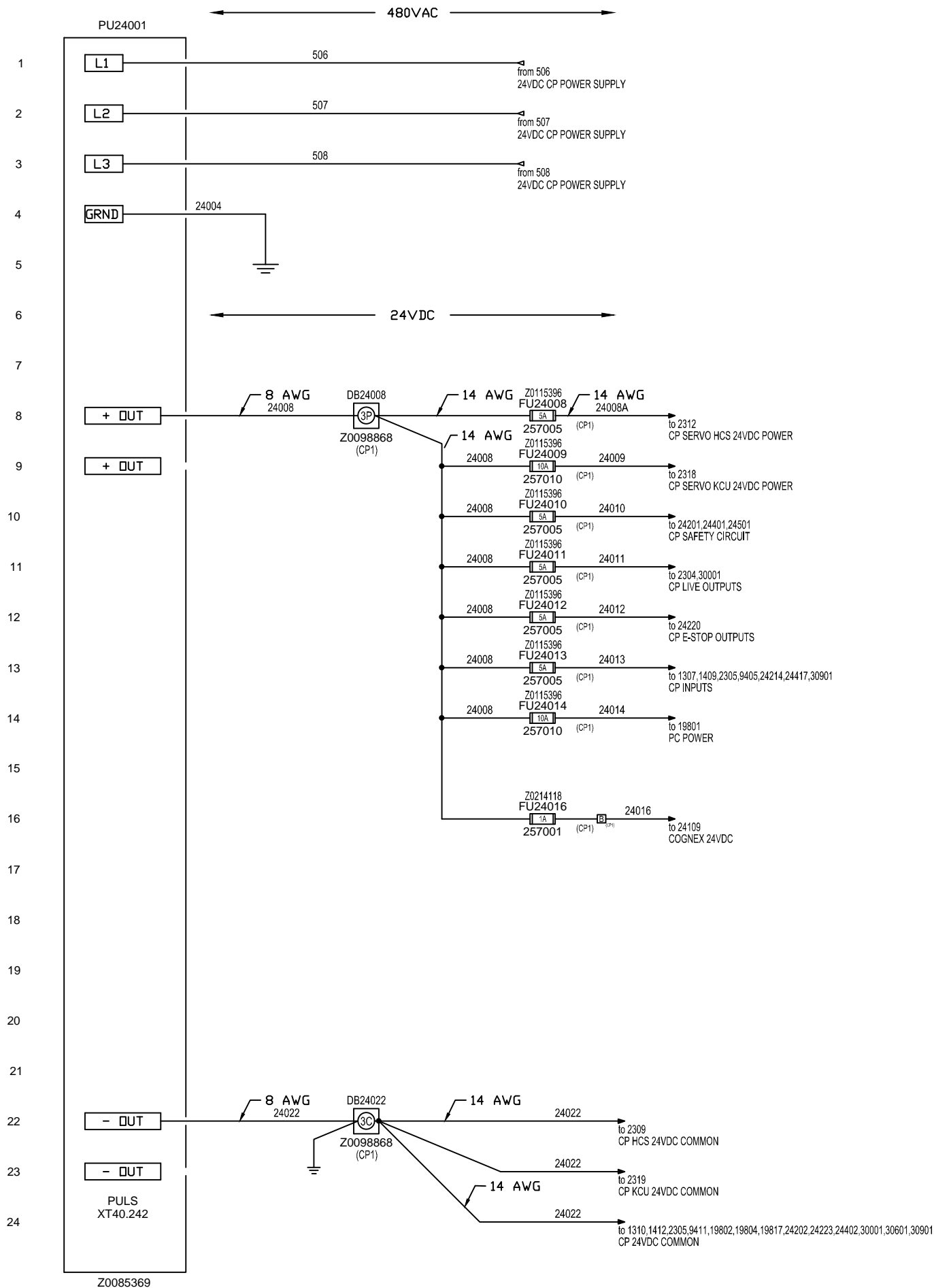
DWG BY: PML	 3711 IOWA STREET ALEXANDRIA, MN 56308 (320) 763-6043 FAX (320) 763-7859	TITLE: 120 GMI RH KDGP & ORIENTER	
REV: 3		DATE: 05/15/09	SHEET: 16 OF 43
		DRAWING NO: 120VAC POWER DIST	

(198)

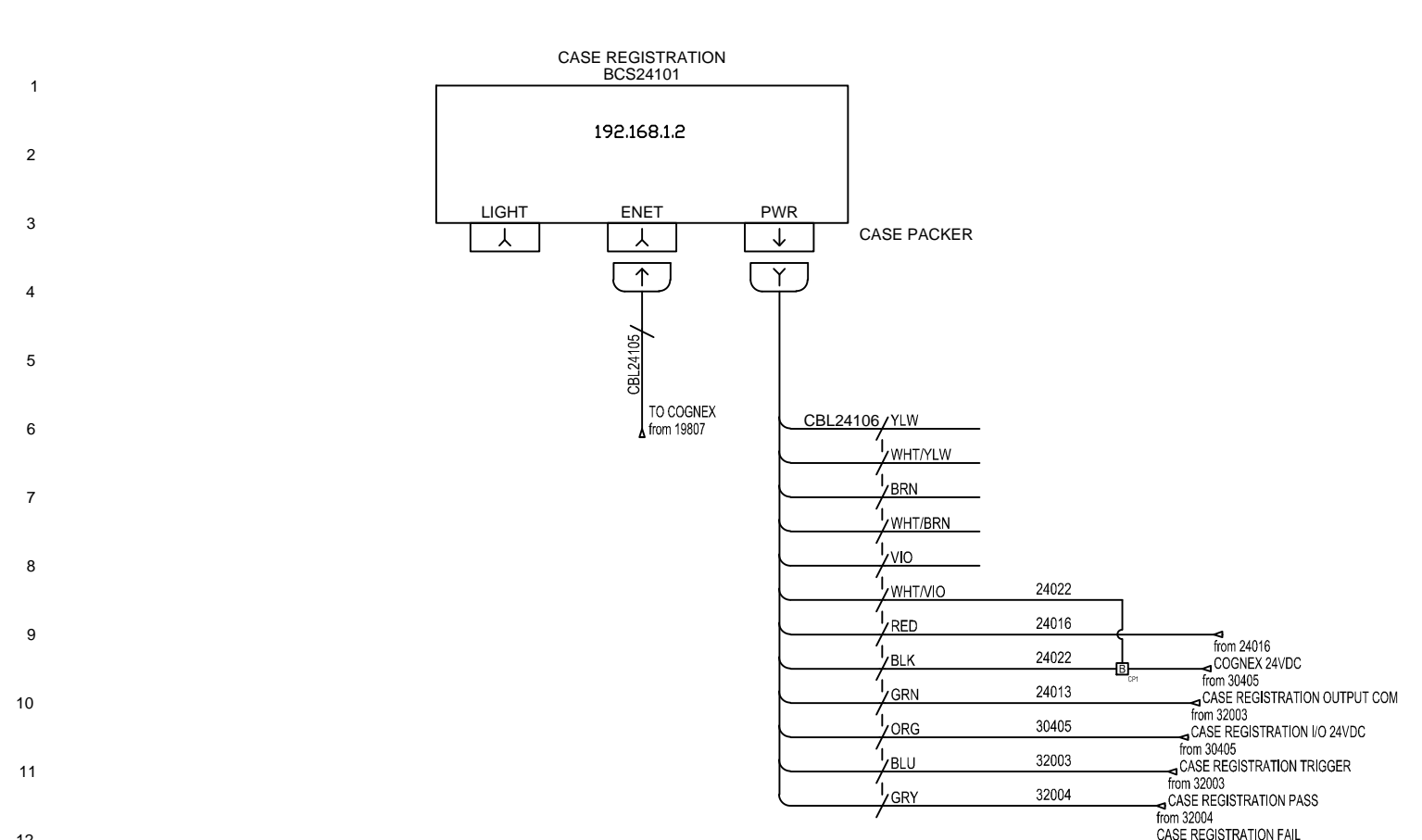


DWG BY: PML	 3711 IOWA STREET ALEXANDRIA, MN 56308 (320) 763-6043 FAX (320) 763-7859	TITLE: 120 GMI RH KDPC & ORIENTER	
REV: 3		DATE: 9/22/10	SHEET: 17 OF 43
1.1		UPGRADED PC	
2-10-21		DRO	
DRAWING NO: PC WIRING			

(240)



(241)



NOTE: PANEL TO BE UL APPROVED AND LABELED

NOTE: ALL WIRE 18 GA. UNLESS OTHERWISE NOTED

NOTE: WIRE COLORS ARE AS FOLLOWS UNLESS OTHERWISE NOTED

480 VAC - BLACK; 120/280 VAC RED (NEUTRAL-WHITE)

DC - BLUE; DC COMMON - BLUE/WHITE

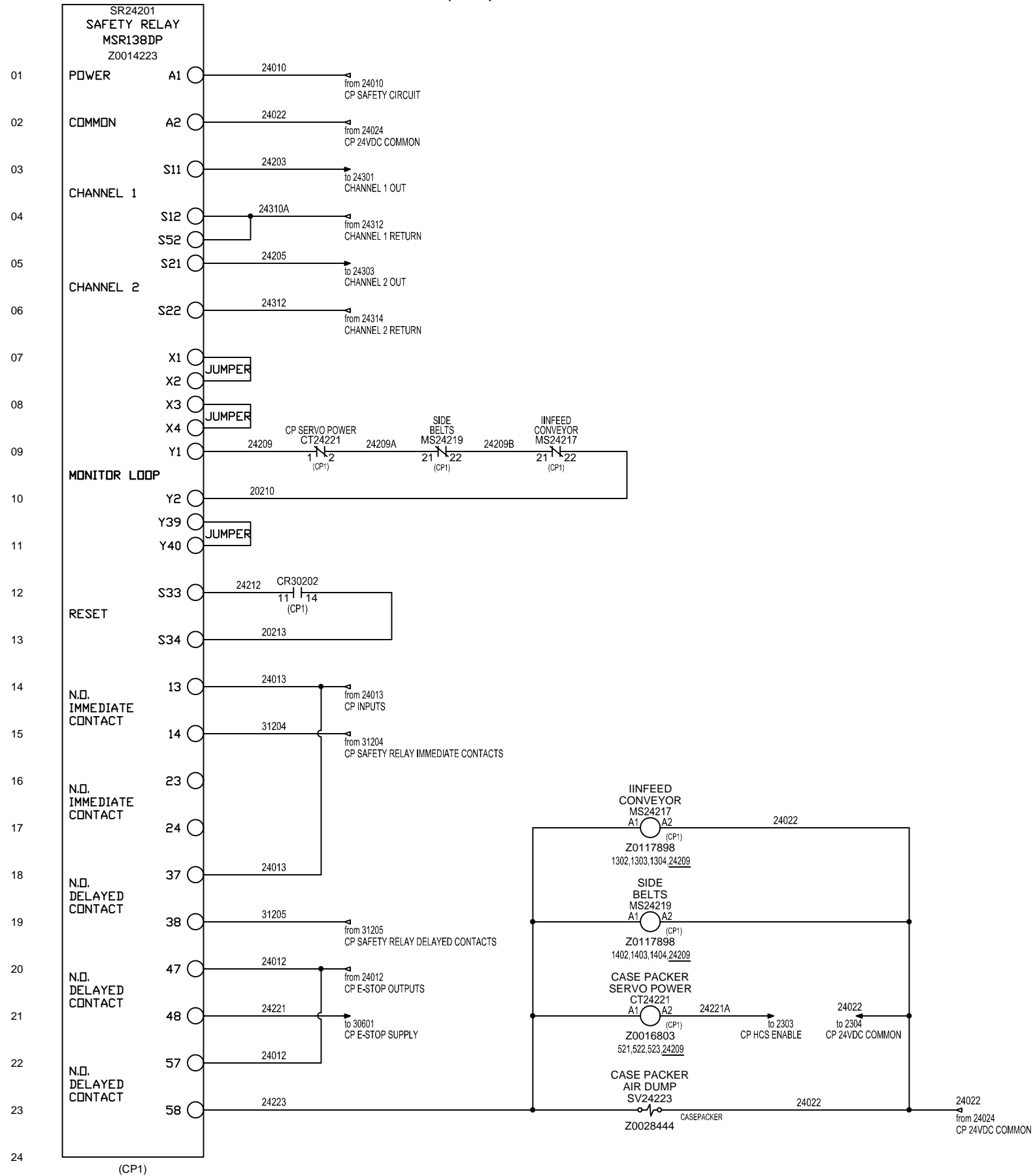
(CP1) CASE PACKER MAIN ELECTRICAL ENCLOSURE

(CP2) ORIENTER MAIN ELECTRICAL ENCLOSURE

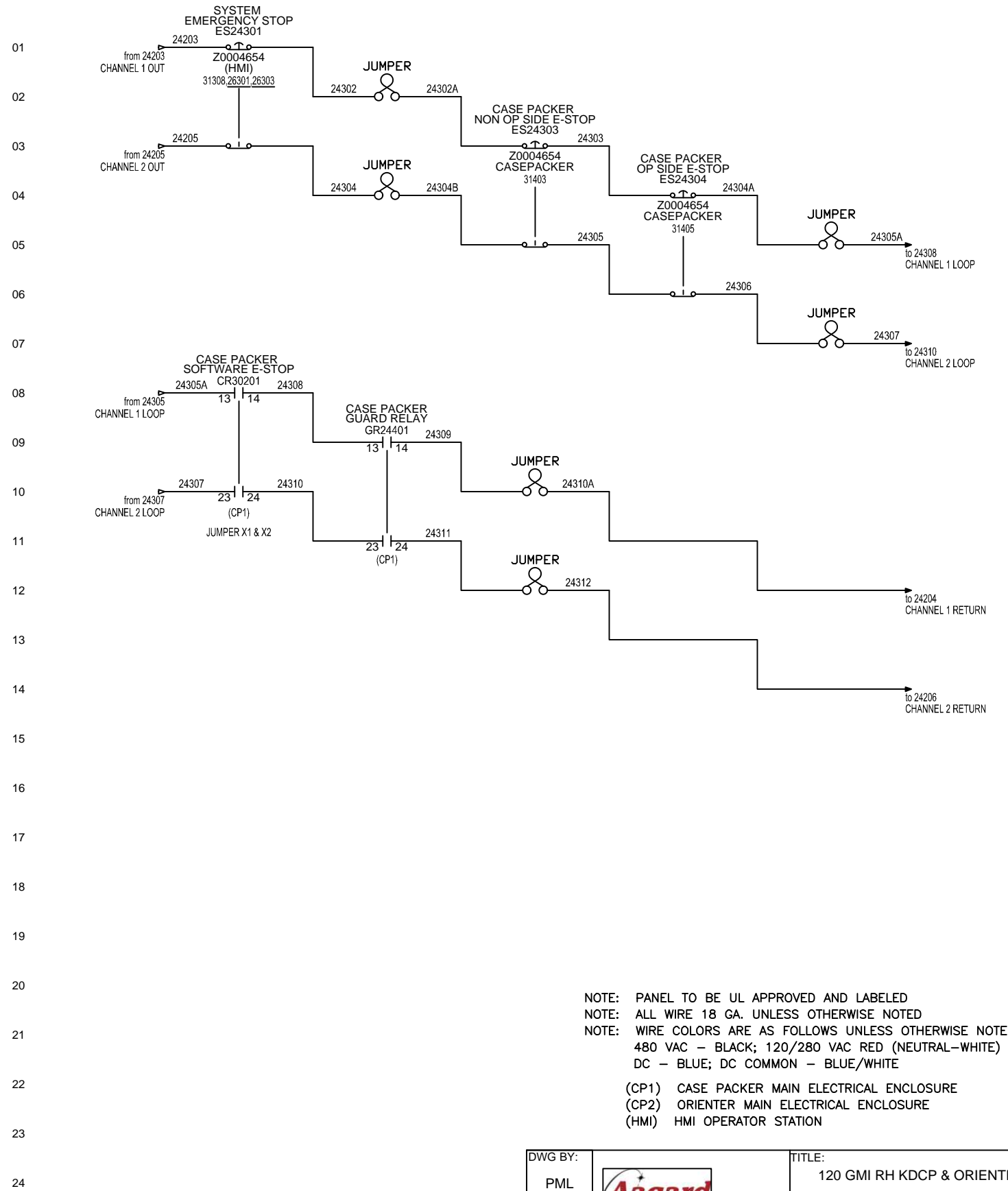
(HMI) HMI OPERATOR STATION

DWG BY: PML		TITLE: 120 GMI RH KDCCP & ORIENTER	
REV: 3		DATE: 02/17/09	SHEET: 18 OF 43
3711 IOWA STREET ALEXANDRIA, MN 56308 (320) 763-6043 FAX (320) 763-7859		DRAWING NO: CASE PACKER 24VDC POWER DIST	

(242)



(243)

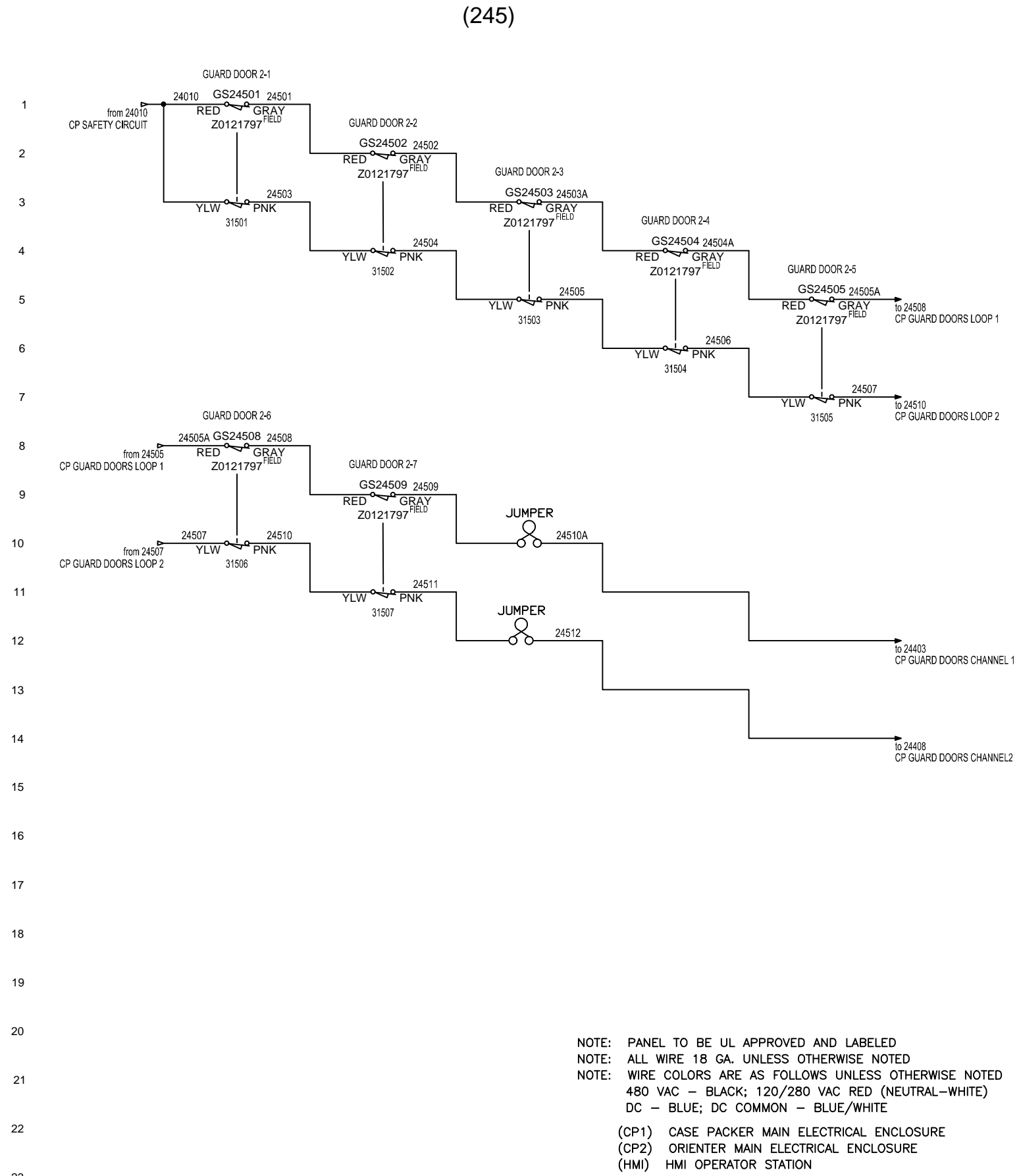
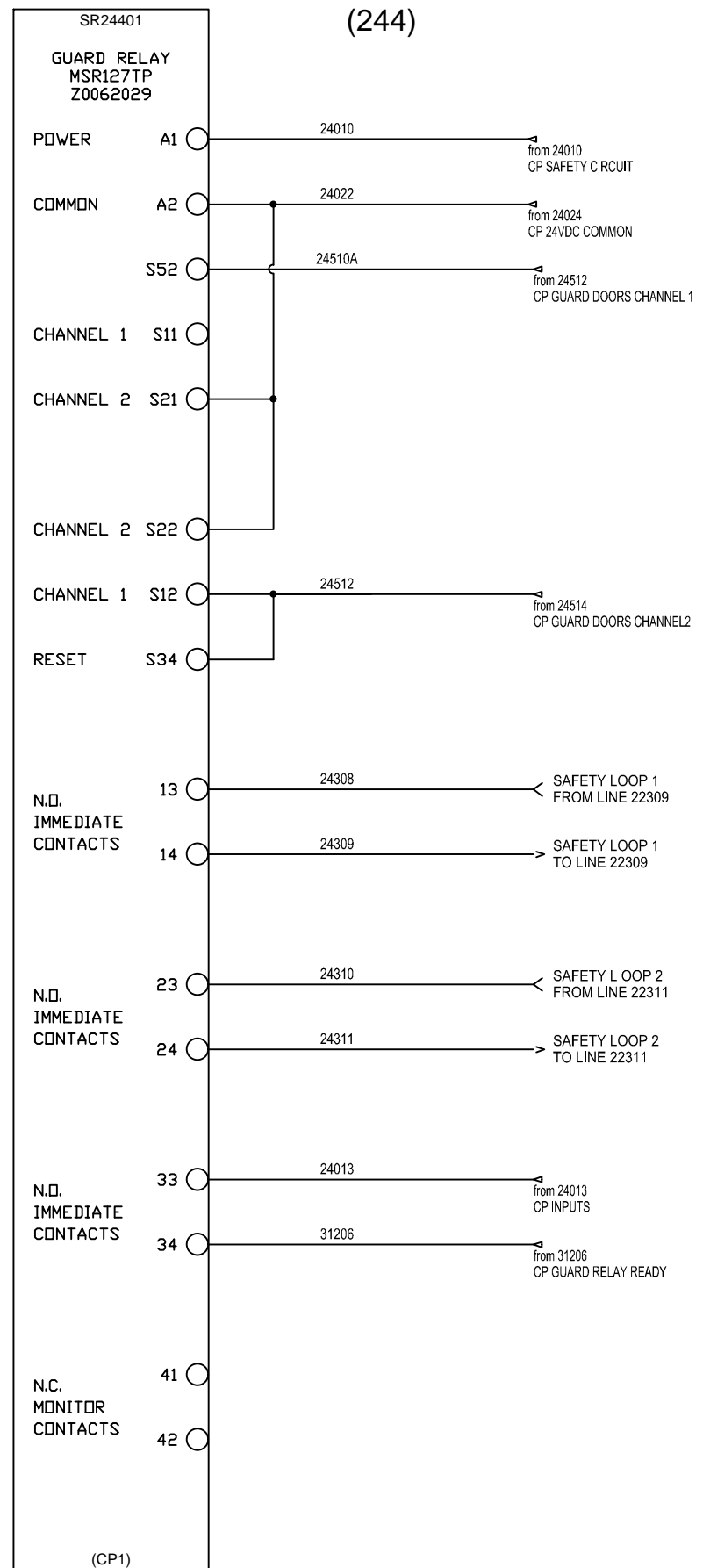


NOTE: PANEL TO BE UL APPROVED AND LABELED
 NOTE: ALL WIRE 18 GA. UNLESS OTHERWISE NOTED
 NOTE: WIRE COLORS ARE AS FOLLOWS UNLESS OTHERWISE NOTED
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 DC - BLUE; DC COMMON - BLUE/WHITE

(CP1) CASE PACKER MAIN ELECTRICAL ENCLOSURE
 (CP2) ORIENTER MAIN ELECTRICAL ENCLOSURE
 (HMI) HMI OPERATOR STATION

DWG BY: PML		TITLE: 120 GMI RH KDPC & ORIENTER	
REV: 3		DATE: 02/17/09	SHEET: 19 OF 43
		DRAWING NO: CASE PACKER SAFETY WIRING	

3711 IOWA STREET
ALEXANDRIA, MN 56308
(320) 763-6043
FAX (320) 763-7859



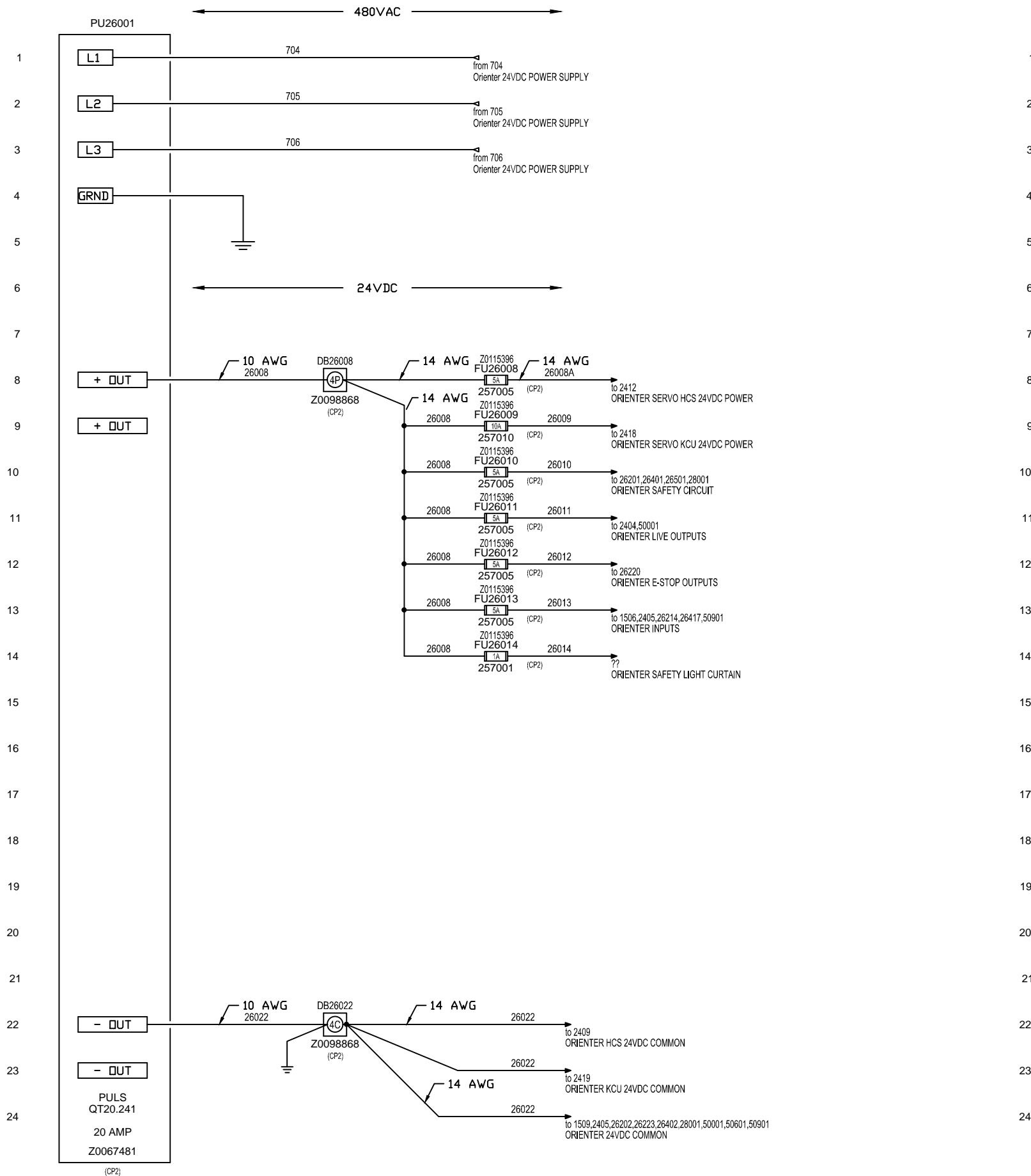
NOTE: PANEL TO BE UL APPROVED AND LABELED
 NOTE: ALL WIRE 18 GA. UNLESS OTHERWISE NOTED
 NOTE: WIRE COLORS ARE AS FOLLOWS UNLESS OTHERWISE NOTED
 480 VAC - BLACK; 120/280 VAC RED (NEUTRAL-WHITE)
 DC - BLUE; DC COMMON - BLUE/WHITE

(CP1) CASE PACKER MAIN ELECTRICAL ENCLOSURE
 (CP2) ORIENTER MAIN ELECTRICAL ENCLOSURE
 (HMI) HMI OPERATOR STATION

DWG BY: PML	 3711 IOWA STREET ALEXANDRIA, MN 56308 (320) 763-6043 FAX (320) 763-7859	TITLE: 120 GMI RH KDGP & ORIENTER	
REV: 3		DATE: 02/17/09	SHEET: 20 OF 43
		DRAWING NO: CASE PACKER GUARD DOOR WIRING	


(260)

(261)

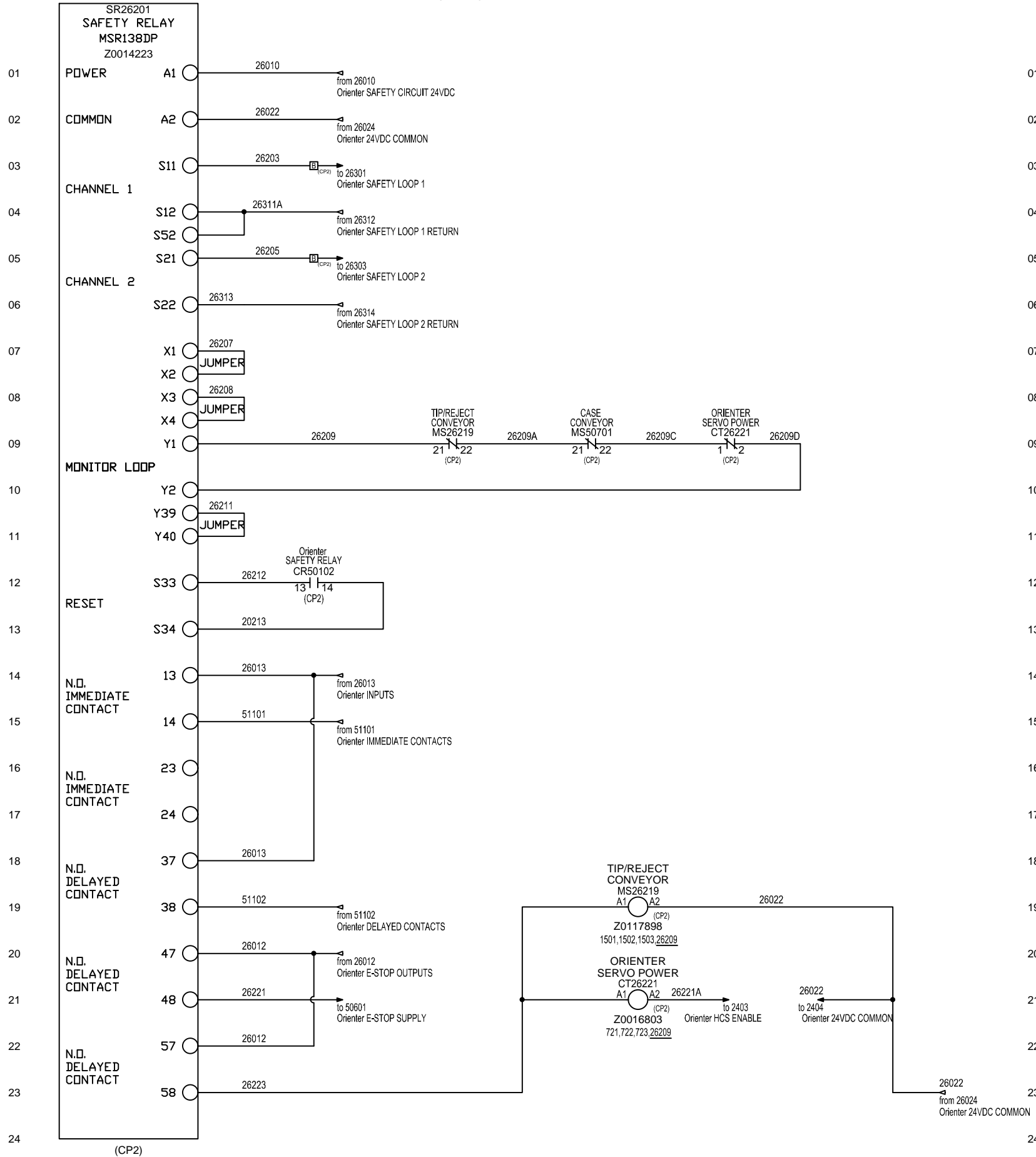


NOTE: PANEL TO BE UL APPROVED AND LABELED
 NOTE: ALL WIRE 18 GA. UNLESS OTHERWISE NOTED
 NOTE: WIRE COLORS ARE AS FOLLOWS UNLESS OTHERWISE NOTED
 480 VAC - BLACK; 120/280 VAC RED (NEUTRAL-WHITE)
 DC - BLUE; DC COMMON - BLUE/WHITE

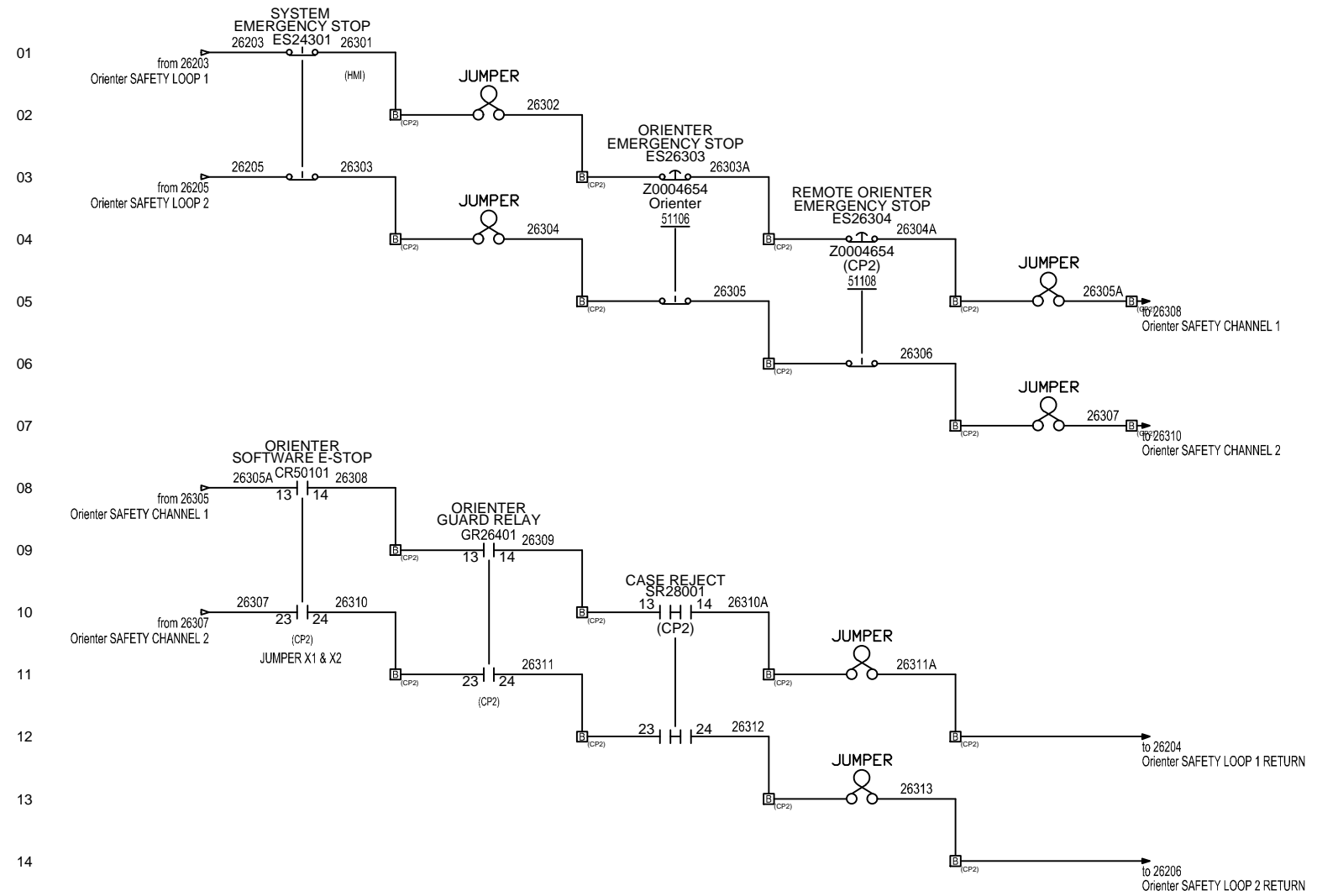
(CP1) CASE PACKER MAIN ELECTRICAL ENCLOSURE
 (CP2) Orienter MAIN ELECTRICAL ENCLOSURE
 (HMI) HMI OPERATOR STATION

DWG BY: PML	 3711 IOWA STREET ALEXANDRIA, MN 56308 (320) 763-6043 FAX (320) 763-7859	TITLE: 120 GMI RH KDCP & ORIENTER	
REV: 3		DATE: 02/17/09	SHEET: 21 OF 43
		DRAWING NO: ORIENTER 24VDC POWER DIST	

(262)




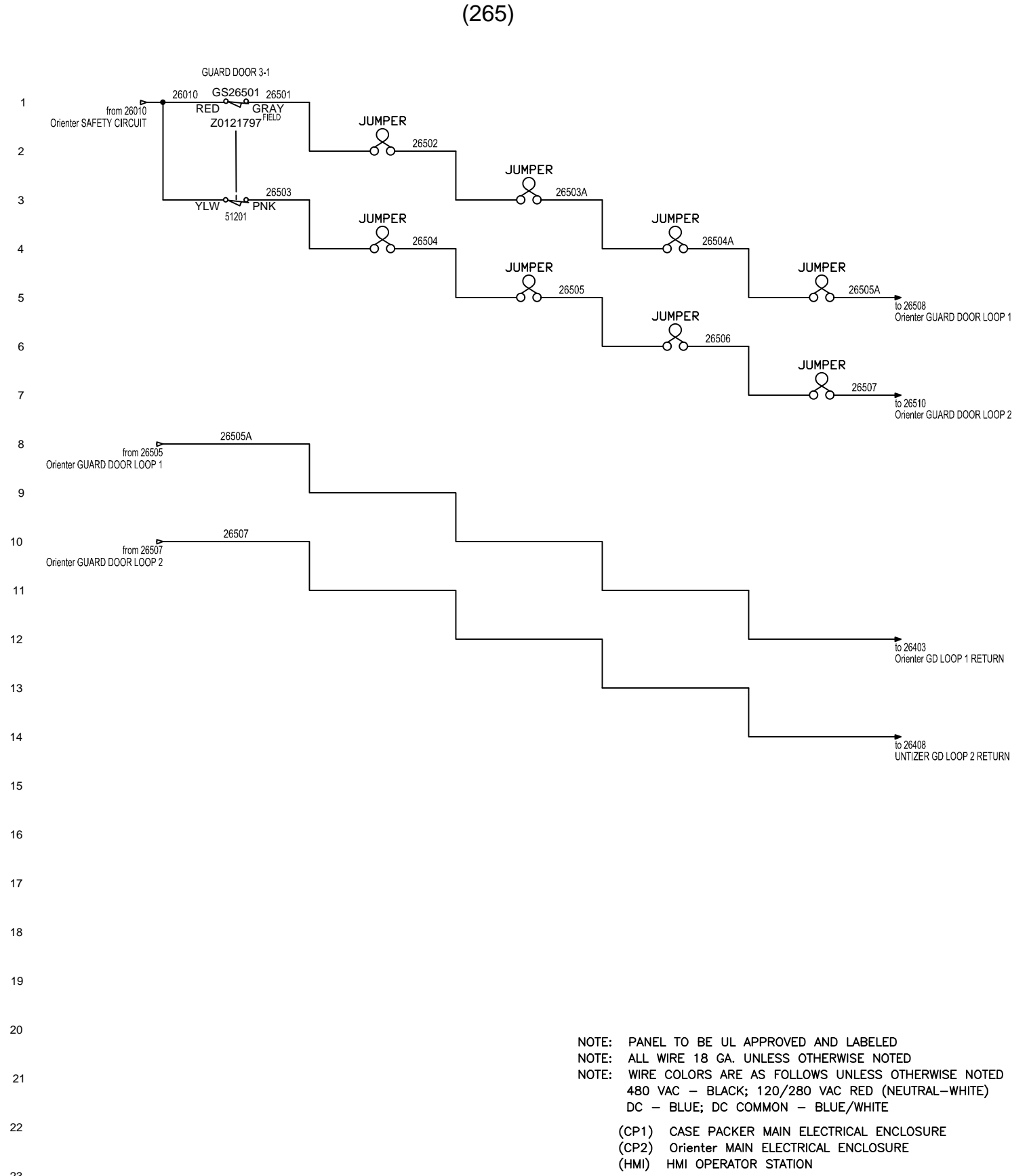
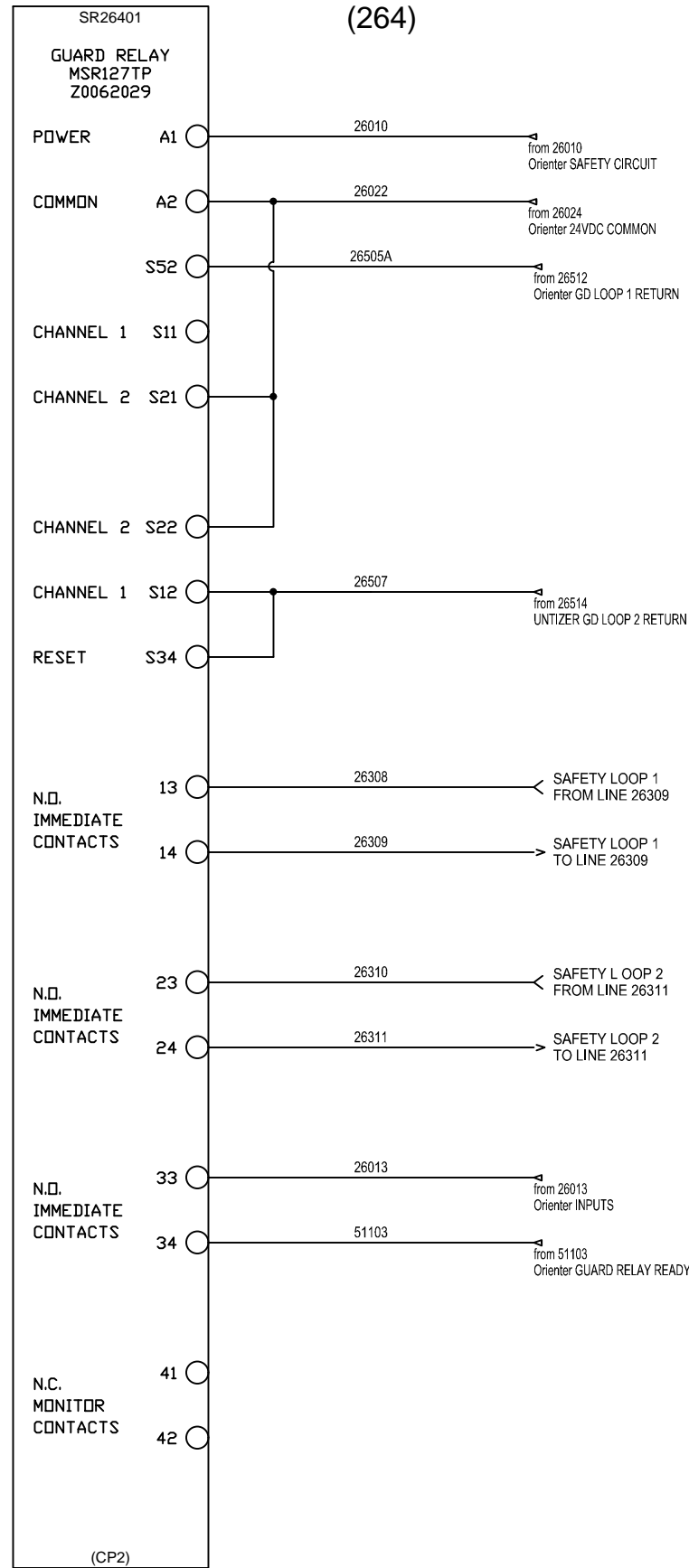
(263)



NOTE: PANEL TO BE UL APPROVED AND LABELED
 NOTE: ALL WIRE 18 GA. UNLESS OTHERWISE NOTED
 NOTE: WIRE COLORS ARE AS FOLLOWS UNLESS OTHERWISE NOTED
 480 VAC - BLACK; 120/280 VAC RED (NEUTRAL-WHITE)
 DC - BLUE; DC COMMON - BLUE/WHITE


(CP1) CASE PACKER MAIN ELECTRICAL ENCLOSURE
 (CP2) Orienter MAIN ELECTRICAL ENCLOSURE
 (HMI) HMI OPERATOR STATION

DWG BY: PML	 3711 IOWA STREET ALEXANDRIA, MN 56308 (320) 763-6043 FAX (320) 763-7859	TITLE: 120 GMI RH KDGP & ORIENTER	
REV: 3		DATE: 02/17/09	SHEET: 22 OF 43
1.1		DRAWING NO: ORIENTER SAFETY WIRING	



NOTE: PANEL TO BE UL APPROVED AND LABELED
 NOTE: ALL WIRE 18 GA. UNLESS OTHERWISE NOTED
 NOTE: WIRE COLORS ARE AS FOLLOWS UNLESS OTHERWISE NOTED
 480 VAC - BLACK; 120/280 VAC RED (NEUTRAL-WHITE)
 DC - BLUE; DC COMMON - BLUE/WHITE

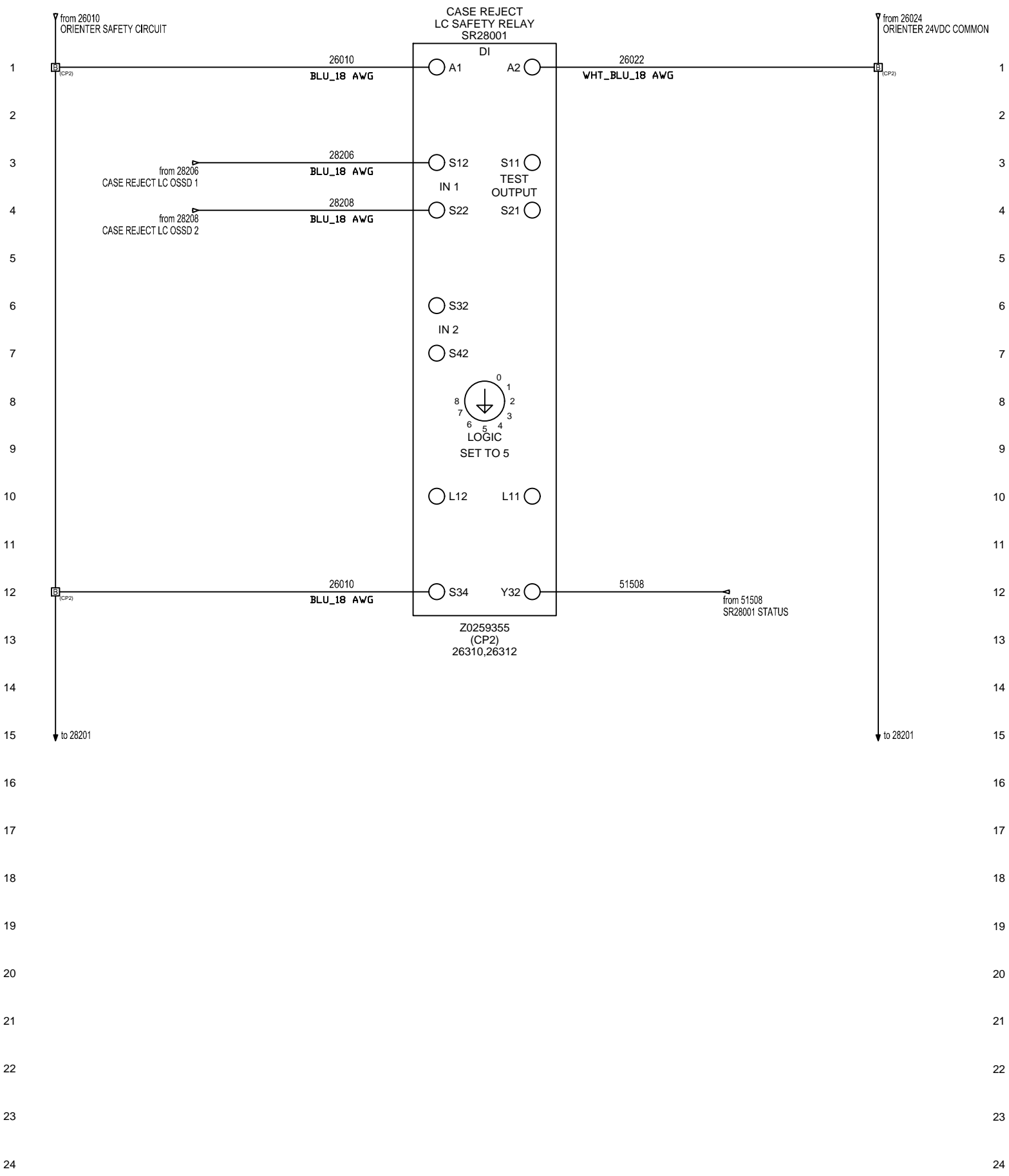
(CP1) CASE PACKER MAIN ELECTRICAL ENCLOSURE
 (CP2) Orienter MAIN ELECTRICAL ENCLOSURE
 (HMI) HMI OPERATOR STATION


DWG BY: PML		TITLE: 120 GMI RH KDCP & ORIENTER	
REV: 3		DATE: 02/17/09	SHEET: 23 OF 43
		DRAWING NO: ORIENTER GUARD DOOR WIRING	

3711 IOWA STREET
 ALEXANDRIA, MN 56308
 (320) 763-6043
 FAX (320) 763-7859

(280)

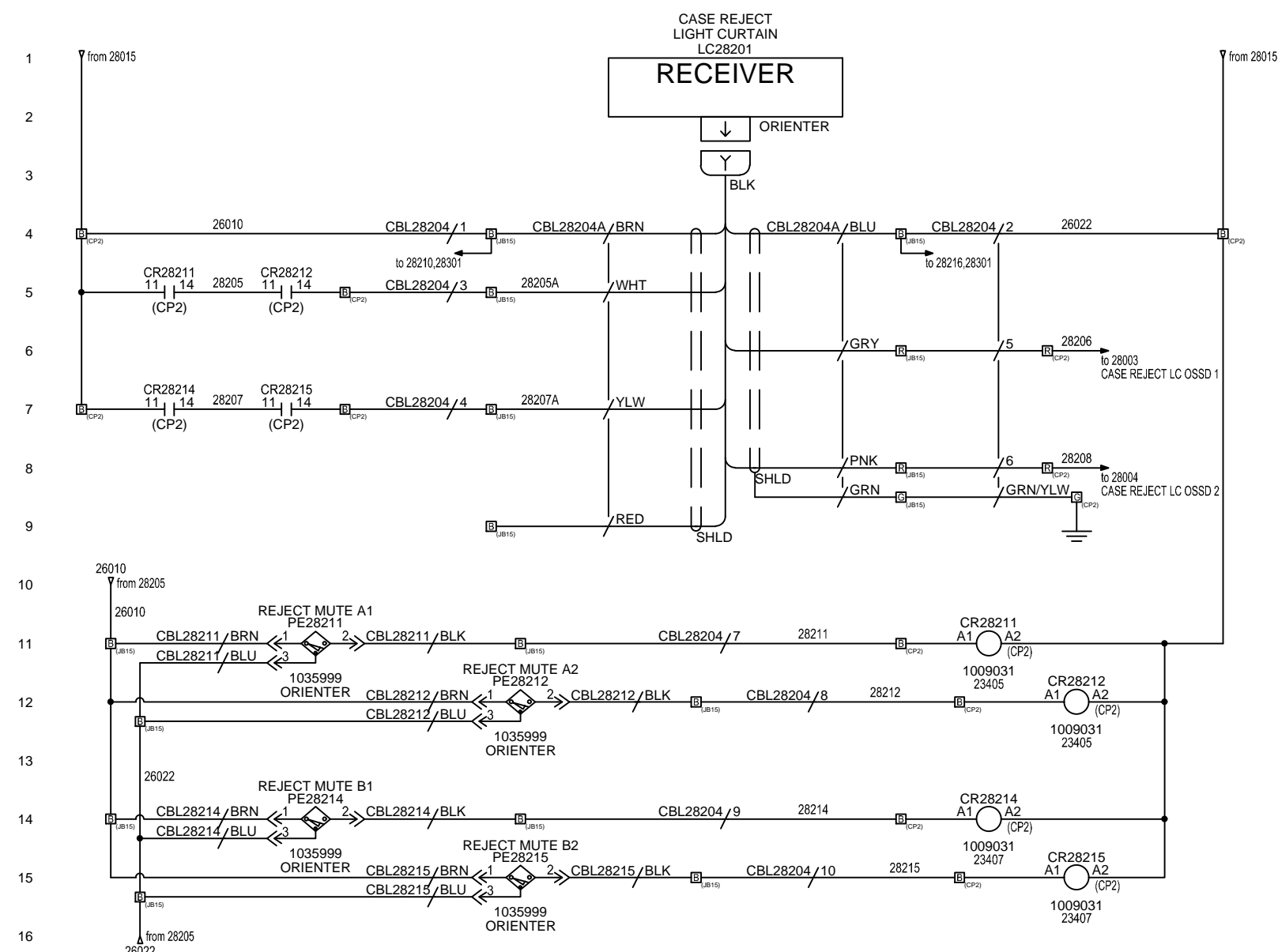
(281)



DWG BY: PML	 3711 IOWA STREET ALEXANDRIA, MN 56308 (320) 763-6043 FAX (320) 763-7859	TITLE: 120 GMI RH KDCP & ORIENTER
REV: 3		DATE: 5/24/10
		DRAWING NO: CASE REJECT LC SAFETY RELAY

1.1	ADDED SR28001	2-26-20	DRO
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(282)



(283)

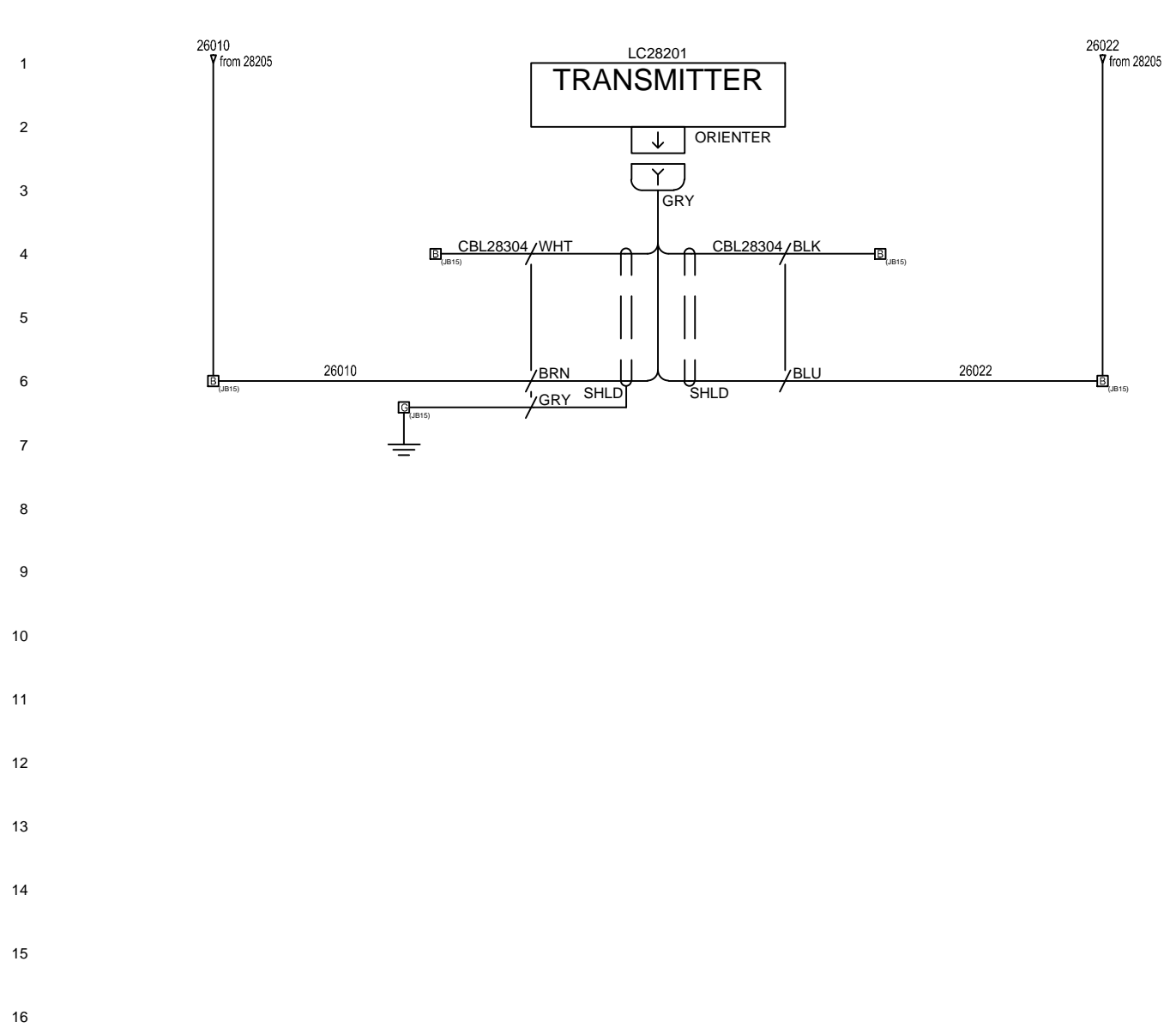


Table 48 - Receiver DIP Switch Settings

Switch	450L-APR-MU-8	Description	Comment
1	OFF	—	—
2	OFF	Low Range Disabled	Optional
3	OFF	Beam Coding Disabled	Optional
4	OFF	—	—
5	OFF	Automatic Start	Optional
6	OFF	—	Optional
7	OFF	EDM Disabled	—
8	ON	Muting	Required
9	OFF or ON	DIP 9: OFF, DIP 10: ON, DIP 11: OFF 2L muting DIP 9: ON, DIP 10: OFF, DIP 11: OFF 2T muting	Determines Muting Type
10	OFF or ON		
11	OFF		
12	OFF		

DWG BY: PML

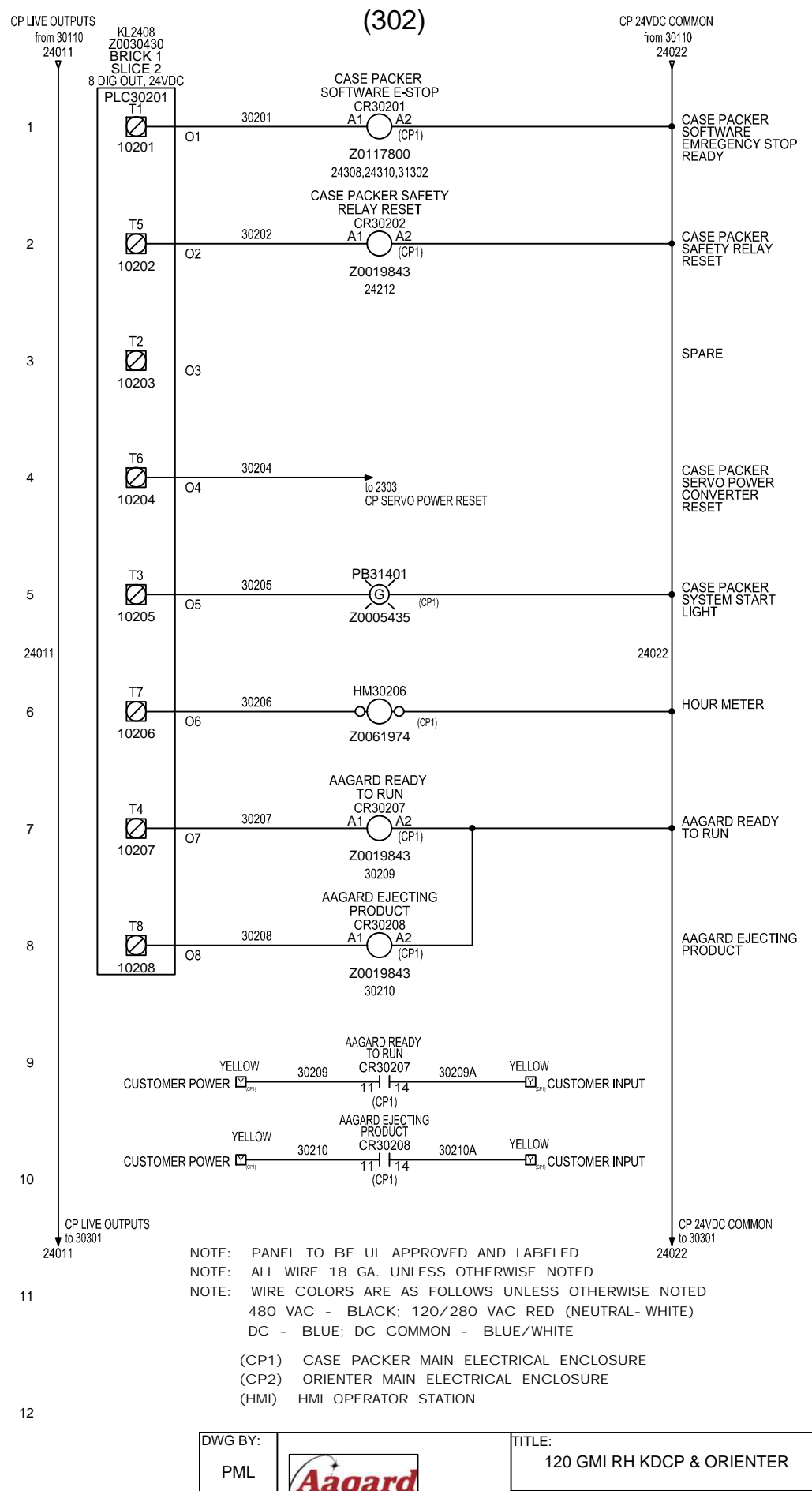
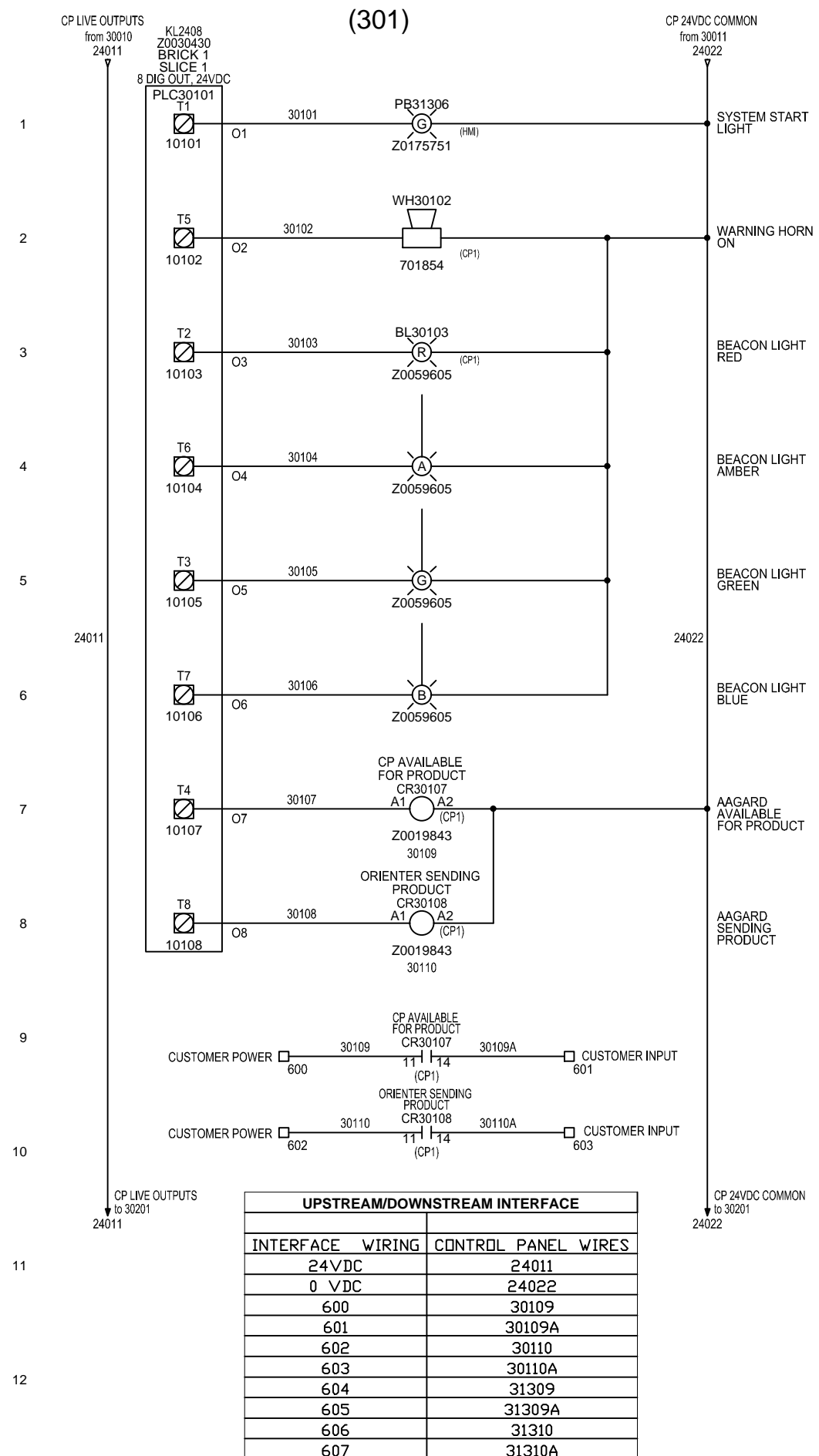
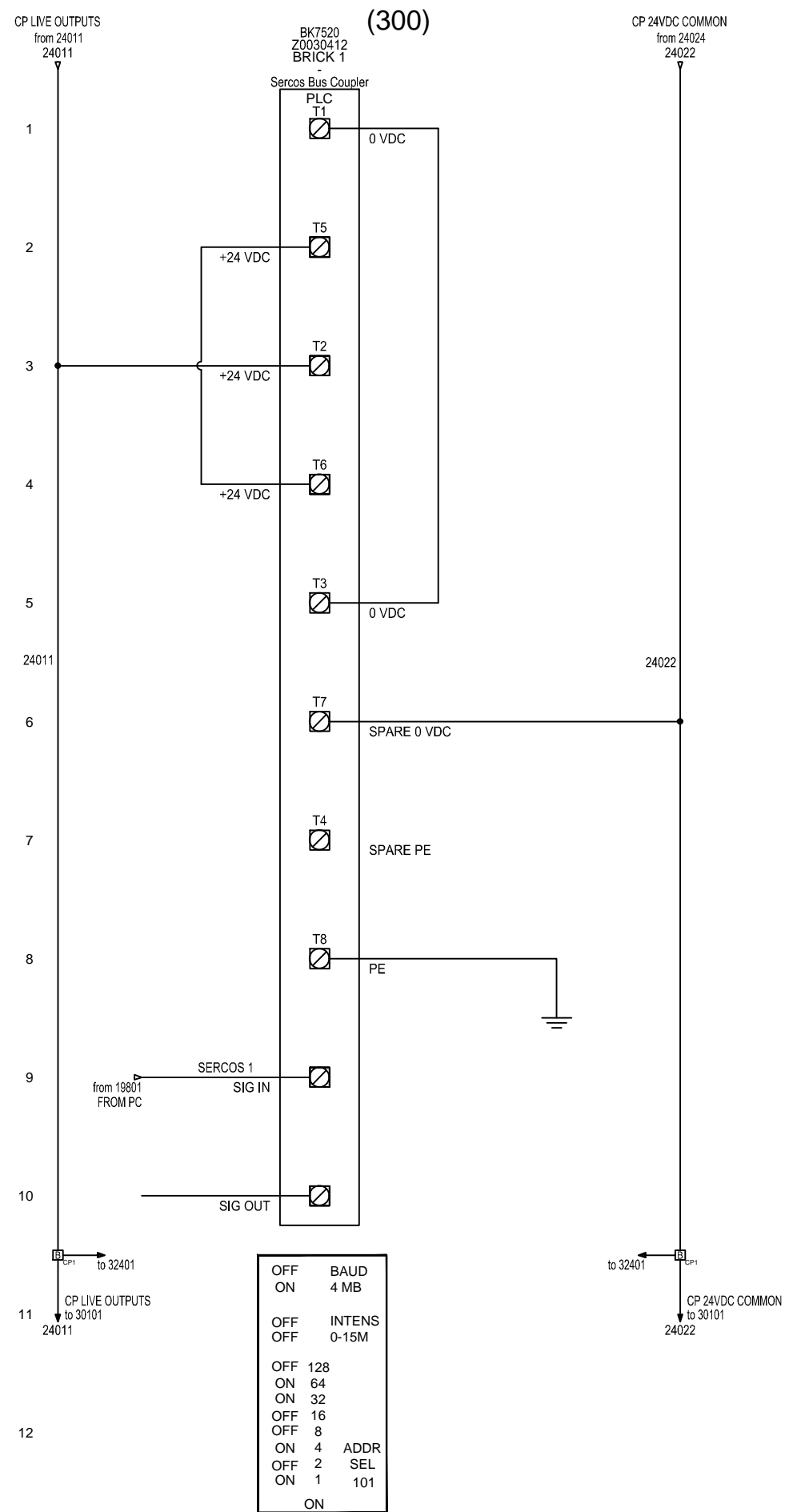
REV: 3

DATE: 5/24/10 SHEET: 25 OF 43

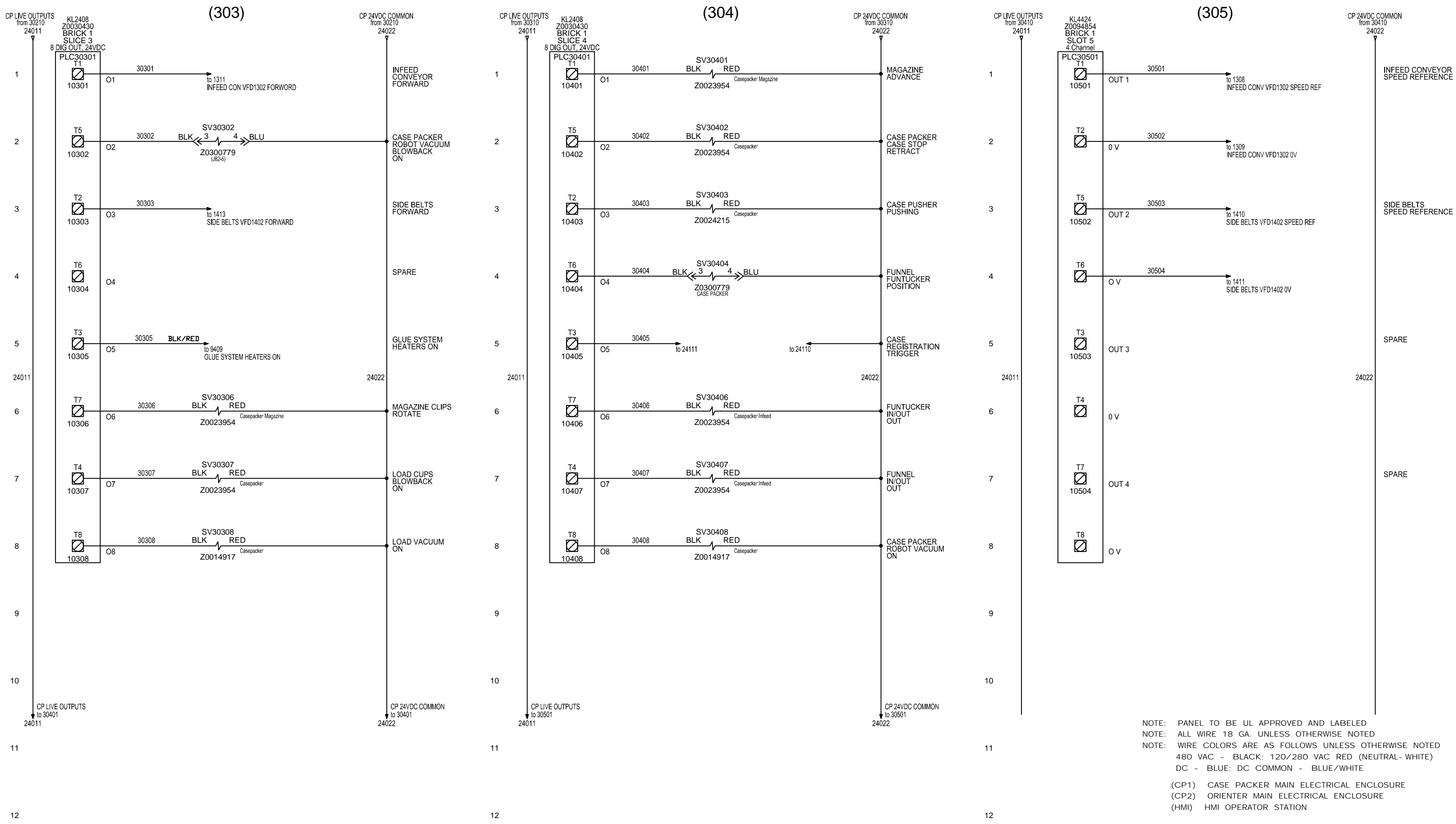
DRAWING NO: CASE REJECT LIGHT CURTAIN

3711 IOWA STREET
ALEXANDRIA, MN 56308
(320) 763-6043
FAX (320) 763-7859

TITLE: 120 GMI RH KDCCP & ORIENTER




DWG BY:	PML		TITLE:	120 GMI RH KDCCP & ORIENTER	
REV:	3		DATE:	9/22/10	SHEET:
3711 IOWA STREET ALEXANDRIA, MN 56308 (320) 763-6043 FAX (320) 763-7859			DRAWING NO: LIVE OUTPUTS - B1,S1-2		



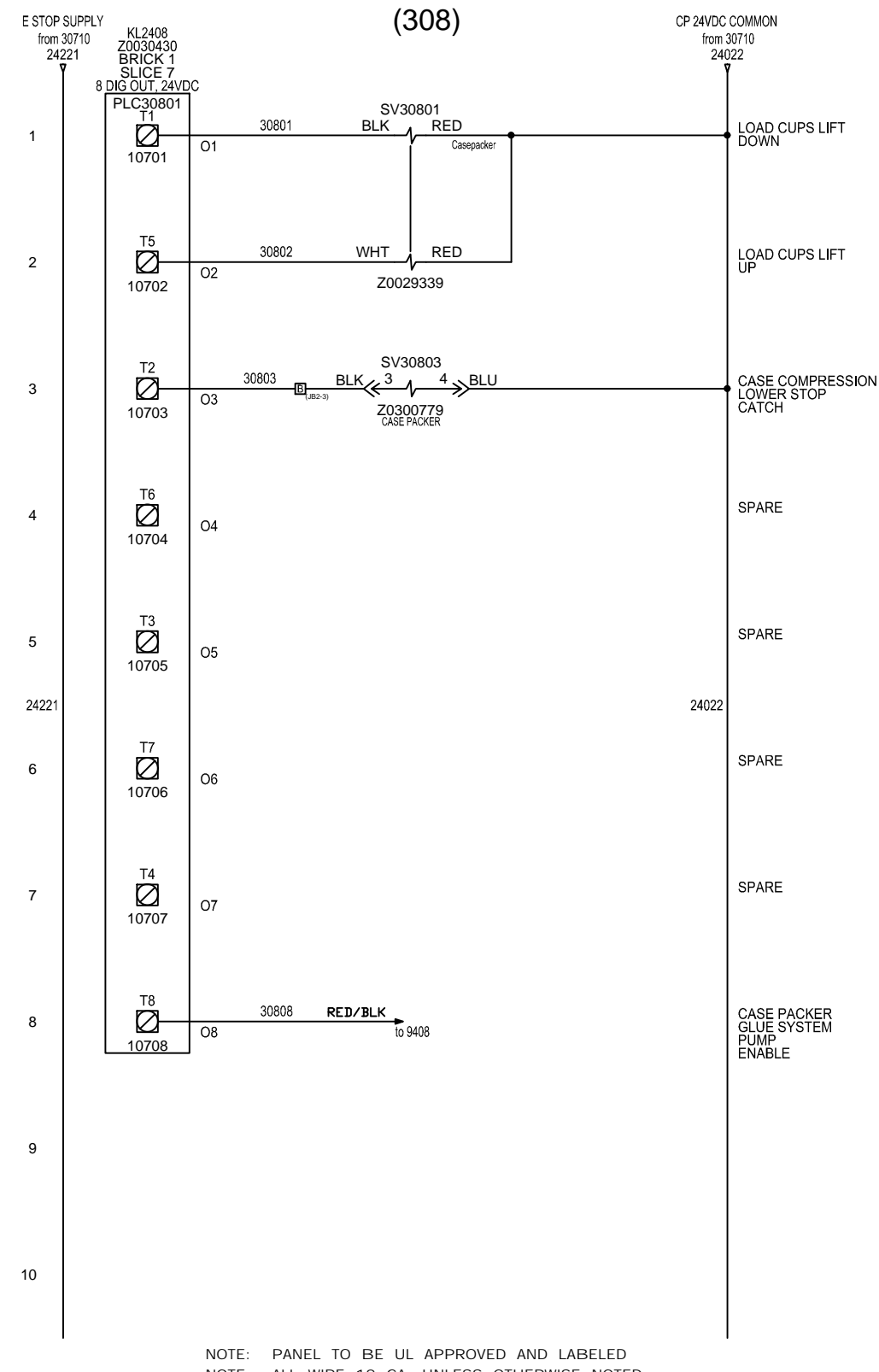
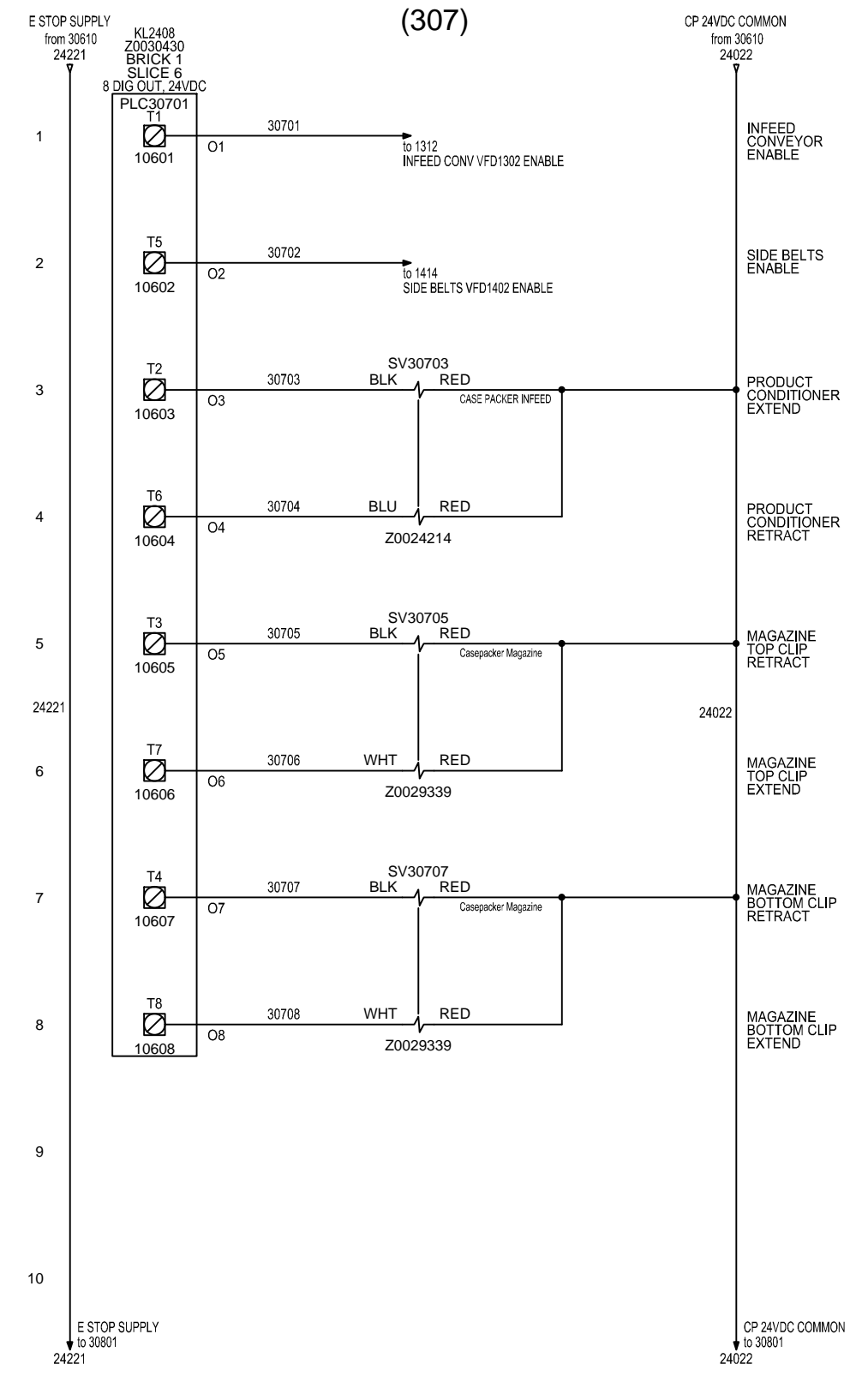
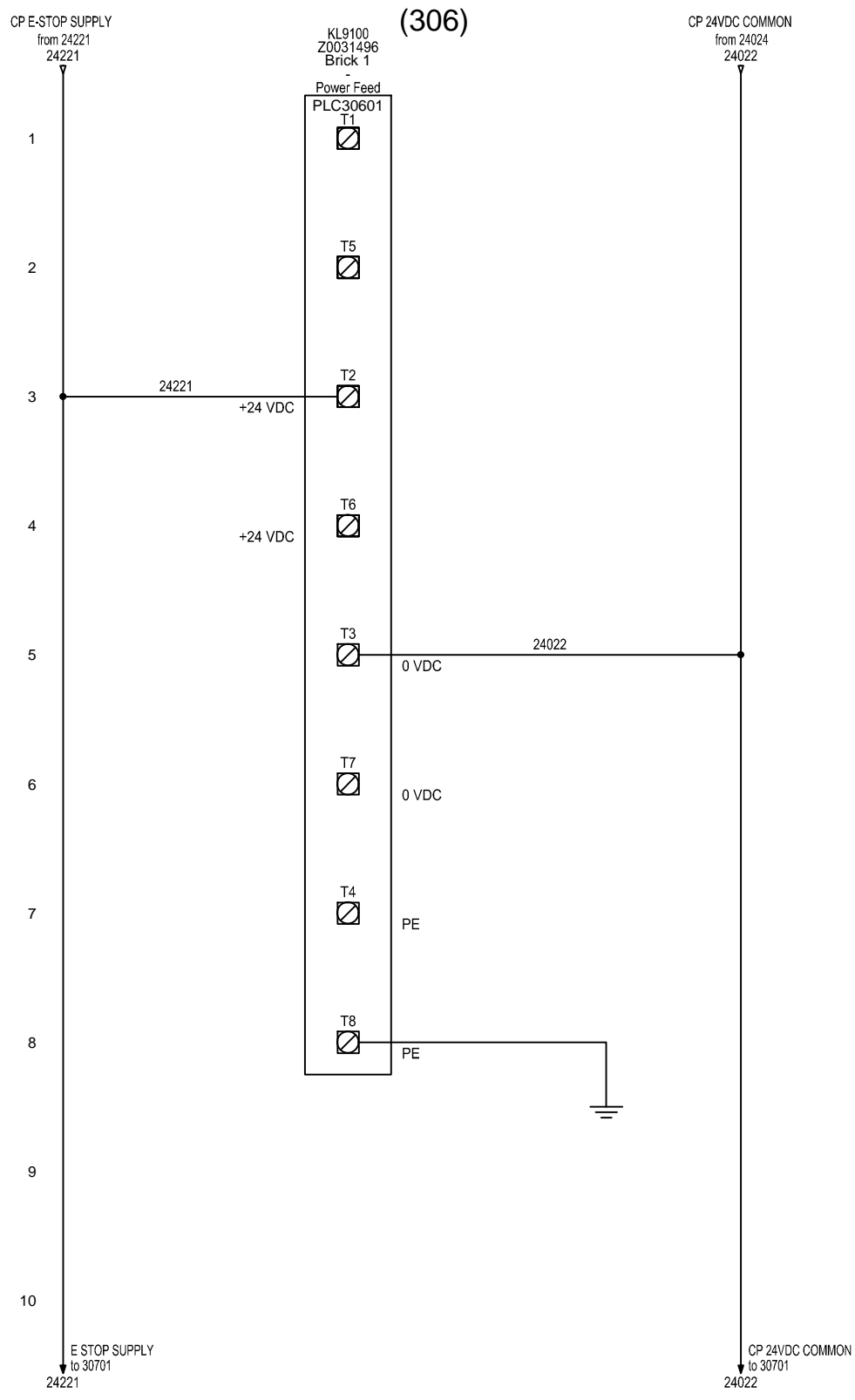
NOTE: PANEL TO BE UL APPROVED AND LABELED
 NOTE: ALL WIRE 18 GA. UNLESS OTHERWISE NOTED
 NOTE: WIRE COLORS ARE AS FOLLOWS UNLESS OTHERWISE NOTED
 480 VAC - BLACK; 120/280 VAC RED (NEUTRAL - WHITE)
 DC - BLUE; DC COMMON - BLUE/WHITE

(CP1) CASE PACKER MAIN ELECTRICAL ENCLOSURE
 (CP2) ORIENTER MAIN ELECTRICAL ENCLOSURE
 (HMI) HMI OPERATOR STATION

3.2	ADDED GLUE SYSTEM OUTPUT	4-28-22	DRO
3.1	ADDED SV30302 & SV30404	5-16-19	DRO
3.0	ADDED CASE REGISTRATION OUTPUT	4-26-18	DRO


DWG BY: PML
 REV: 3

 3711 IOWA STREET
 ALEXANDRIA, MN 56308
 (320) 763-6043
 FAX (320) 763-7859

TITLE: 120 GMI RH KDCCP & ORIENTER
 DATE: 02/17/09 SHEET: 27 OF 43
 DRAWING NO: LIVE OUTPUTS - B1,S3-5

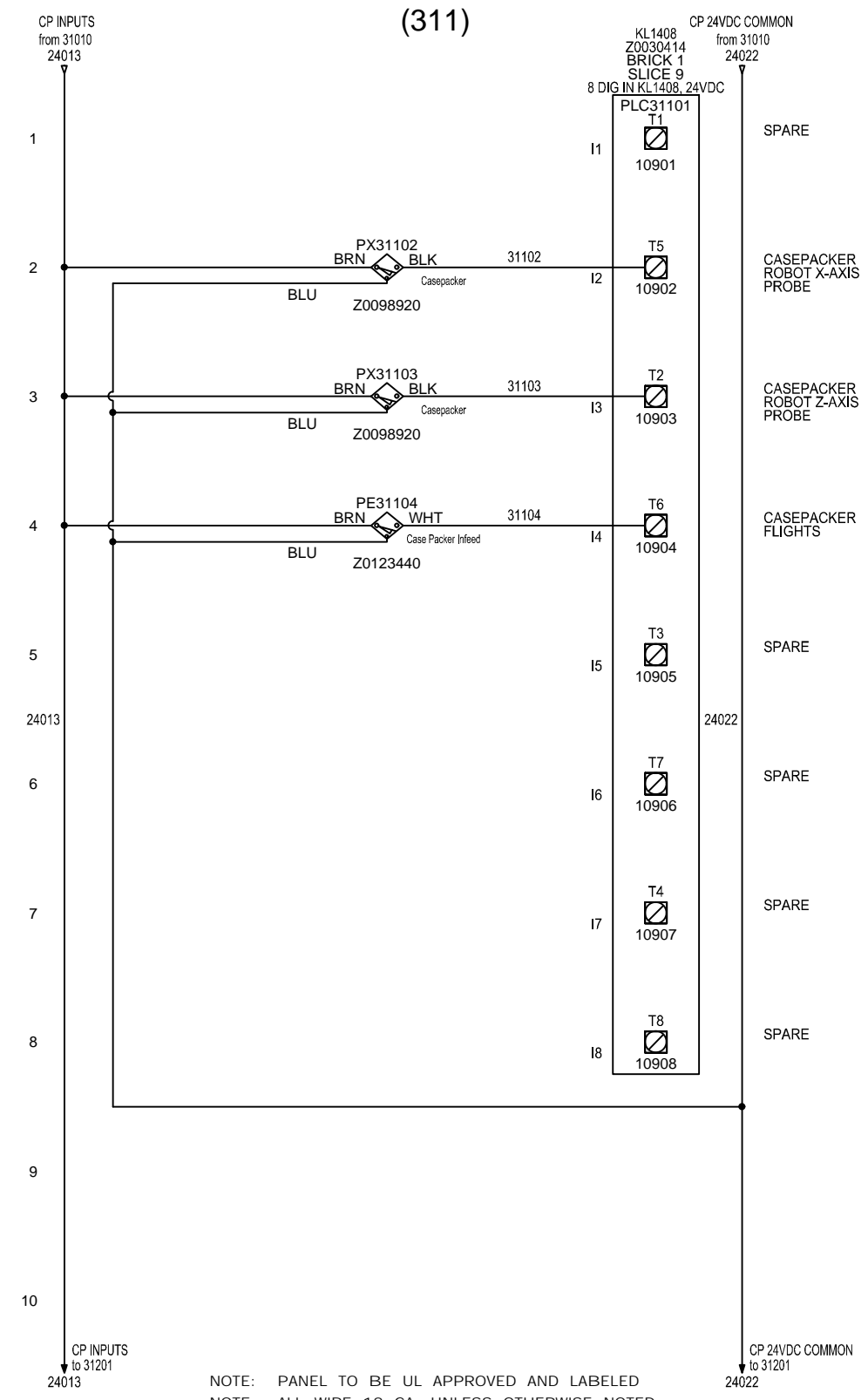
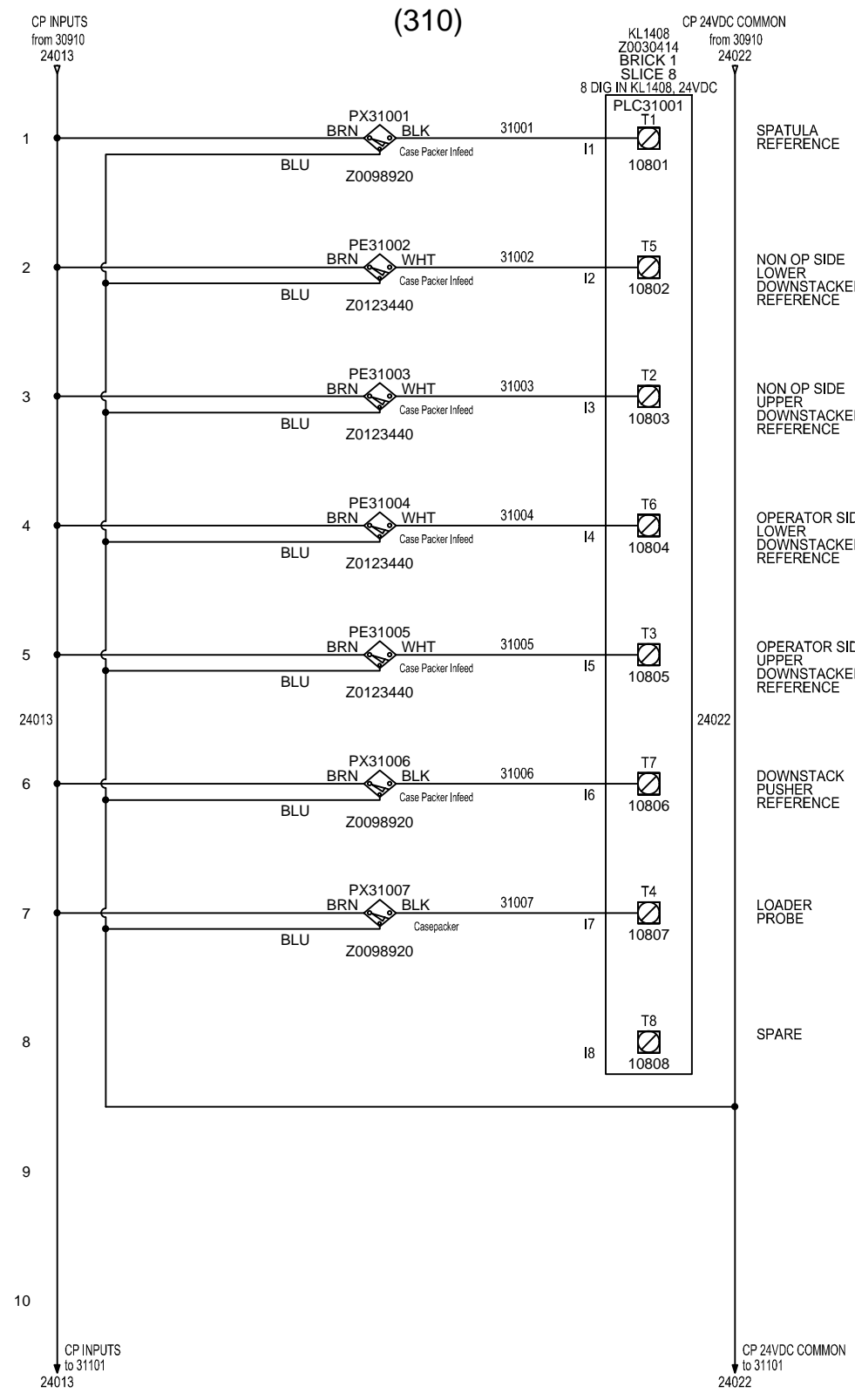
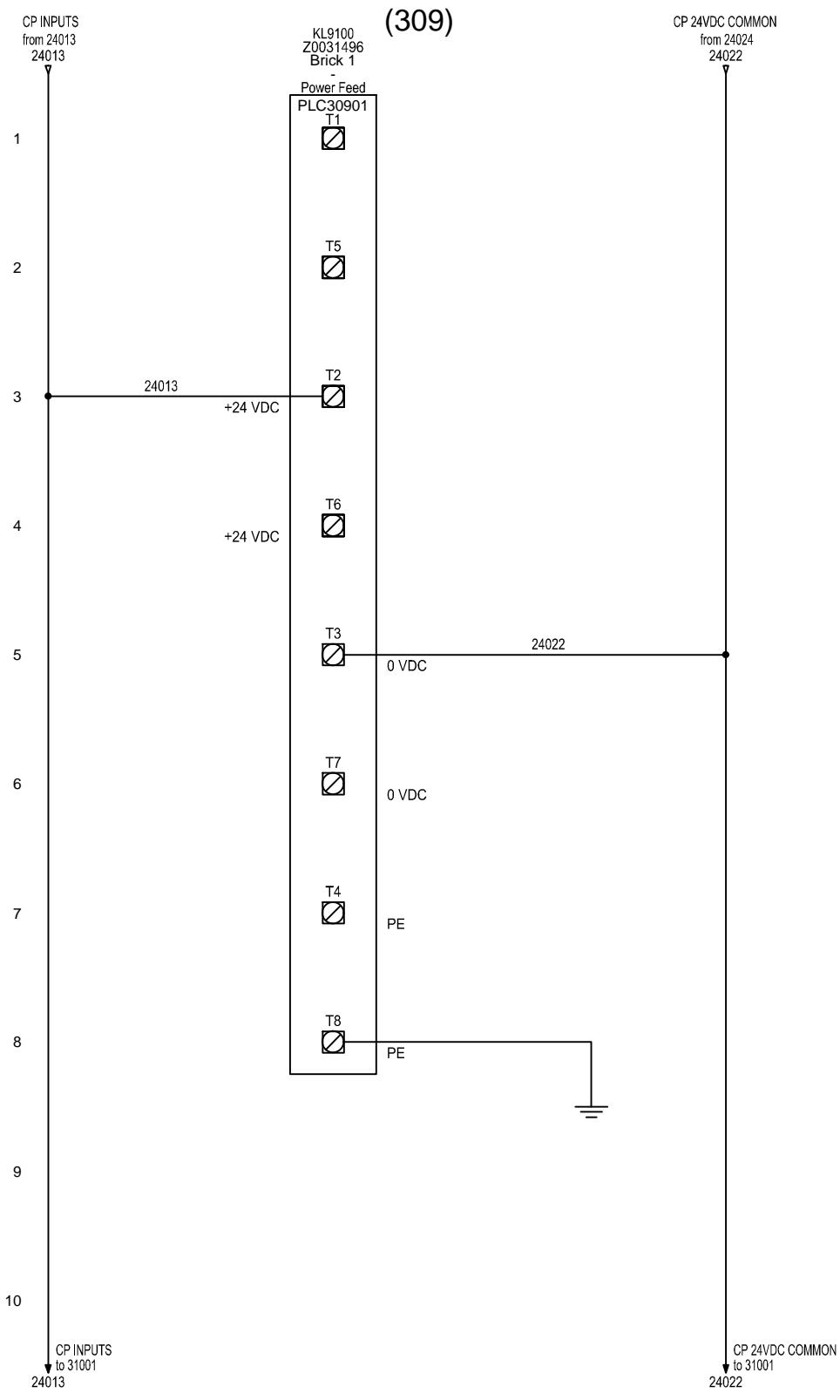


NOTE: PANEL TO BE UL APPROVED AND LABELED
 NOTE: ALL WIRE 18 GA. UNLESS OTHERWISE NOTED
 NOTE: WIRE COLORS ARE AS FOLLOWS UNLESS OTHERWISE NOTED
 480 VAC - BLACK; 120/280 VAC RED (NEUTRAL - WHITE)
 DC - BLUE; DC COMMON - BLUE/WHITE

(CP1) CASE PACKER MAIN ELECTRICAL ENCLOSURE
 (CP2) ORIENTER MAIN ELECTRICAL ENCLOSURE
 (HMI) HMI OPERATOR STATION


DWG BY: PML	 3711 IOWA STREET ALEXANDRIA, MN 56308 (320) 763-6043 FAX (320) 763-7859	TITLE: 120 GMI RH KDCCP & ORIENTER	
REV: 3		DATE: 02/17/09	SHEET: 28 OF 43
		DRAWING NO: E-STOP OUTPUTS - B1,S6-7	

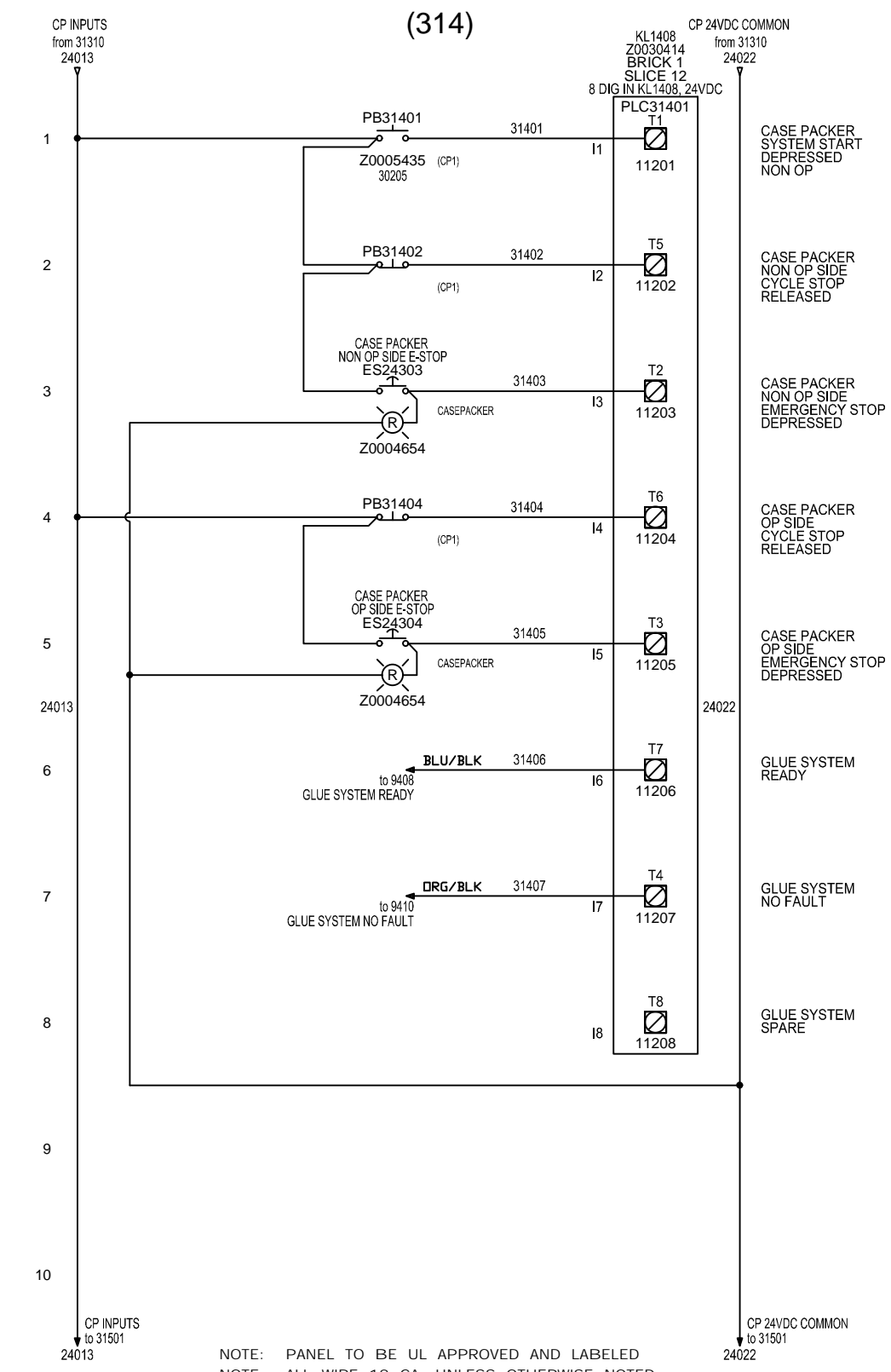
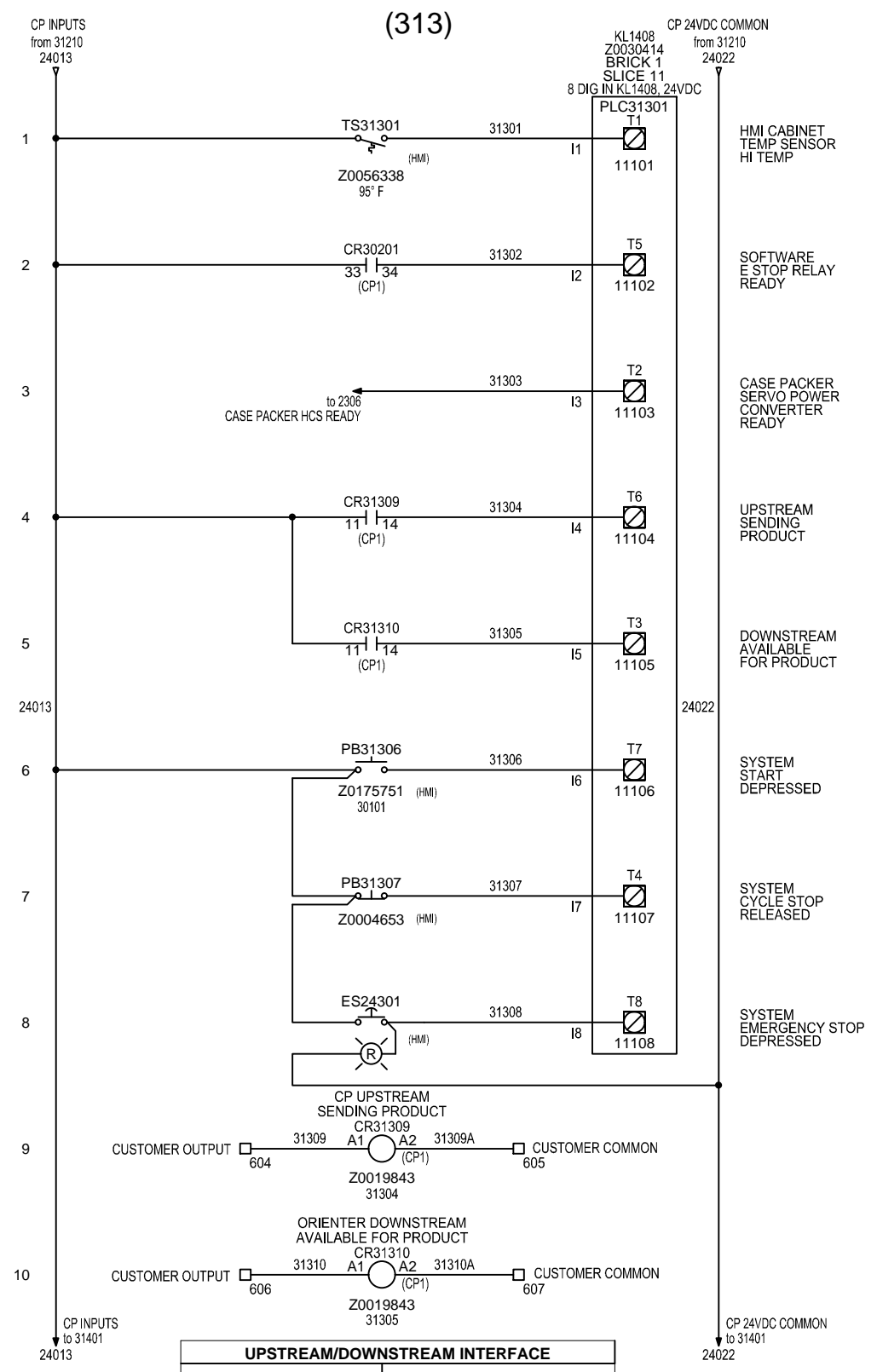
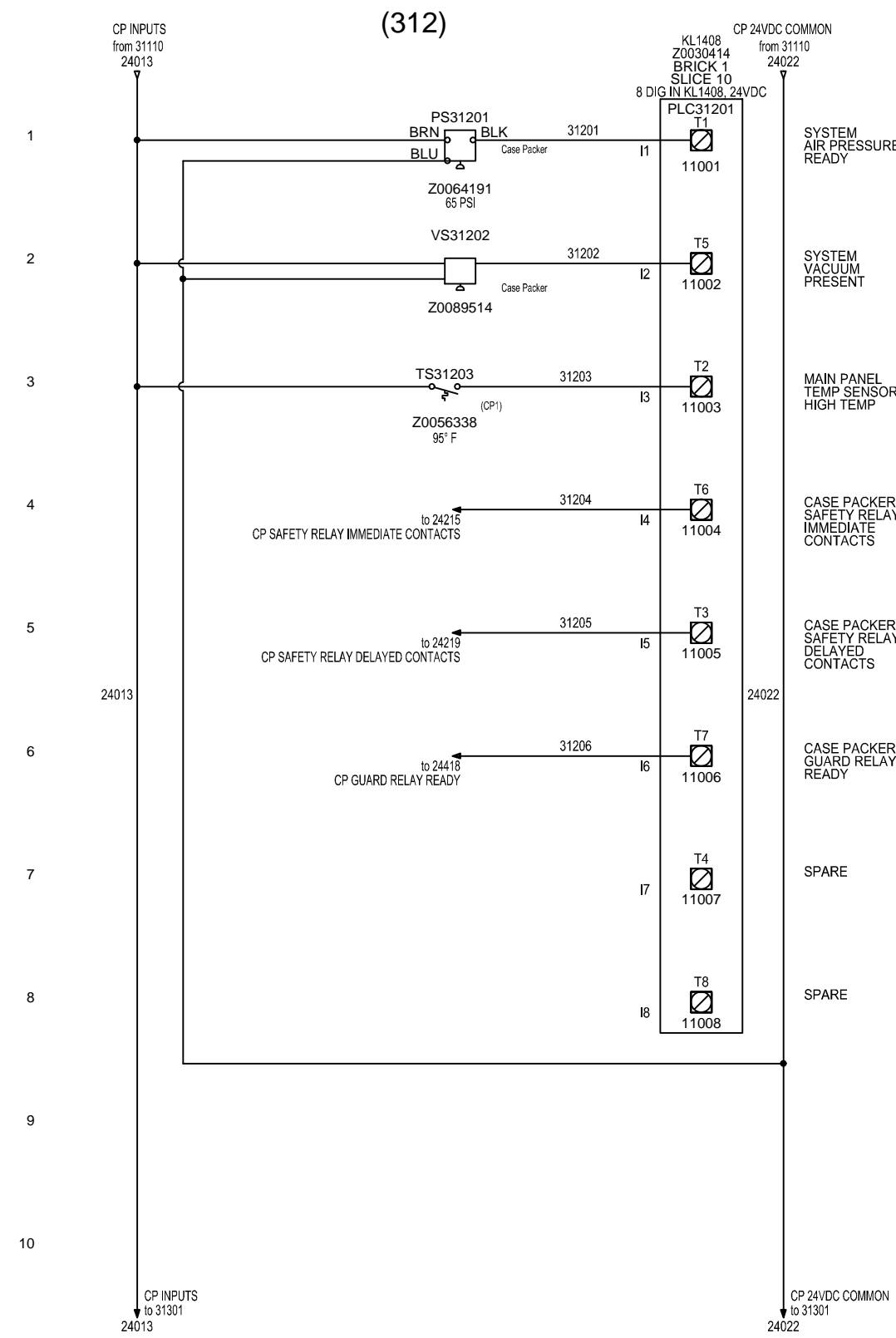
3.2	REMOVED GLUE OUTPUTS	4-28-22	DRO
3.1	ADDED SV30803	9-16-20	DRO



NOTE: PANEL TO BE UL APPROVED AND LABELED
 NOTE: ALL WIRE 18 GA. UNLESS OTHERWISE NOTED
 NOTE: WIRE COLORS ARE AS FOLLOWS UNLESS OTHERWISE NOTED
 480 VAC - BLACK; 120/280 VAC RED (NEUTRAL - WHITE)
 DC - BLUE; DC COMMON - BLUE/WHITE

(CP1) CASE PACKER MAIN ELECTRICAL ENCLOSURE
 (CP2) ORIENTER MAIN ELECTRICAL ENCLOSURE
 (HMI) HMI OPERATOR STATION

DWG BY: PML	 3711 IOWA STREET ALEXANDRIA, MN 56308 (320) 763-6043 FAX (320) 763-7859	TITLE: 120 GMI RH KDGP & ORIENTER	
REV: 3		DATE: 02/17/09	SHEET: 29 OF 43
		DRAWING NO: INPUTS - B1,S8-9	



UPSTREAM/DOWNSTREAM INTERFACE	
INTERFACE WIRING	CONTROL PANEL WIRES
24VDC	24011
0 VDC	24022
600	30109
601	30109A
602	30110
603	30110A
604	31309
605	31309A
606	31310
607	31310A

NOTE: PANEL TO BE UL APPROVED AND LABELED

NOTE: ALL WIRE 18 GA. UNLESS OTHERWISE NOTED

NOTE: WIRE COLORS ARE AS FOLLOWS UNLESS OTHERWISE NOTED

480 VAC - BLACK; 120/280 VAC RED (NEUTRAL - WHITE)

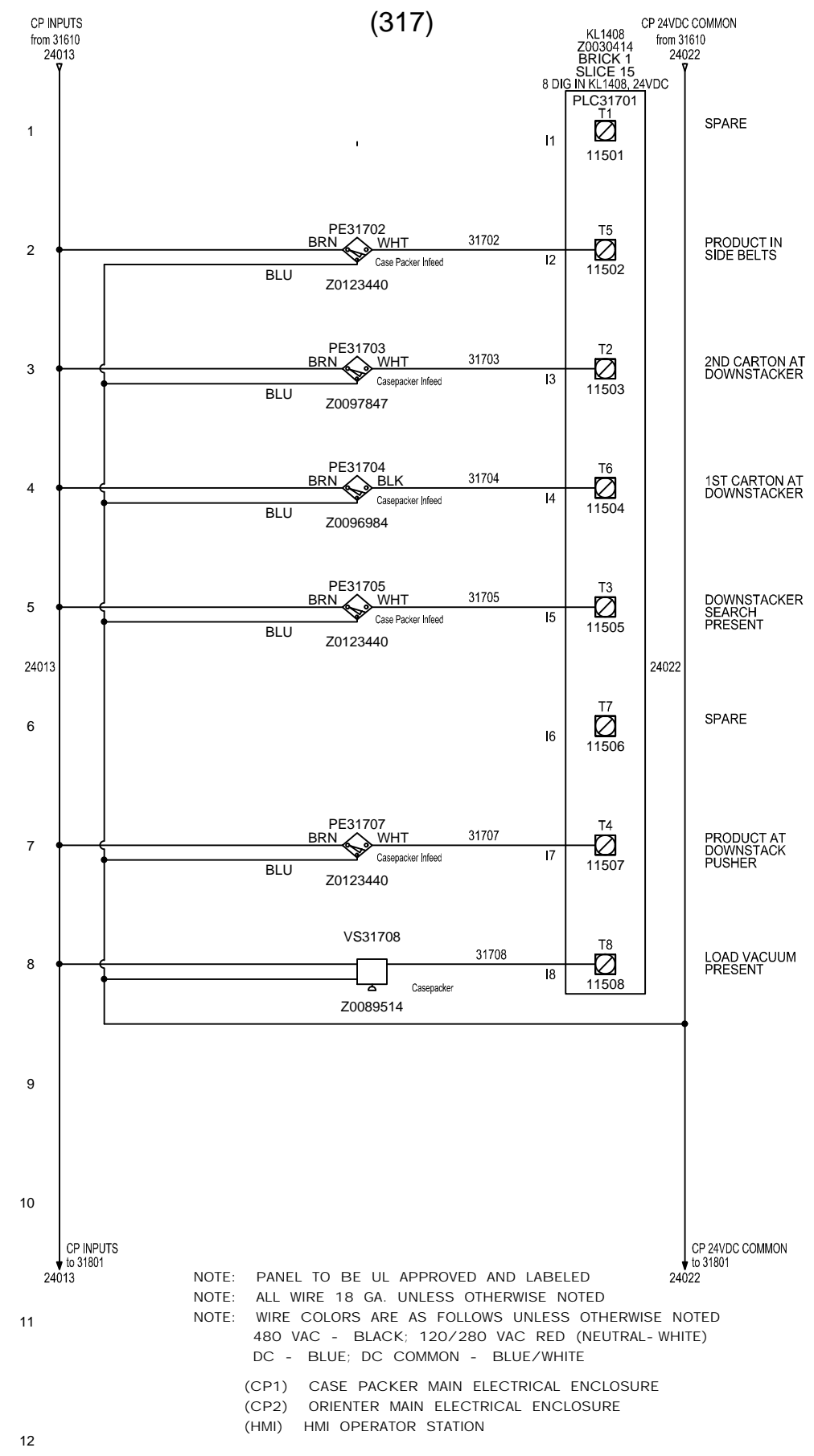
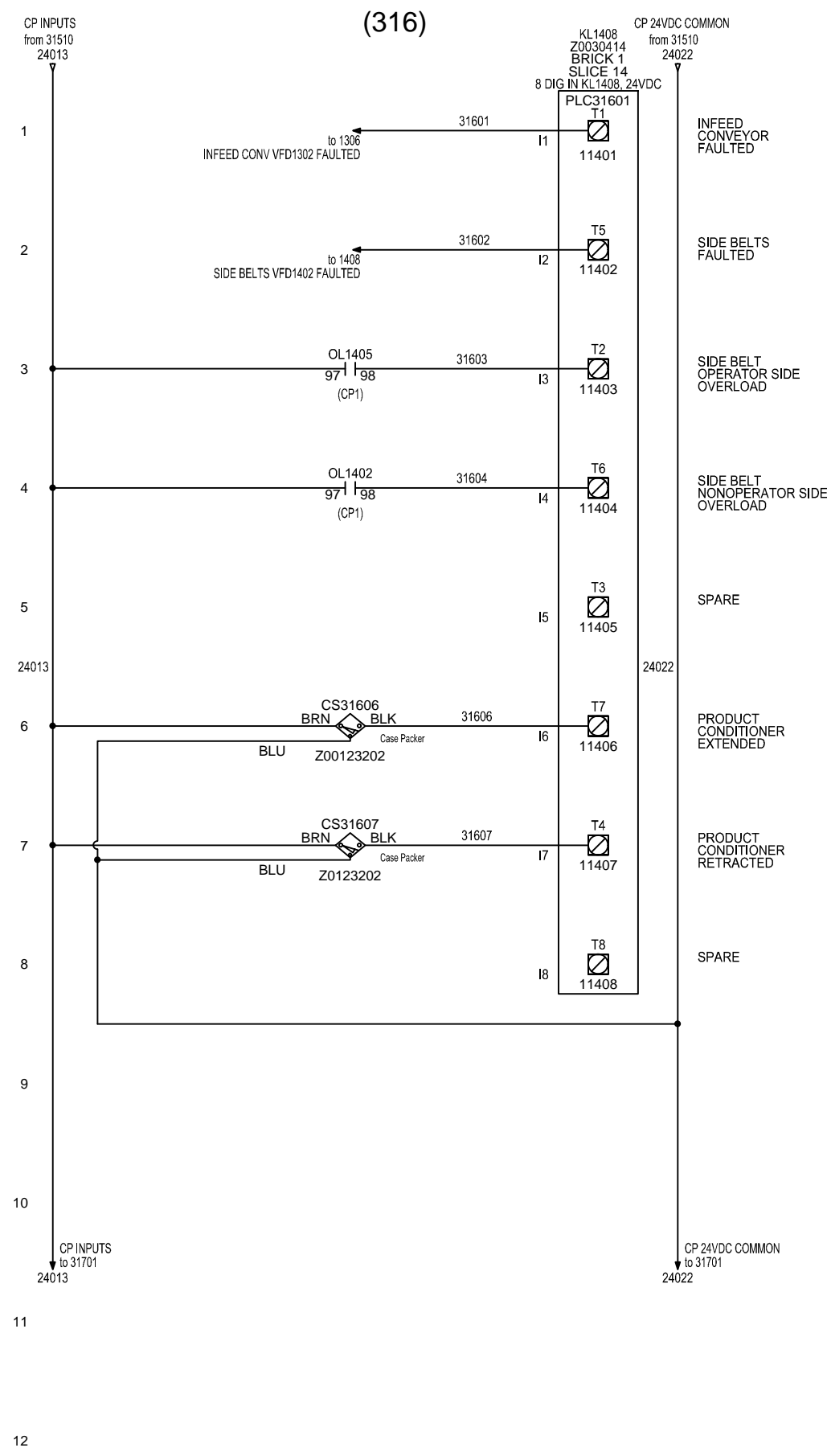
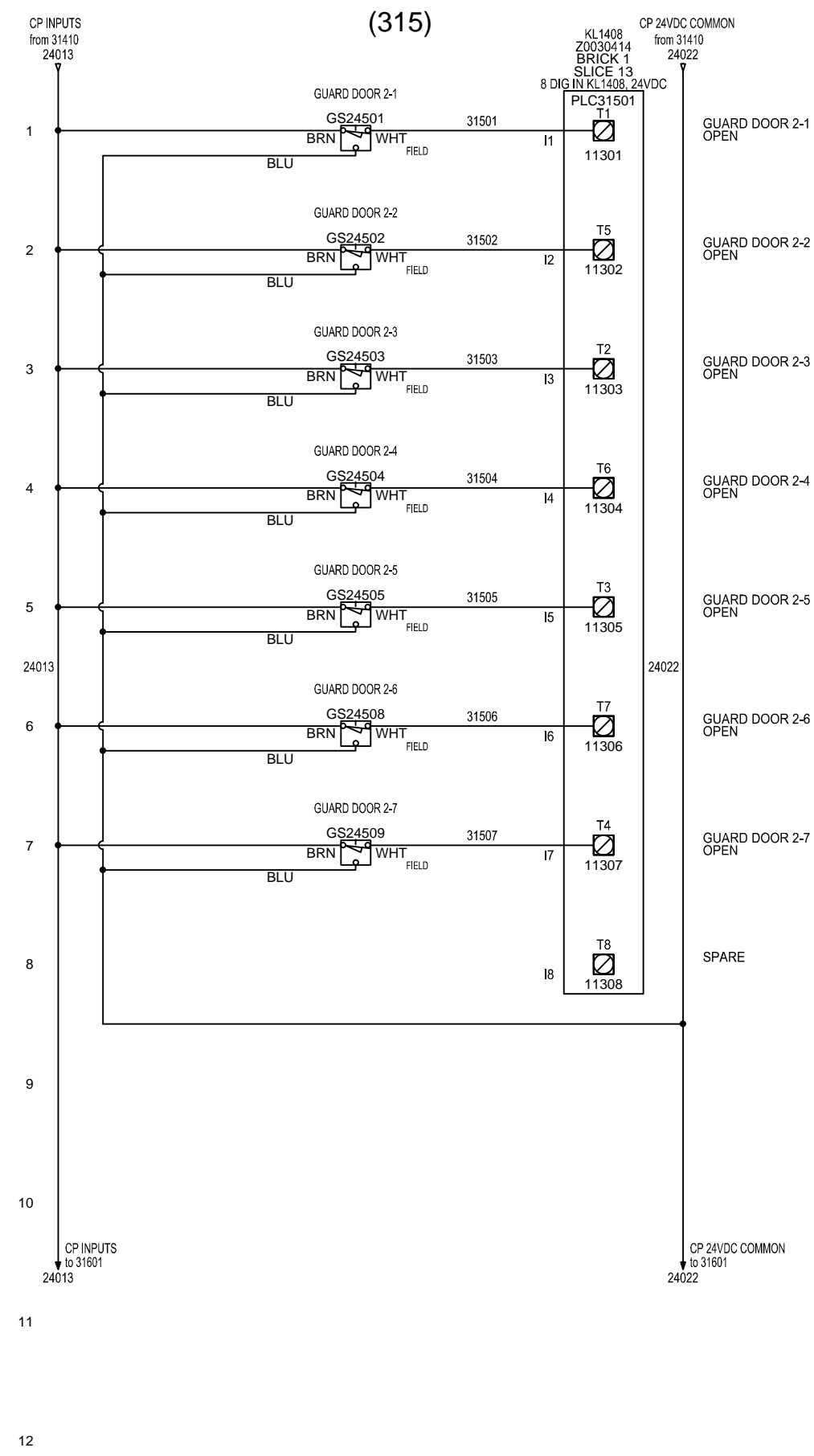
DC - BLUE; DC COMMON - BLUE/WHITE

(CP1) CASE PACKER MAIN ELECTRICAL ENCLOSURE

(CP2) ORIENTER MAIN ELECTRICAL ENCLOSURE


(HMI) HMI OPERATOR STATION

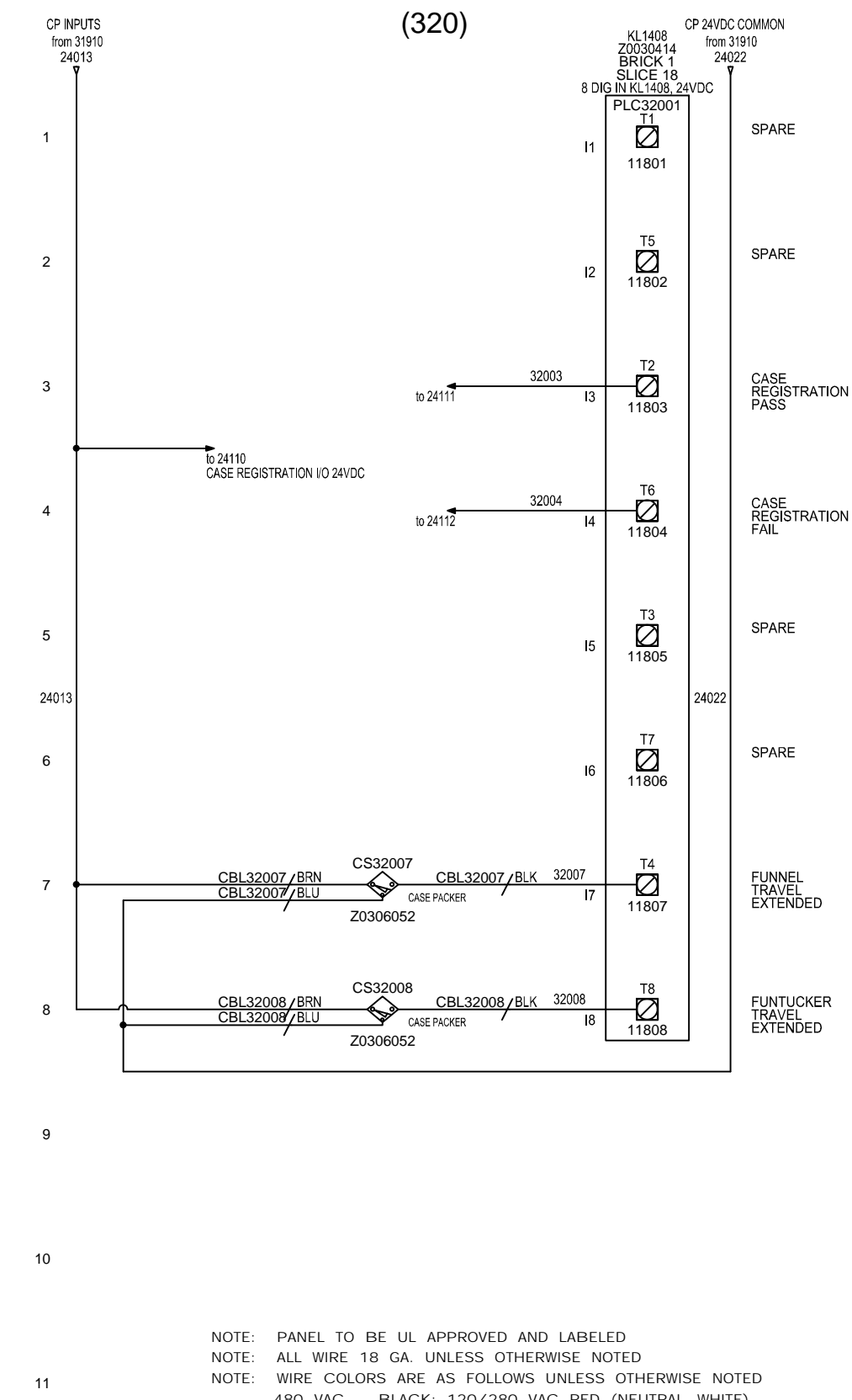
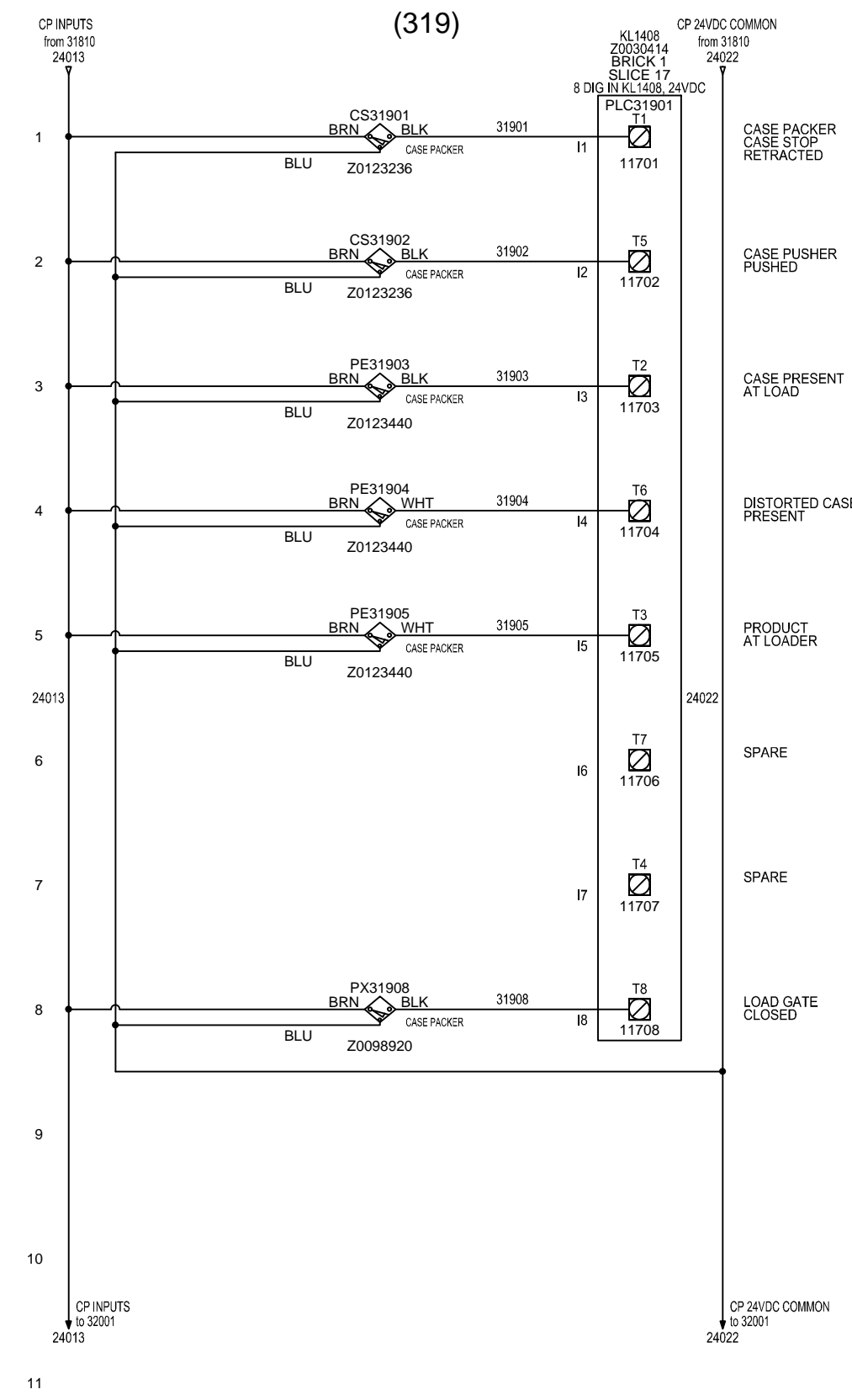
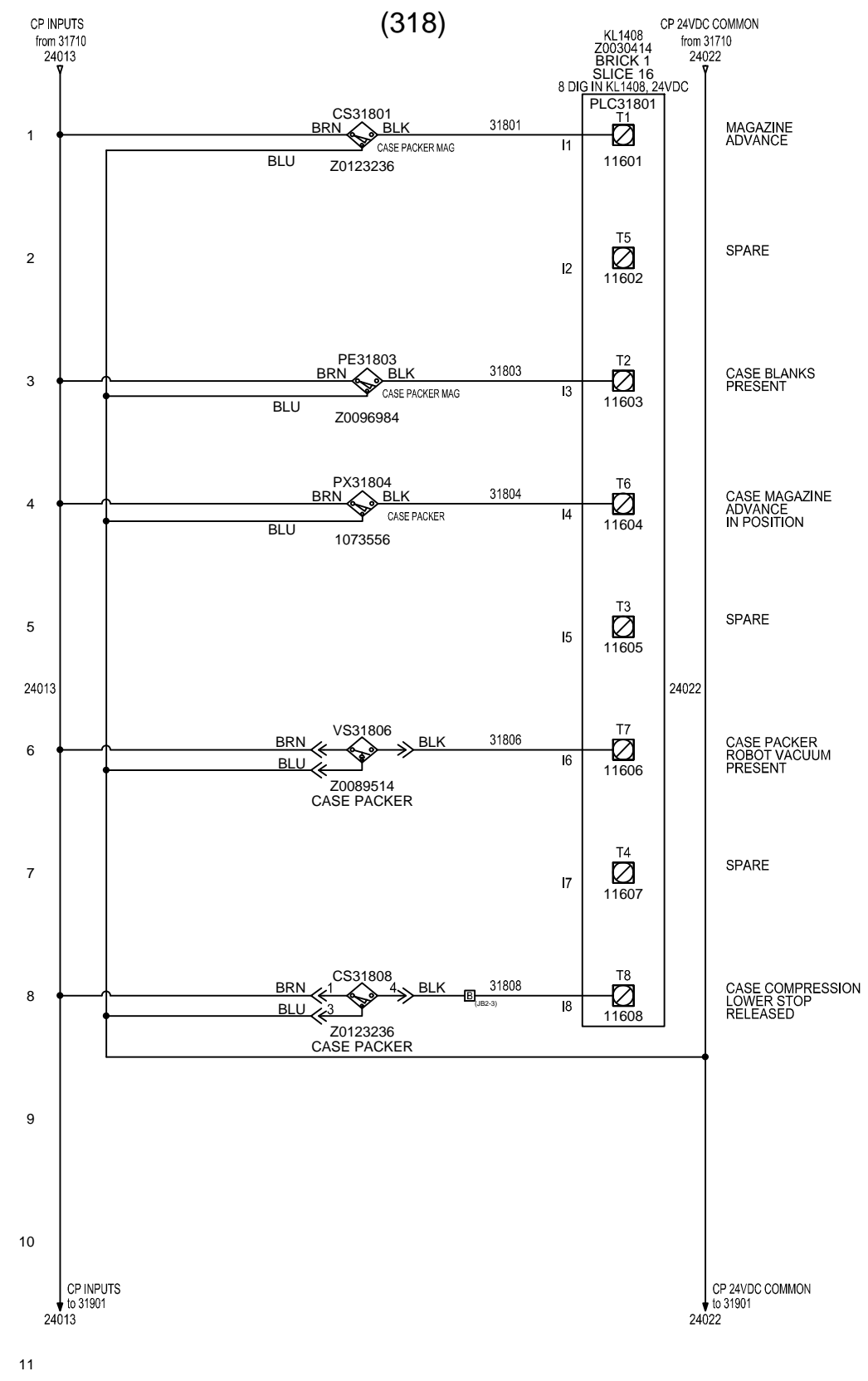
DWG BY: PML		TITLE: 120 GMI RH KDGP & ORIENTER	
REV: 3		DATE: 02/17/09	SHEET: 30 OF 43
3711 IOWA STREET ALEXANDRIA, MN 56308 (320) 763-6043 FAX (320) 763-7859		DRAWING NO: INPUTS - B1,S10-12	



NOTE: PANEL TO BE UL APPROVED AND LABELED
 NOTE: ALL WIRE 18 GA. UNLESS OTHERWISE NOTED
 NOTE: WIRE COLORS ARE AS FOLLOWS UNLESS OTHERWISE NOTED
 480 VAC - BLACK; 120/280 VAC RED (NEUTRAL - WHITE)
 DC - BLUE; DC COMMON - BLUE/WHITE

(CP1) CASE PACKER MAIN ELECTRICAL ENCLOSURE
 (CP2) ORIENTER MAIN ELECTRICAL ENCLOSURE
 (HMI) HMI OPERATOR STATION

DWG BY: PML	 3711 IOWA STREET ALEXANDRIA, MN 56308 (320) 763-6043 FAX (320) 763-7859	TITLE: 120 GMI RH KDCCP & ORIENTER	
REV: 3		DATE: 02/17/09	SHEET: 31 OF 43
		DRAWING NO: INPUTS - B1,S13-15	



NOTE: PANEL TO BE UL APPROVED AND LABELED
 NOTE: ALL WIRE 18 GA. UNLESS OTHERWISE NOTED
 NOTE: WIRE COLORS ARE AS FOLLOWS UNLESS OTHERWISE NOTED
 480 VAC - BLACK; 120/280 VAC RED (NEUTRAL- WHITE)
 DC - BLUE; DC COMMON - BLUE/WHITE

(CP1) CASE PACKER MAIN ELECTRICAL ENCLOSURE
 (CP2) ORIENTER MAIN ELECTRICAL ENCLOSURE
 (HMI) HMI OPERATOR STATION

3.4	UPDATED PE31903	2-11-21	DRO
3.3	ADDED CS31808	9-16-20	DRO
3.2	REMOVED CS31906 & CS31907	5-16-19	DRO
3.2	ADDED CS32007 & CS32008	5-16-19	DRO
3.0	ADDED CASE REGISTRATION INPUTS	4-26-18	DRO

DWG BY:
PML

REV:
3

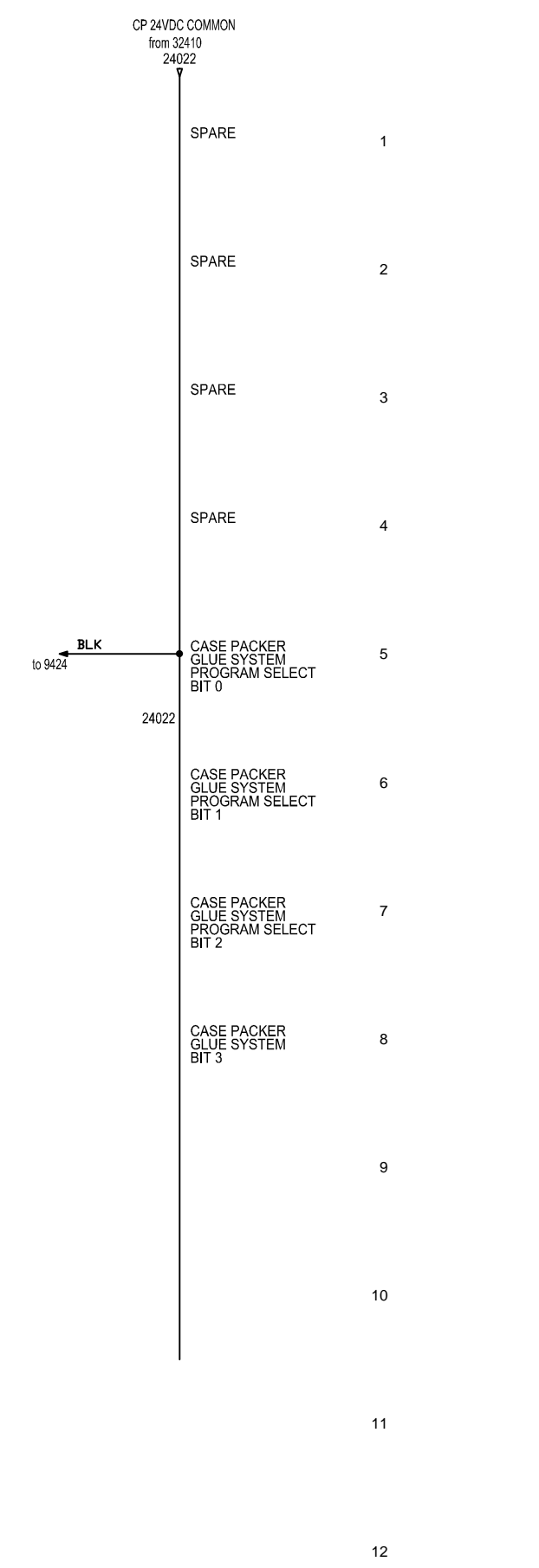
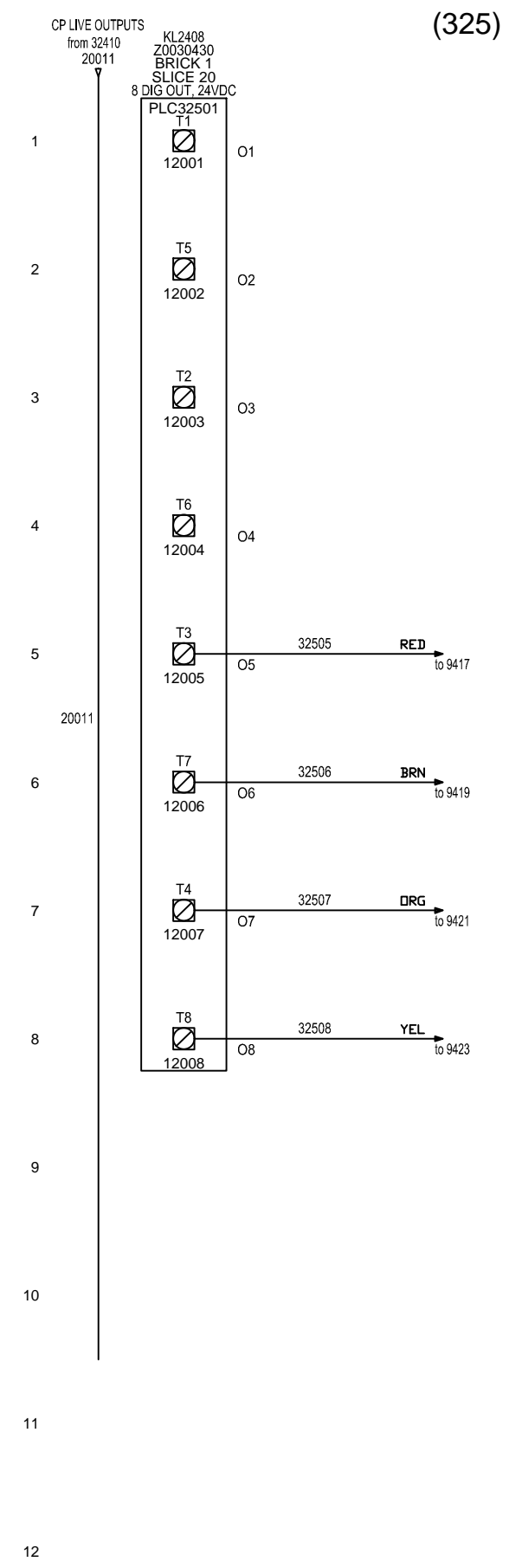
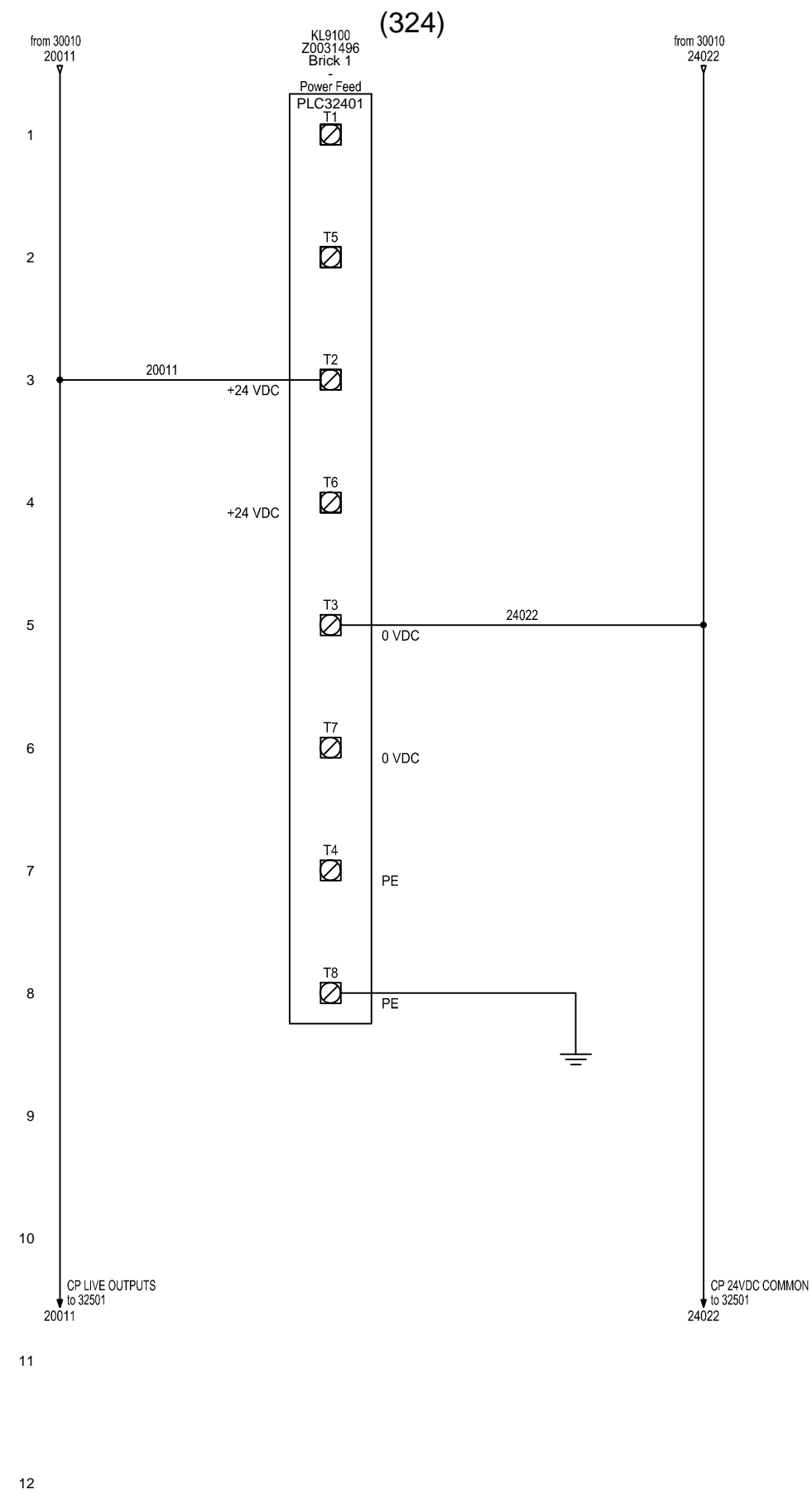
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3711 IOWA STREET
ALEXANDRIA, MN 56308
(320) 763-6043
FAX (320) 763-7859

TITLE:
120 GMI RH KDCP & ORIENTER

DATE: 02/17/09 SHEET: 32 OF 43


DRAWING NO:
INPUTS - B1,S16-18

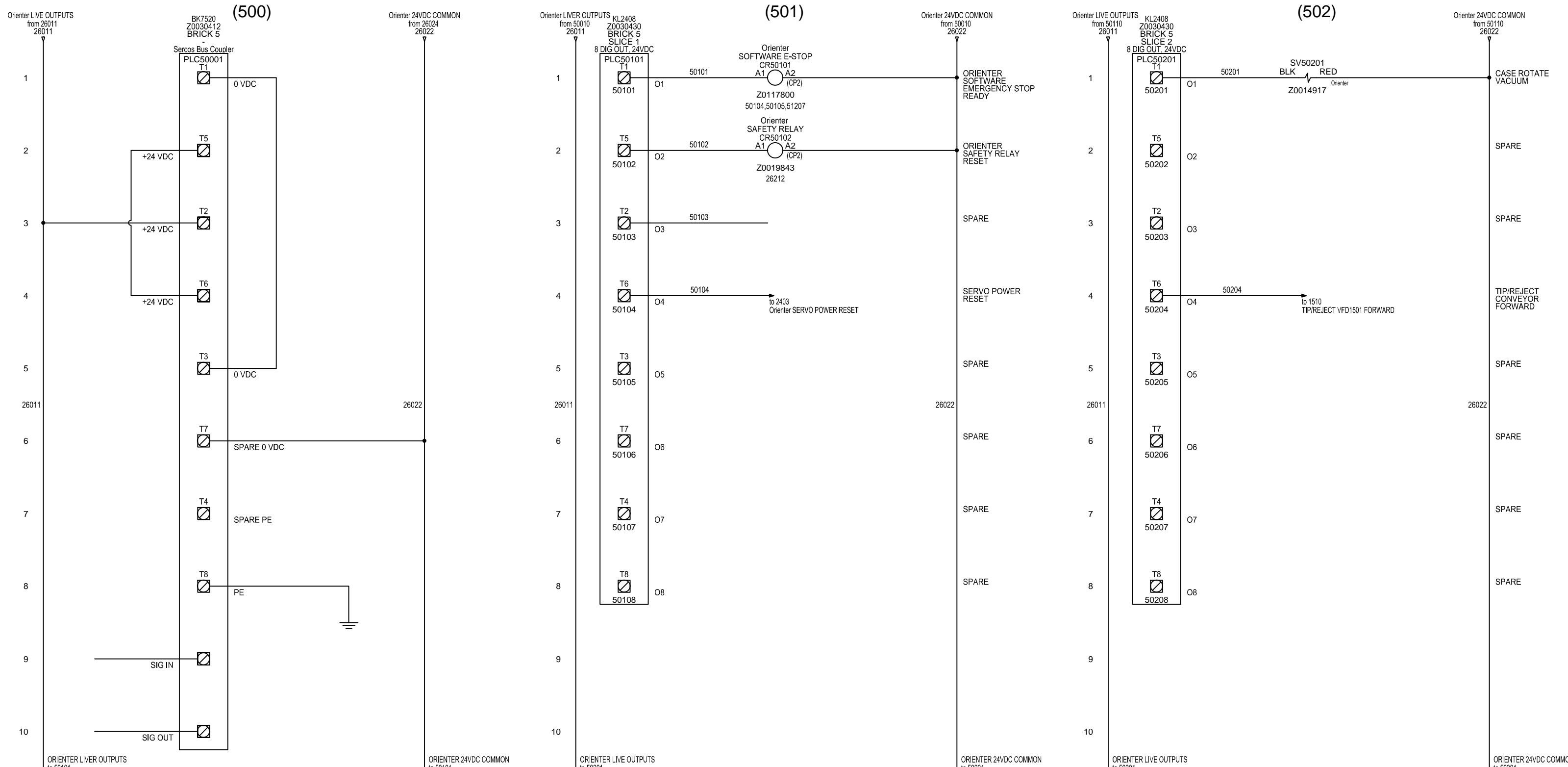


NOTE: PANEL TO BE UL APPROVED AND LABELED
 NOTE: ALL WIRE 18 GA. UNLESS OTHERWISE NOTED
 NOTE: WIRE COLORS ARE AS FOLLOWS UNLESS OTHERWISE NOTED
 480 VAC - BLACK; 120/280 VAC RED (NEUTRAL- WHITE)
 DC - BLUE; DC COMMON - BLUE/WHITE

(CP1) CASE PACKER MAIN ELECTRICAL ENCLOSURE
 (CP2) ORIENTER MAIN ELECTRICAL ENCLOSURE
 (HMI) HMI OPERATOR STATION

3.1	ADDED CASE PACKER GLUE SYSTEM OUTPUTS	4-28-22	DRO
3.1	ADDED POWER FEED & OUTPUT MODULES	4-28-22	DRO


DWG BY: PML	 3711 IOWA STREET ALEXANDRIA, MN 56308 (320) 763-6043 FAX (320) 763-7859	TITLE: 120 GMI RH KDGP & ORIENTER	
REV: 3		DATE: 02/17/09	SHEET: 33 OF 43
		DRAWING NO: LIVE OUTPUTS - B1,S20	



OFF	BAUD
ON	4 MB
OFF	INTENS
OFF	0-15M
OFF	128
ON	64
ON	32
OFF	16
ON	8
OFF	4 ADDR
OFF	2 SEL
ON	1 105
ON	

NOTE: PANEL TO BE UL APPROVED AND LABELED
 NOTE: ALL WIRE 18 GA. UNLESS OTHERWISE NOTED
 NOTE: WIRE COLORS ARE AS FOLLOWS UNLESS OTHERWISE NOTED
 480 VAC - BLACK; 120/280 VAC RED (NEUTRAL- WHITE)
 DC - BLUE; DC COMMON - BLUE/WHITE

(CP1) CASE PACKER MAIN ELECTRICAL ENCLOSURE
 (CP2) Orienter MAIN ELECTRICAL ENCLOSURE
 (HMI) HMI OPERATOR STATION

DWG BY: PML	 3711 IOWA STREET ALEXANDRIA, MN 56308 (320) 763-6043 FAX (320) 763-7859	TITLE: 120 GMI RH KDCCP & ORIENTER	
REV: 3		DATE: 02/17/09	SHEET: 34 OF 43
		DRAWING NO: LIVE OUTPUTS - B5,S1-2	

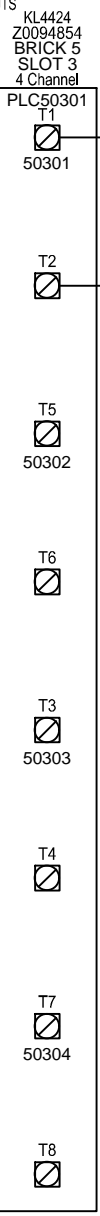
ORIENTER LIVE OUTPUTS
from 50210
26011

(503)

ORIENTER 24VDC COMMON
from 50210
26022

(504)

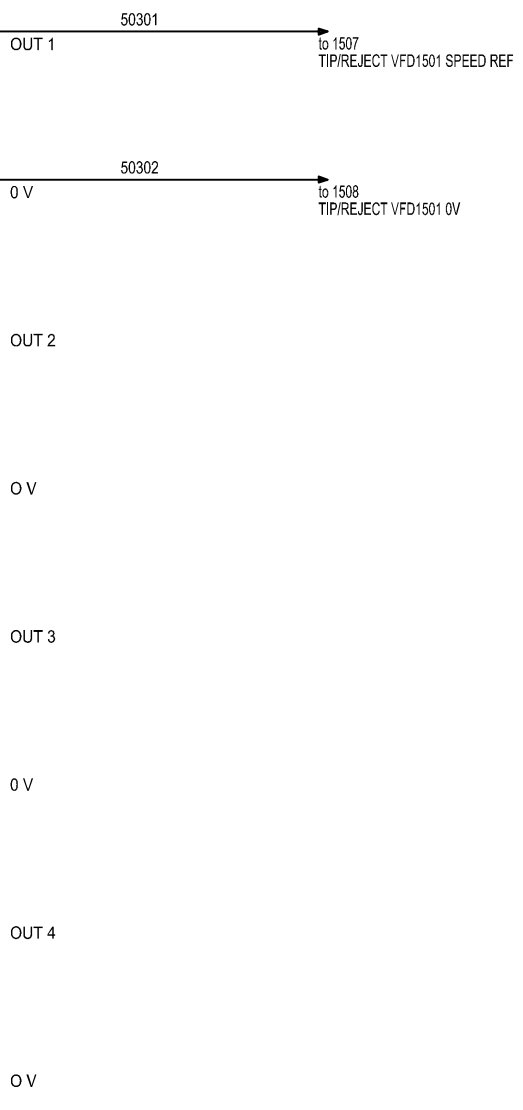
(505)



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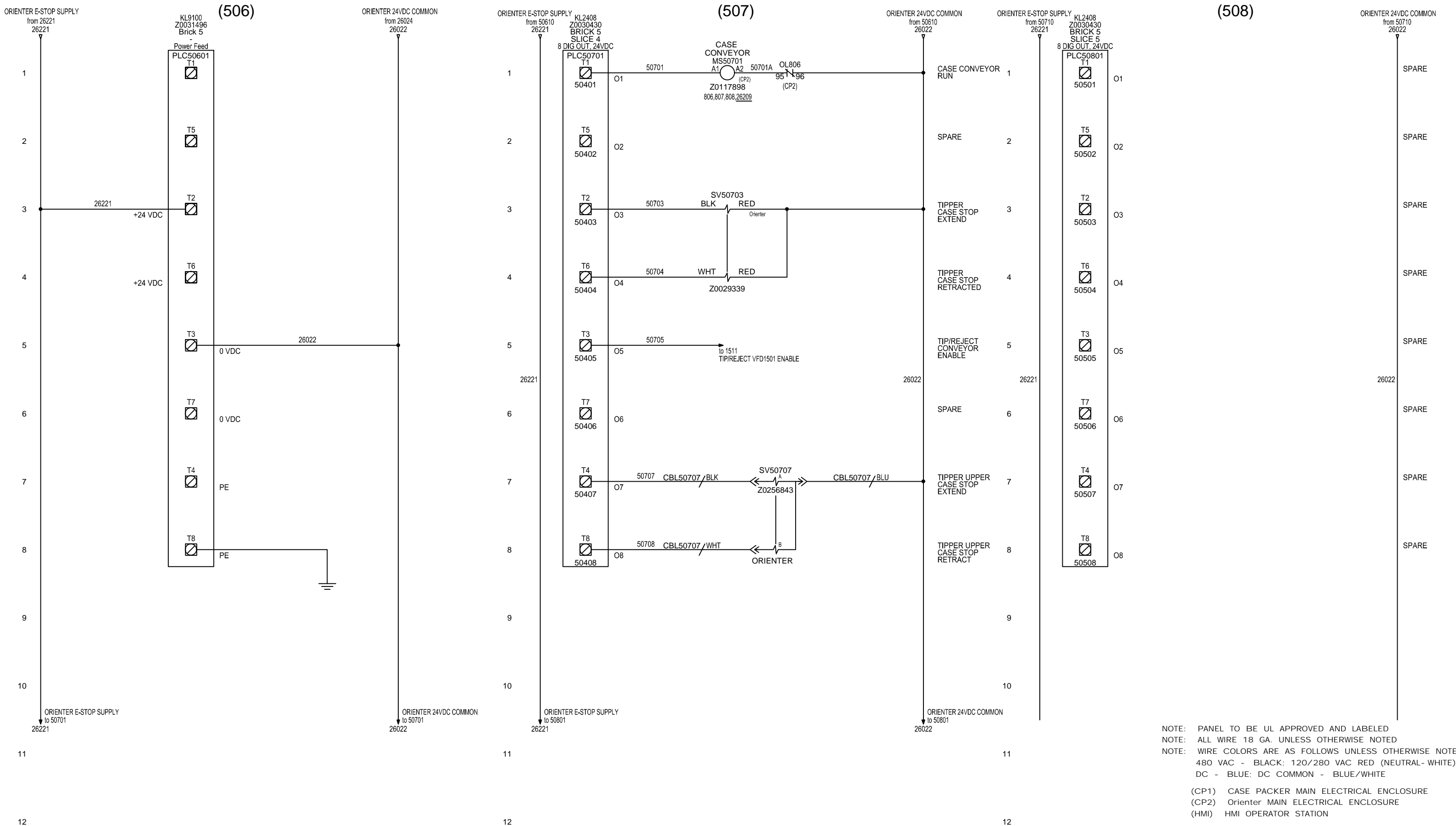
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NOTE: PANEL TO BE UL APPROVED AND LABELED
 NOTE: ALL WIRE 18 GA. UNLESS OTHERWISE NOTED
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 480 VAC - BLACK; 120/280 VAC RED (NEUTRAL- WHITE)
 DC - BLUE; DC COMMON - BLUE/WHITE


(CP1) CASE PACKER MAIN ELECTRICAL ENCLOSURE
 (CP2) Orienter MAIN ELECTRICAL ENCLOSURE
 (HMI) HMI OPERATOR STATION

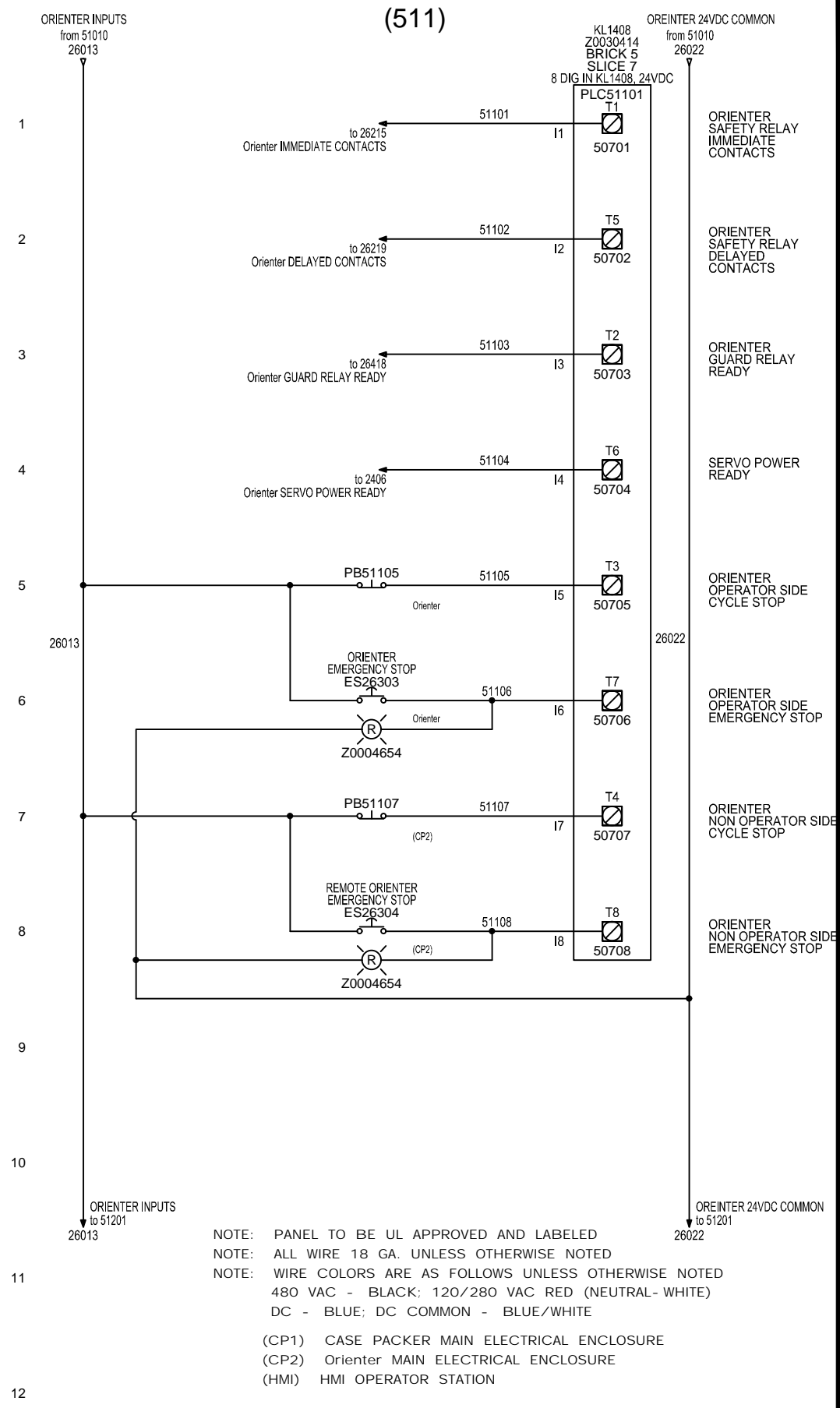
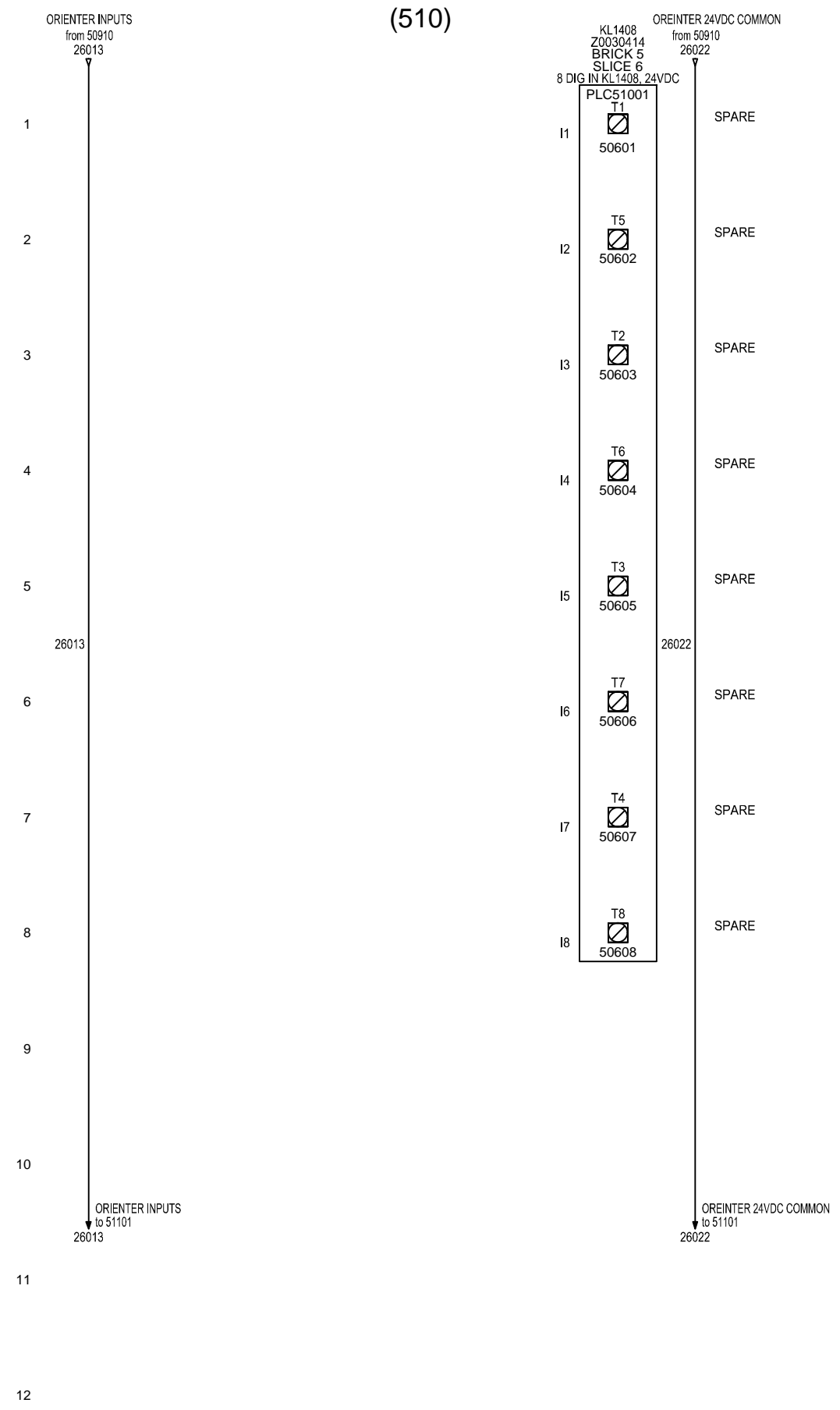
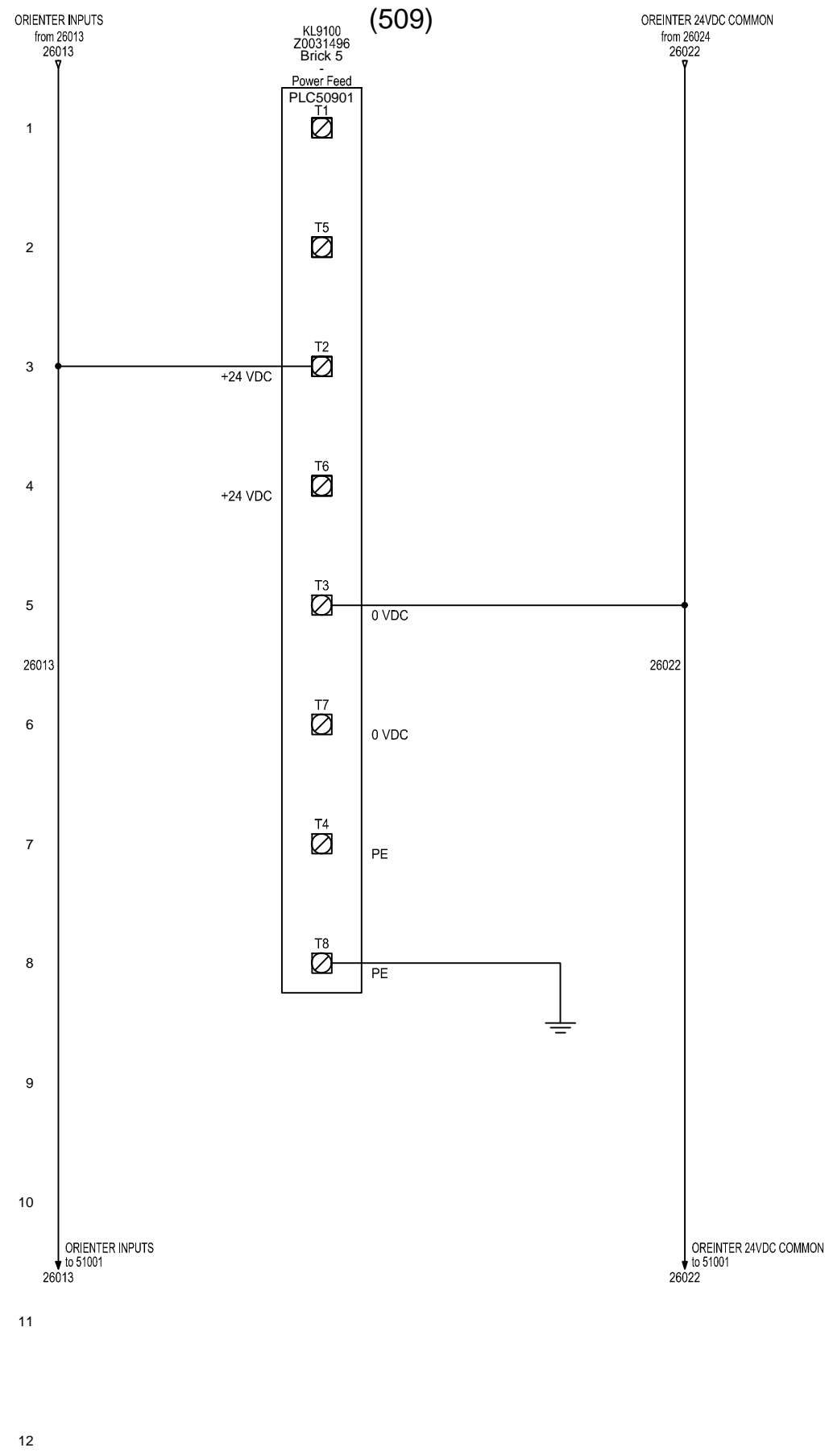
DWG BY: PML	 3711 IOWA STREET ALEXANDRIA, MN 56308 (320) 763-6043 FAX (320) 763-7859	TITLE: 120 GMI RH KDGP & ORIENTER	
REV: 3		DATE: 02/17/09	SHEET: 35 OF 43
		DRAWING NO: LIVE OUTPUTS - B5.S3	



NOTE: PANEL TO BE UL APPROVED AND LABELED
 NOTE: ALL WIRE 18 GA. UNLESS OTHERWISE NOTED
 NOTE: WIRE COLORS ARE AS FOLLOWS UNLESS OTHERWISE NOTED
 480 VAC - BLACK; 120/280 VAC RED (NEUTRAL - WHITE)
 DC - BLUE; DC COMMON - BLUE/WHITE

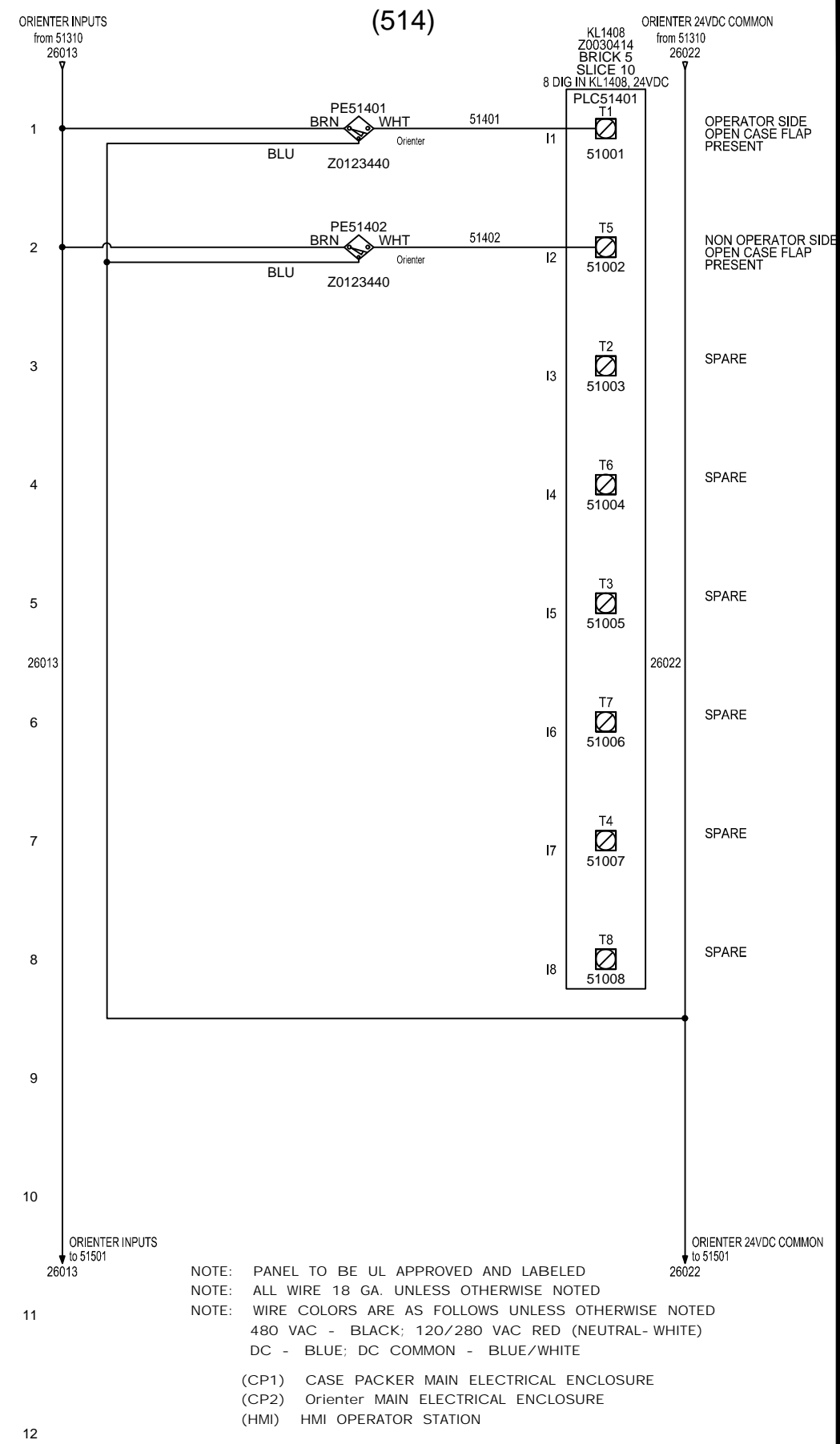
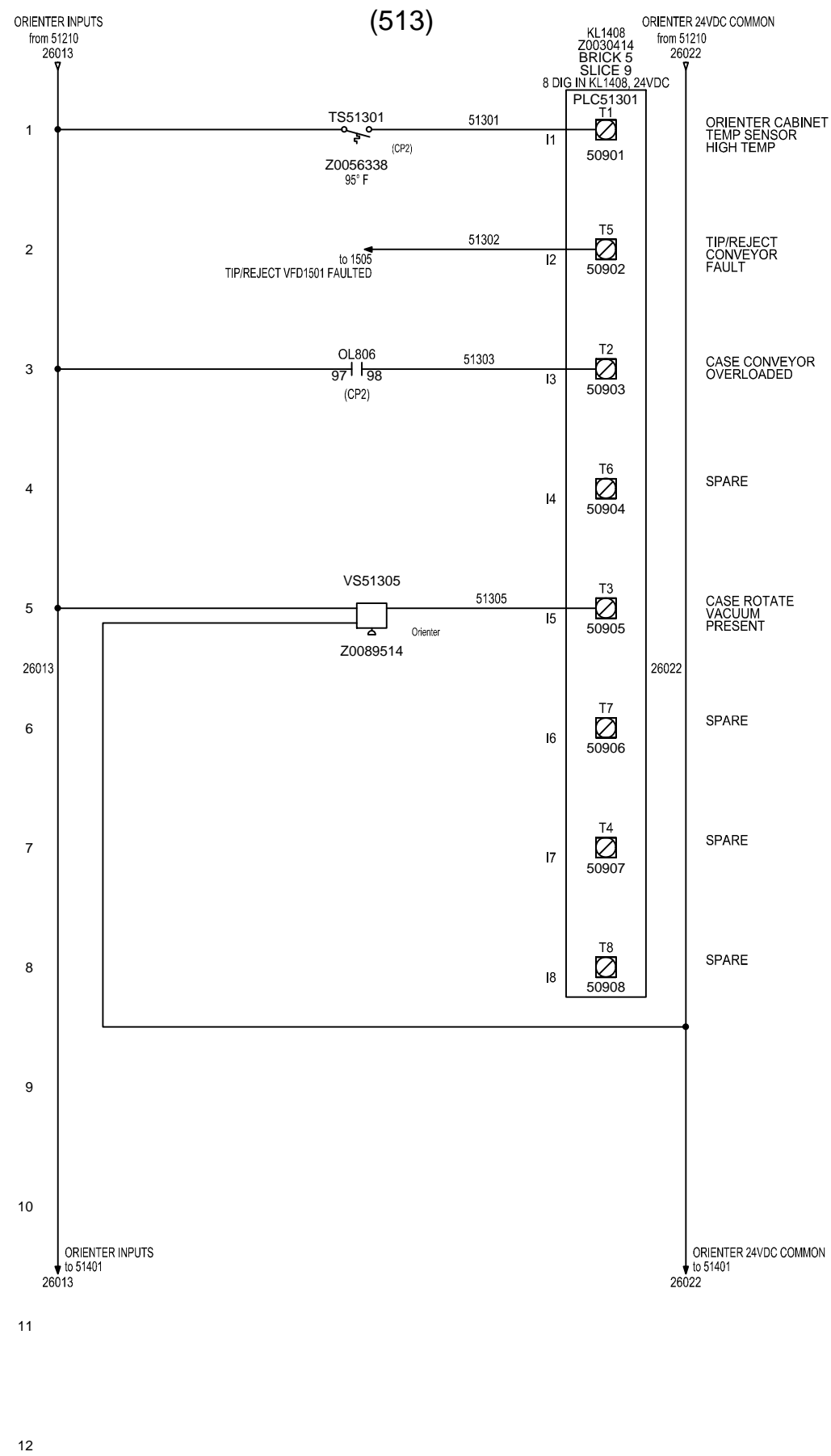
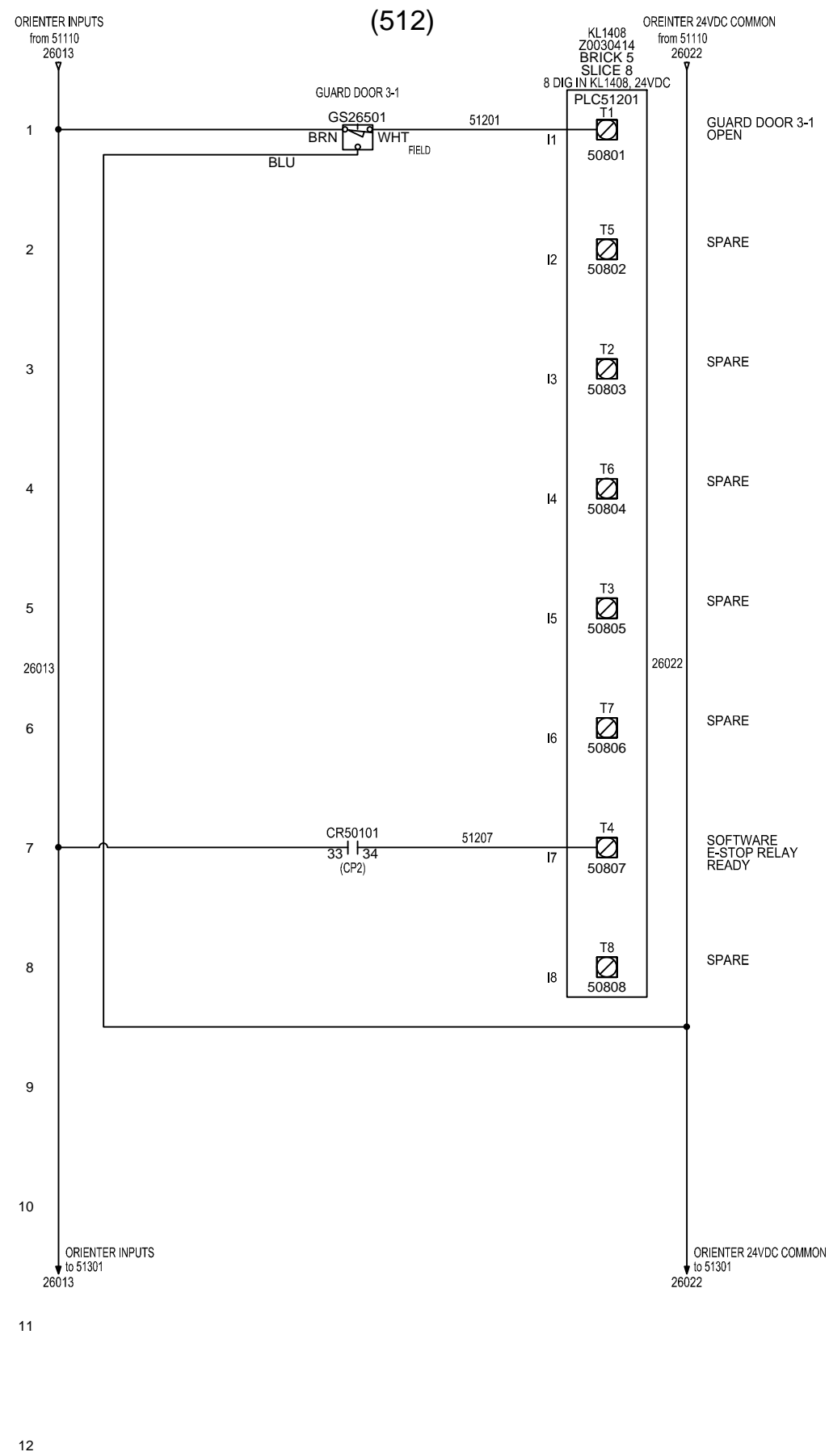
(CP1) CASE PACKER MAIN ELECTRICAL ENCLOSURE
 (CP2) Orienter MAIN ELECTRICAL ENCLOSURE
 (HMI) HMI OPERATOR STATION

DWG BY: PML	 3711 IOWA STREET ALEXANDRIA, MN 56308 (320) 763-6043 FAX (320) 763-7859	TITLE: 120 GMI RH KDCCP & ORIENTER	
REV: 3		DATE: 02/17/09	SHEET: 36 OF 43
3.1		DRAWING NO: E-STOP OUTPUTS - B5,S4-5	



NOTE: PANEL TO BE UL APPROVED AND LABELED
NOTE: ALL WIRE 18 GA. UNLESS OTHERWISE NOTED
NOTE: WIRE COLORS ARE AS FOLLOWS UNLESS OTHERWISE NOTED
480 VAC - BLACK; 120/280 VAC RED (NEUTRAL - WHITE)
DC - BLUE; DC COMMON - BLUE/WHITE
(CP1) CASE PACKER MAIN ELECTRICAL ENCLOSURE
(CP2) Orienter MAIN ELECTRICAL ENCLOSURE
(HMI) HMI OPERATOR STATION

DWG BY: PML		TITLE: 120 GMI RH KDCCP & ORIENTER	
REV: 3		DATE: 02/17/09	SHEET: 37 OF 43
3711 IOWA STREET ALEXANDRIA, MN 56308 (320) 763-6043 FAX (320) 763-7859		DRAWING NO: INPUTS - B5,S6-7	



NOTE: PANEL TO BE UL APPROVED AND LABELED
 NOTE: ALL WIRE 18 GA. UNLESS OTHERWISE NOTED
 NOTE: WIRE COLORS ARE AS FOLLOWS UNLESS OTHERWISE NOTED
 480 VAC - BLACK; 120/280 VAC RED (NEUTRAL- WHITE)
 DC - BLUE; DC COMMON - BLUE/WHITE

(CP1) CASE PACKER MAIN ELECTRICAL ENCLOSURE
 (CP2) Orienter MAIN ELECTRICAL ENCLOSURE
 (HMI) HMI OPERATOR STATION

DWG BY:

PML

REV:

3



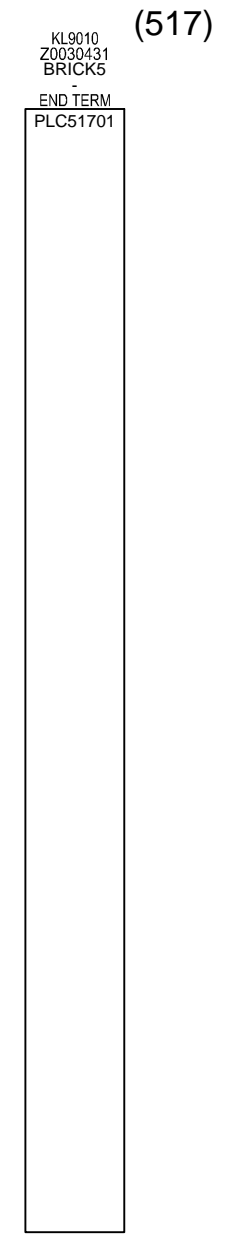
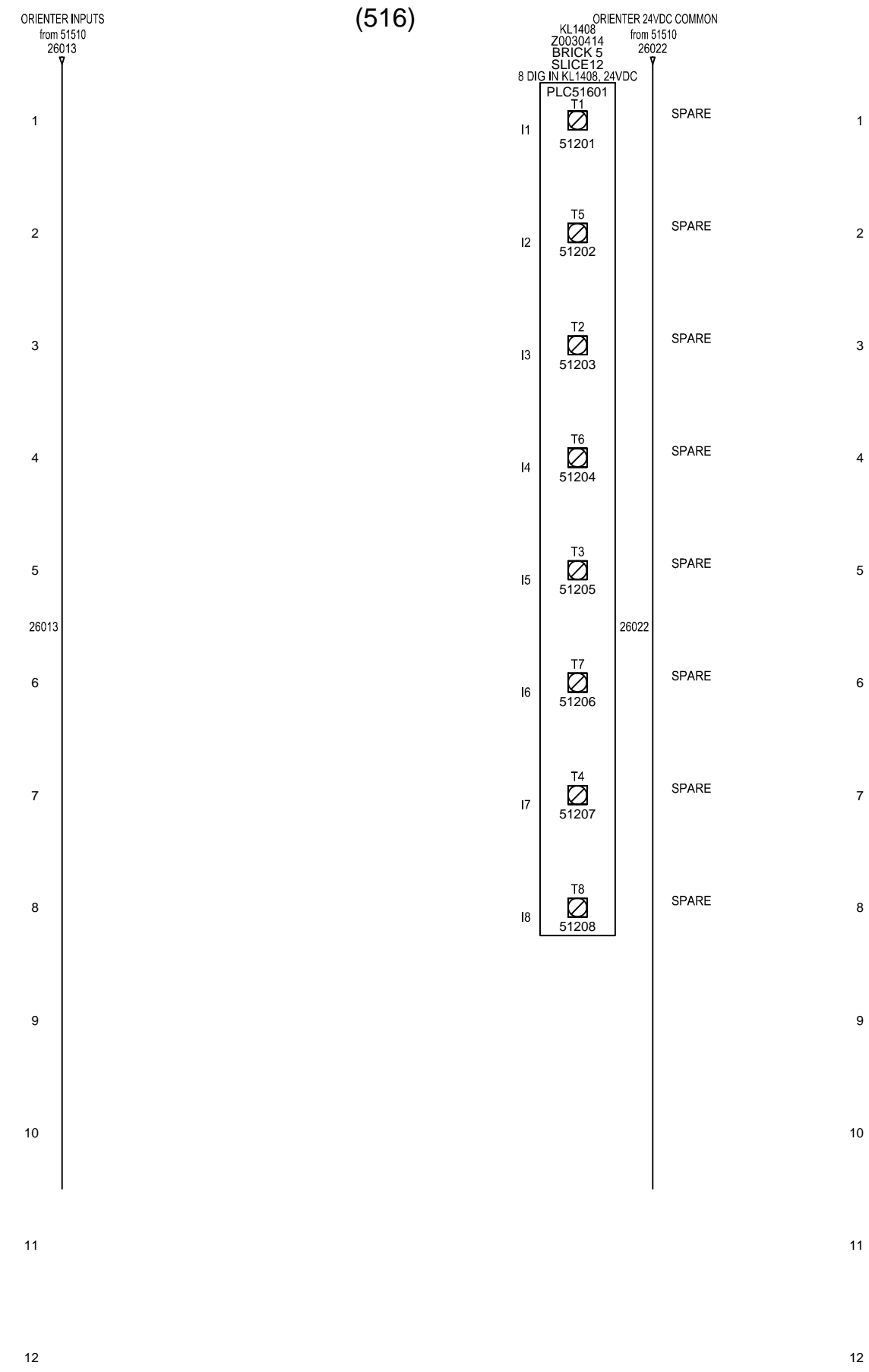
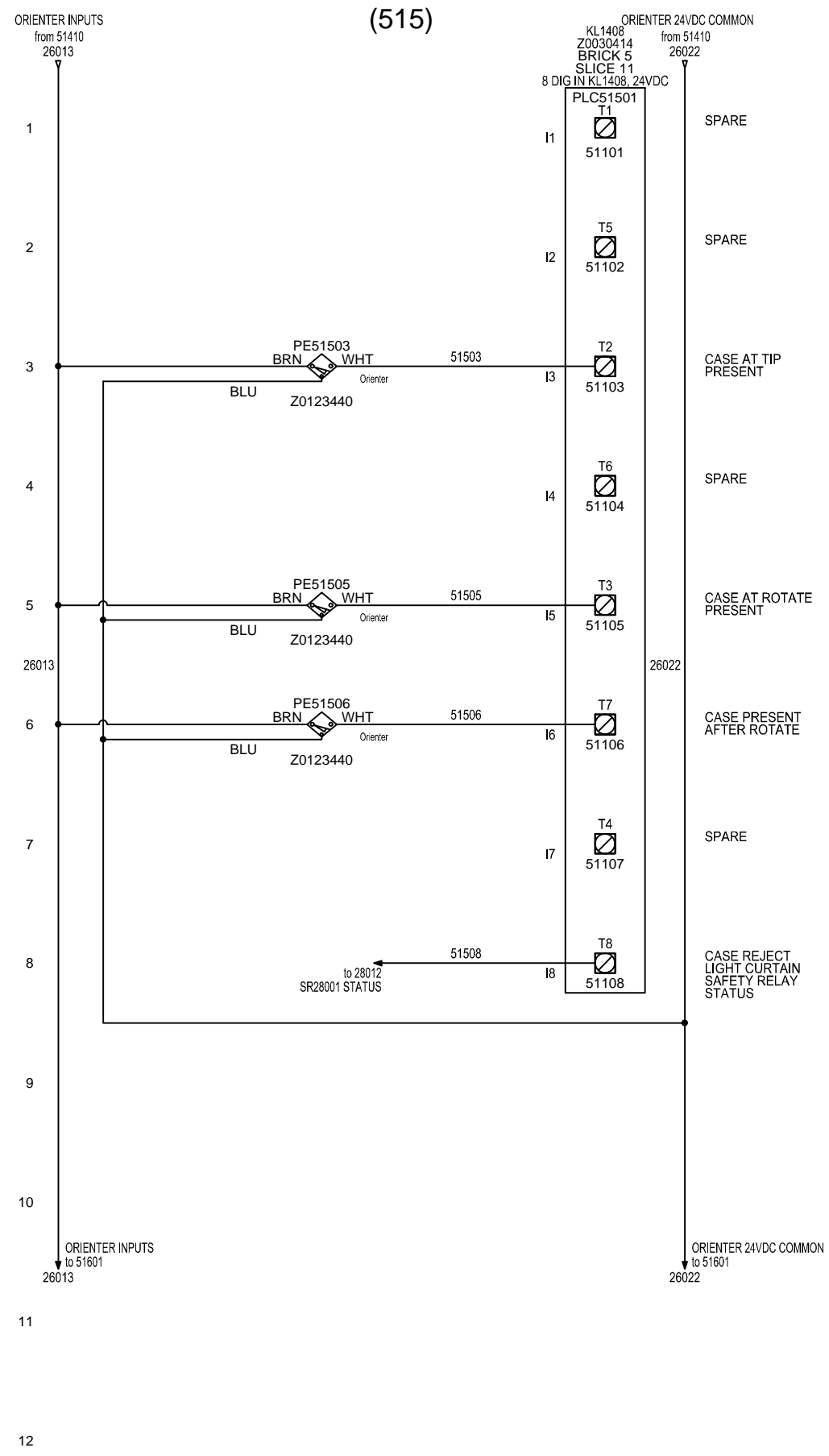
3711 IOWA STREET
 ALEXANDRIA, MN 56308
 (320) 763-6043
 FAX (320) 763-7859

TITLE:
 120 GMI RH KDCCP & ORIENTER

DATE: 02/17/09 SHEET: 38 OF 43

DRAWING NO:
 INPUTS - B5,S8-10

3.2	REMOVED CS51405	4-6-20	DRO
3.1	ADDED CS51405	5-16-19	DRO

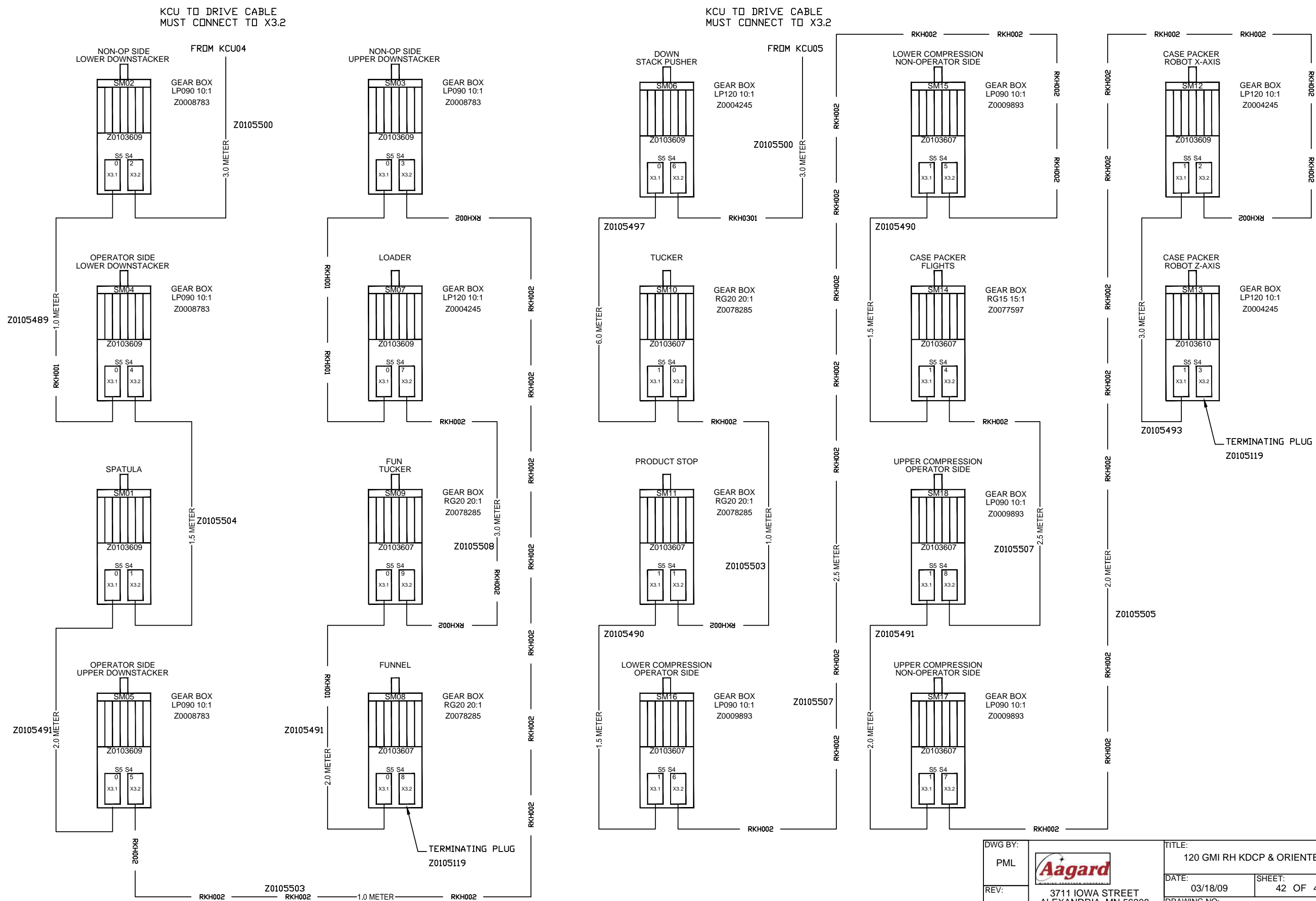


NOTE: PANEL TO BE UL APPROVED AND LABELED
 NOTE: ALL WIRE 18 GA. UNLESS OTHERWISE NOTED
 NOTE: WIRE COLORS ARE AS FOLLOWS UNLESS OTHERWISE NOTED
 480 VAC - BLACK; 120/280 VAC RED (NEUTRAL-WHITE)
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(CP1) CASE PACKER MAIN ELECTRICAL ENCLOSURE
 (CP2) Orienter MAIN ELECTRICAL ENCLOSURE
 (HMI) HMI OPERATOR STATION

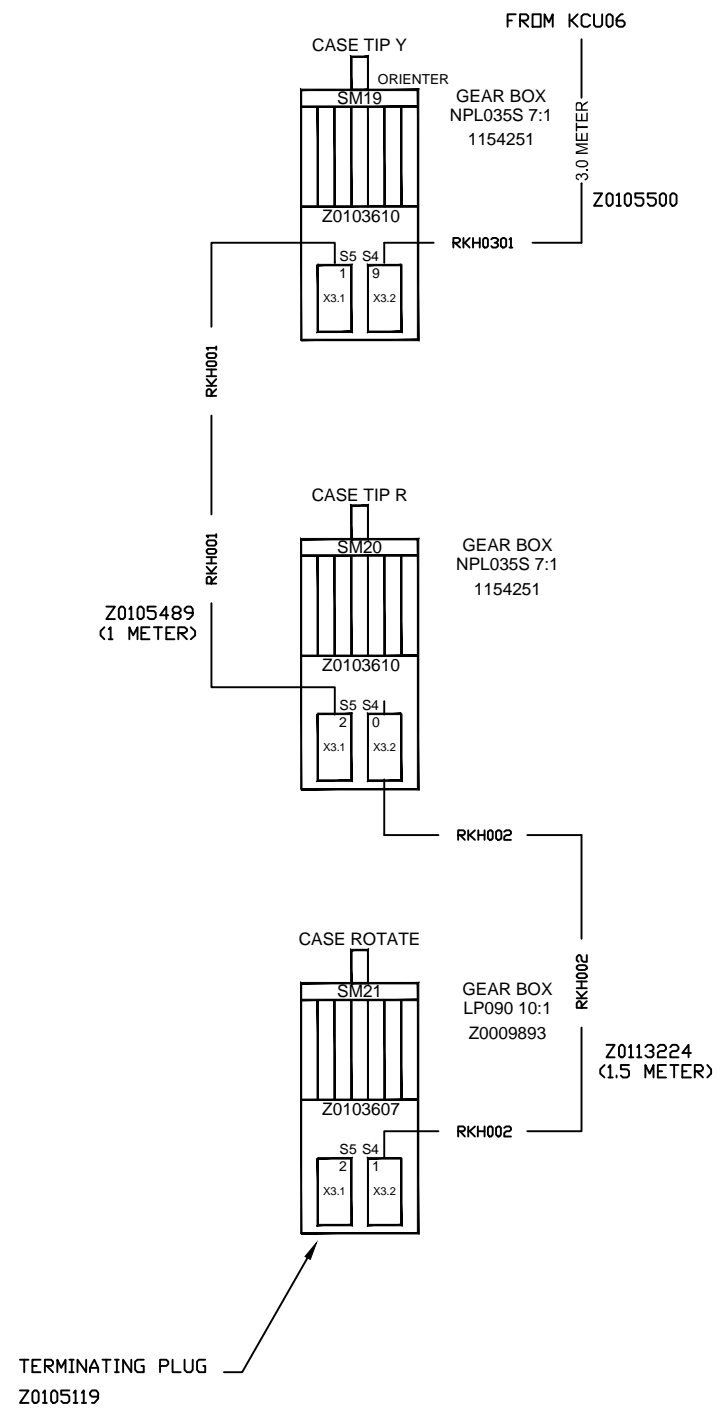
DWG BY: PML				TITLE: 120 GMI RH KDGP & ORIENTER	
REV: 3				DATE: 02/17/09 SHEET: 39 OF 43	
DRAWING NO: INPUTS - B5,S11-12				Aagard	
3711 IOWA STREET ALEXANDRIA, MN 56308 (320) 763-6043 FAX (320) 763-7859					
3.3	REMOVED CS51507	4-6-20	DRO		
3.2	ADDED SR28001 STATUS INPUT	2-26-20	DRO		
3.1	REMOVED PE36504 & PE36508	2-26-20	DRO		


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DWG BY: PML	 3711 IOWA STREET ALEXANDRIA, MN 56308 (320) 763-6043 FAX (320) 763-7859	TITLE: 120 GMI RH KDCCP & ORIENTER	
REV: 3		DATE: 03/18/09	SHEET: 42 OF 43
		DRAWING NO: CP SERVO STRING	

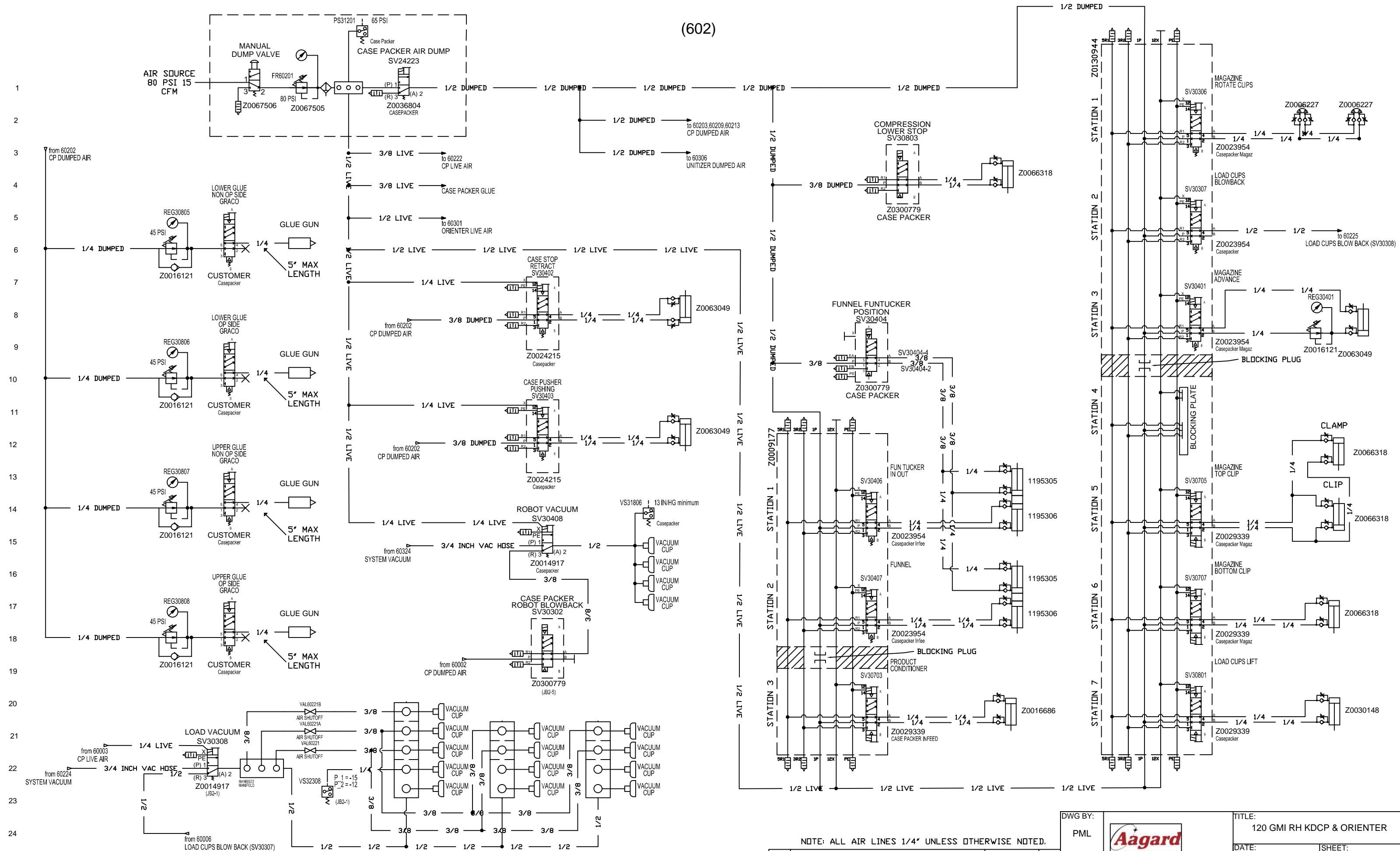
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DWG BY: PML	 3711 IOWA STREET ALEXANDRIA, MN 56308 (320) 763-6043 FAX (320) 763-7859	TITLE: 120 GMI RH KDCP & ORIENTER	
REV: 3		DATE: 03/18/09	SHEET: 43 OF 43
		DRAWING NO: ORIENTER SERVO STRING	

3.1	CHANGED SM19 & SM20 DESCRIPTION	5-16-19	DRO
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(602)



NOTE: ALL AIR LINES 1/4" UNLESS OTHERWISE NOTED.

3.3	UPDATED GLUE OUTPUTS	4-28-22	DRO
3.2	ADDED SV30803	9-16-20	DRO
3.1	ADDED SV30302 & SV30404	5-16-19	DRO

DWG BY: PML

REV: 3

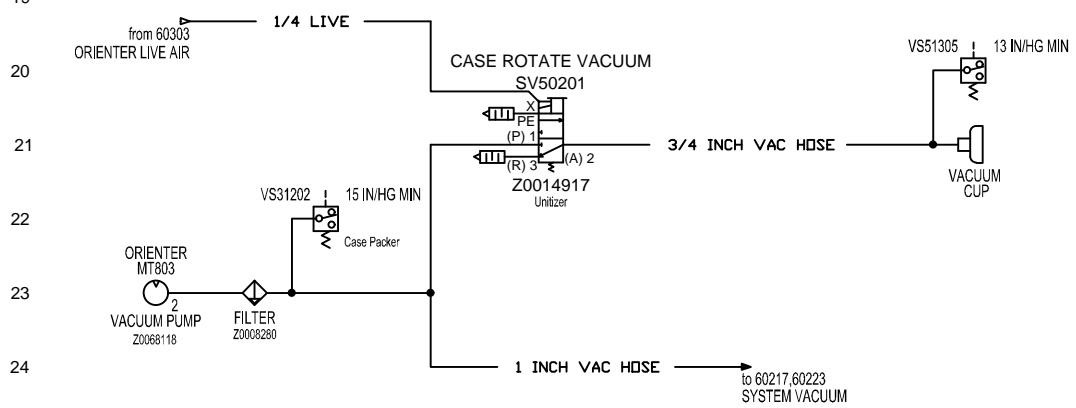
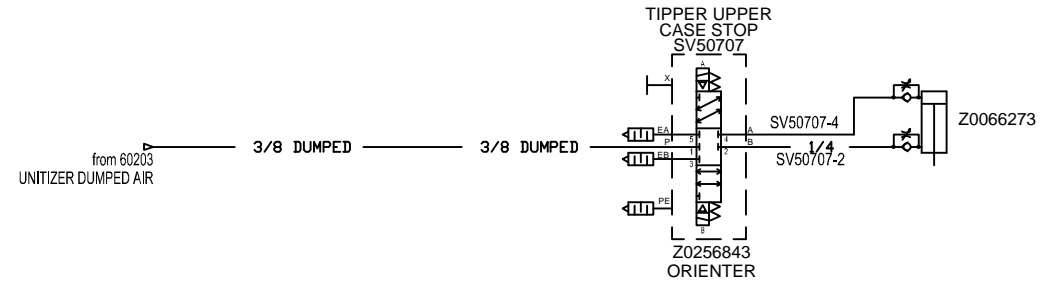
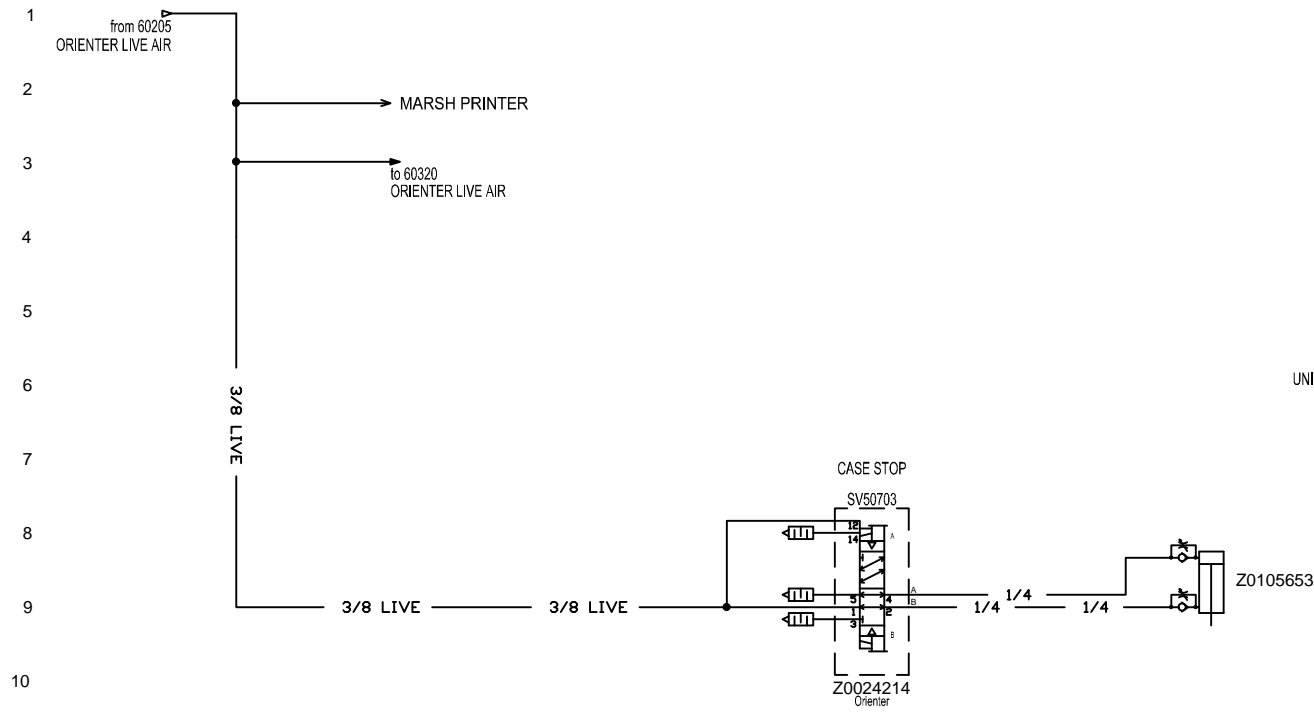
DATE: 02/17/09


SHEET: 40 OF 43

DRAWING NO: CASE PACKER PNEUMATICS

TITLE: 120 GMI RH KDGP & ORIENTER

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3711 IOWA STREET
ALEXANDRIA, MN 56308
(320) 763-6043
FAX (320) 763-7859



DWG BY: PML	 3711 IOWA STREET ALEXANDRIA, MN 56308 (320) 763-6043 FAX (320) 763-7859	TITLE: 120 GMI RH KDGP & ORIENTER	
REV: 3		DATE: 02/17/09	SHEET: 41 OF 43
		DRAWING NO: ORIENTER PNEUMATICS	

3.1	ADDED SV50707	5-16-19	DRO
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