

Service Bulletin

Machinery Affected: Horizontal Stacker

Document: SB182

Replacing a GE® QuickPanel Jr. 5-in. Touch

Title: Screen with a GE QuickPanel Jr. 6-in. Touch

Screen

Applies To: All GE® QuickPanel Jr. 5-in. Touch Screens

Distribution: Customers, Upon Order



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MiTek Machinery Division 301 Fountain Lakes Industrial Drive St. Charles, MO 63301 Phone: 800-523-3380

Sales fax: 636-328-9222

Customer Service fax: 636-328-9218

www.mii.com

Date Created	3 January 2008
Created By	R. Widder
Reviewed by	R. Tucker
Approved by	G. McNeelege
Manuf. Eng.	G. Balke
Applicability	PN 504454
Effectivity	All



Purpose and Scope

 $GE^{\textcircled{R}}$ is discontinuing the 5-in. QuickPanel Color-STN touch screen. As a result, all 5-in. touch screens that need to be replaced must be replaced with a 6-in. QuickPanel Color-STN touch screens. Since this screen is not an exact replacement, the cutout in the enclosure must be enlarged to accommodate the new screen.

Overview

The parts included in this kit are shown in Table 1. Please ensure all parts are present before starting this procedure.

Table 1: Parts in SB182 KIT

Qty.	Part Description	Part #
1	Touch screen, GE, 6"	92116
1	Service Bulletin 182	SB182

Before beginning the procedure, gather the supplies listed in Table 2.

Table 2: Customer-Supplied Items

Qty.	Part Description
1	Tape measure
1	Grease pencil or marker
1	Reciprocating saw with metal cutting blade
1	File
1	Standard screwdriver set
1	Phillips screwdriver set

If you have any questions, call MiTek Machinery Division Customer Service at 800-523-3380.



Procedure



Electrical Lockout/Tagout Procedures

WARNING
ELECTROCUTION HAZARD!
Verify that all power to the machine has been turned off and follow approved lockout/tagout safety procedures before performing any maintenance.
All electrical work must performed by a qualified electrician.
If it is absolutely necessary to troubleshoot an energized machine, follow NFPA 70E for proper procedures and personal protective equipment.

Before performing maintenance on any machine with electrical power, lockout/tagout the machine properly. When working on a machine outside of the machine's main electrical enclosure, not including work on the electrical transmission line to the machine, follow your company's approved lockout/tagout procedures which should include, but are not limited to the steps here.

- 1. Engage an E-stop on the machine.
- 2. Turn the disconnect switch handle on the machine's main electrical enclosure to the "off" position. See Figure 1.

WARNING
ELECTROCUTION HAZARD.
When the disconnect switch is off, there is still live power within the disconnect switch's enclosure. Always turn off power at the building's power source to the equipment before opening this electrical enclosure!

3. Attach a lock and tag that meets OSHA requirements for lockout/tagout.



Sample of a
Lock and Tag
Attached to a
Machine's
Electrical Enclosure

Figure 1: Sample of Lockout/Tagout on the Main Electrical Enclosure



Hydraulic System Lockout/Tagout Procedure

WARNING
MOVING PARTS CAN CRUSH AND CUT.
Always verify that power to the machine has been turned off and follow approved lockout/tagout procedures.
Turn off the shutoff valve before performing any maintenance on the equipment.

	WARNING
1	HIGH PRESSURE HAZARD. Bleed hydraulic lines before performing any maintenance on the hydraulic system.

Replacing the Touch Screen

Removing the Touch Screen

- 1. Disconnect the wiring from the touch screen, noting how it is wired.
- 2. Disconnect the communications cable from the touch screen, noting how it is connected.
- 3. Unscrew the screws that hold the touch screen in place.
- 4. Remove the panel clamps from the slots in the display body.
- 5. Remove the display from the panel opening.

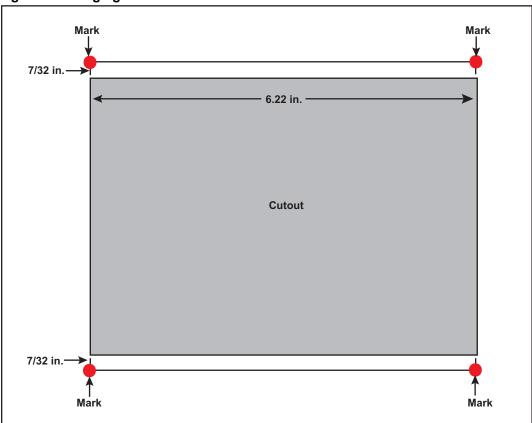


Enlarging the Cutout

The cutout that was created for the 5-in. display was 6.22 in. wide by 4.45 in. high. For the 6-in. display, the height of the cutout must be enlarged to 4.86 in. high. To enlarge the cutout:

1. Mark the location of the new cutout on the top side of the existing cutout. See Figure 2.

Figure 2: Enlarging the Cutout



- a) Using a tape measure or ruler, measure 7/32 in. above of the top left corner of the cutout. Mark the location with a marker or grease pencil.
- b) Measure 7/32 in. above the top right corner of the cutout. Mark the location with a marker or grease pencil.
- c) Using a straight edge, draw a line between the two marks.
- d) Using a straight edge, draw a line from the left mark to the top left corner of the cutout.
- e) Using a straight edge, draw a line from the right mark to the top right corner of the cutout.



- 2. Mark the location of the new cutout on the bottom side of the existing cutout.
 - a) Using a tape measure or ruler, measure 7/32 in. below the bottom left corner of the cutout. Mark the location with a marker or grease pencil.
 - b) Measure 7/32 in. below the bottom right corner of the cutout. Mark the location with a marker or grease pencil.
 - c) Using a straight edge, draw a line between the two marks.
 - d) Using a straight edge, draw a line from the left mark to the bottom left corner of the cutout.
 - e) Using a straight edge, draw a line from the right mark to the bottom right corner of the cutout.
- 3. Use the reciprocating saw to cut along the lines and enlarge the cutout.
- 4. Remove any burrs using the file. Make sure the edge are smooth.

Inserting the New Touch Screen

- 1. Install the gasket in the slot of the touch screen faceplate.
- 2. Insert the display through the panel opening.
- 3. Insert the panel clamps into the slots in the display body and tighten the screws.

Connecting Power and Communications to the Touch Screen

- 1. Remove the protective cover from the DC terminal strip on the back of the touch screen.
- 2. Connect the power supply wires to the terminals at the appropriate locations. See Drawing 90436 and Figure 3.



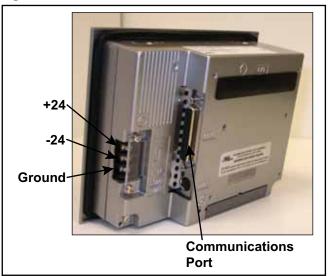
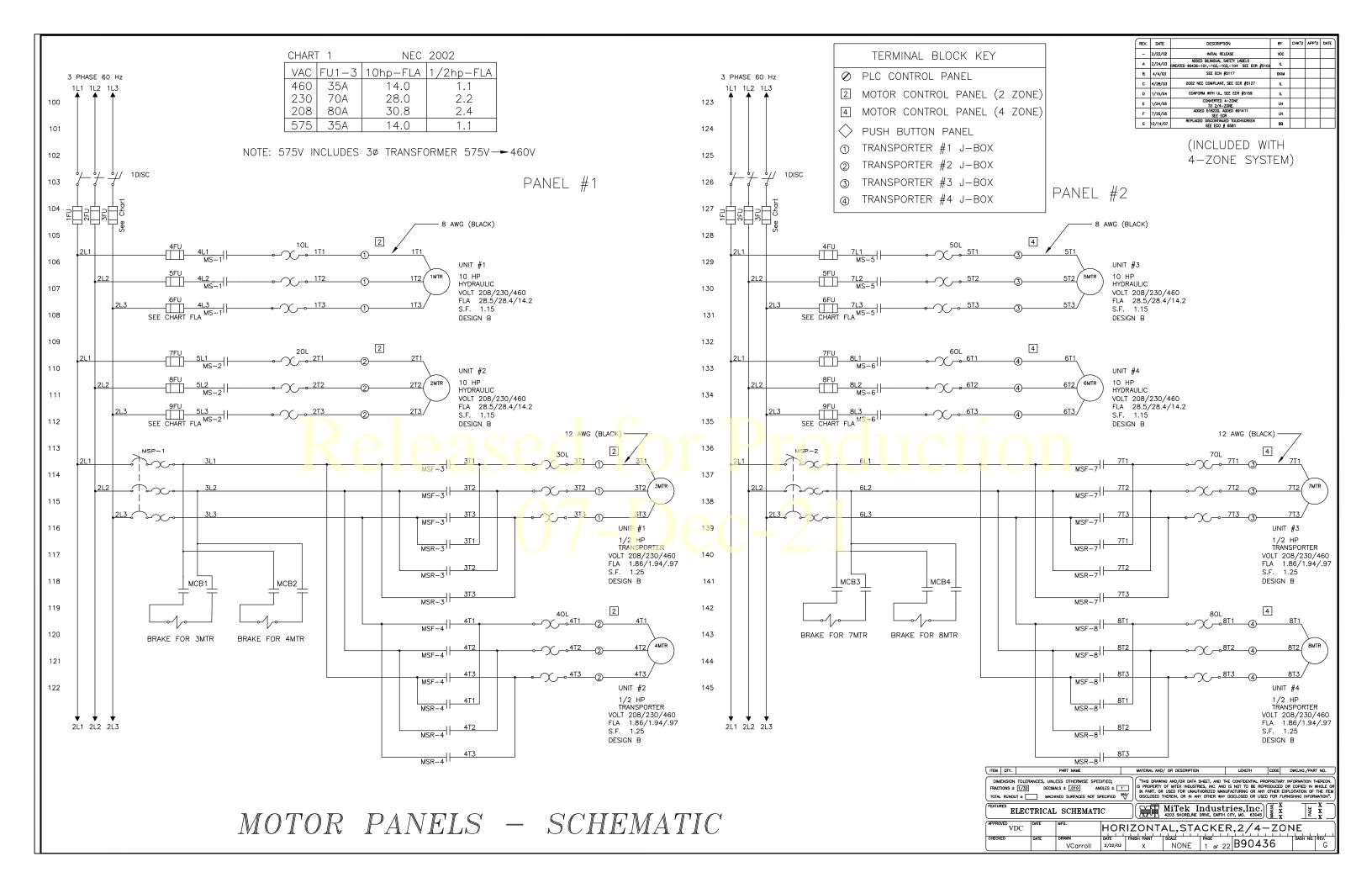
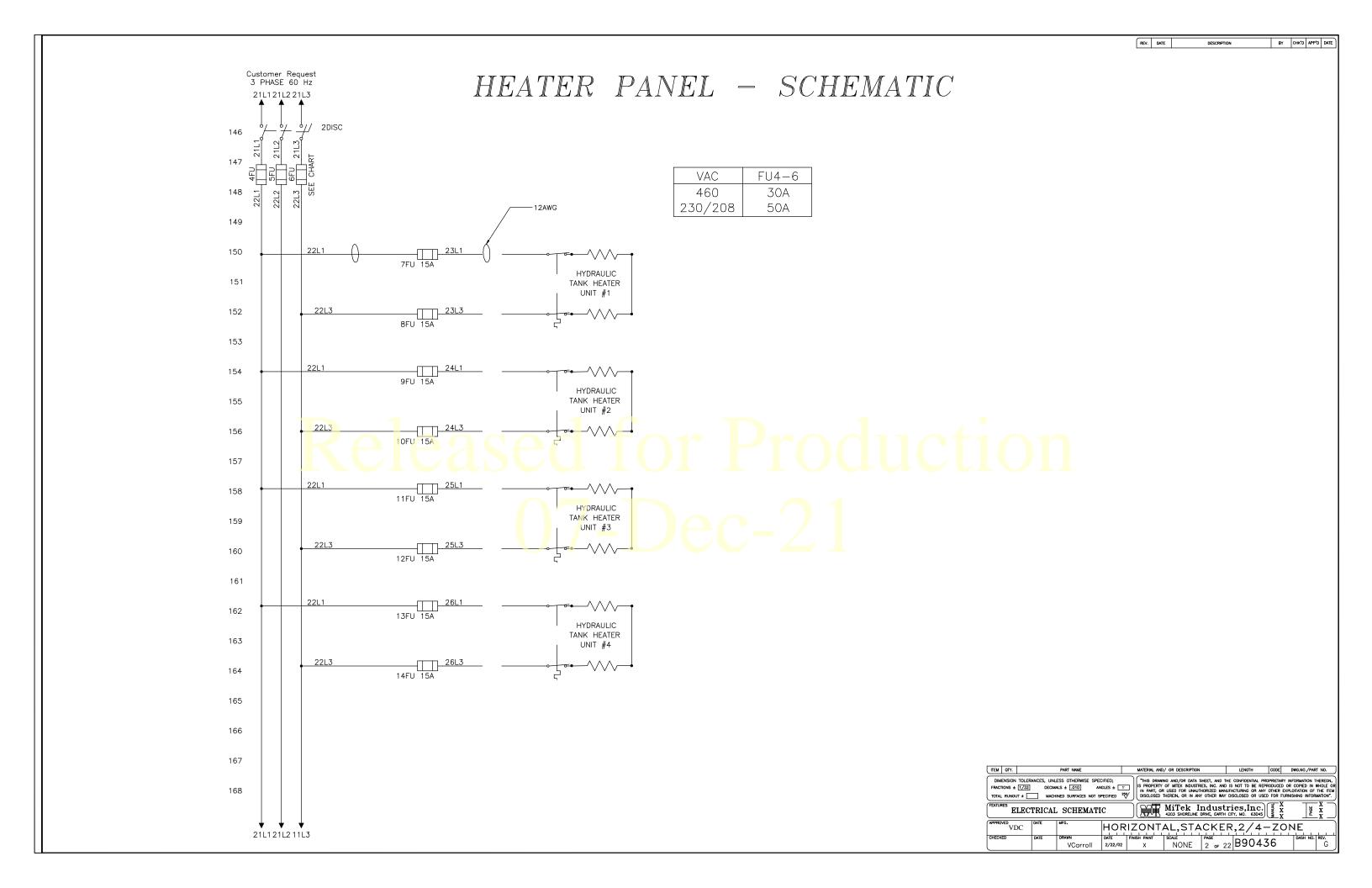
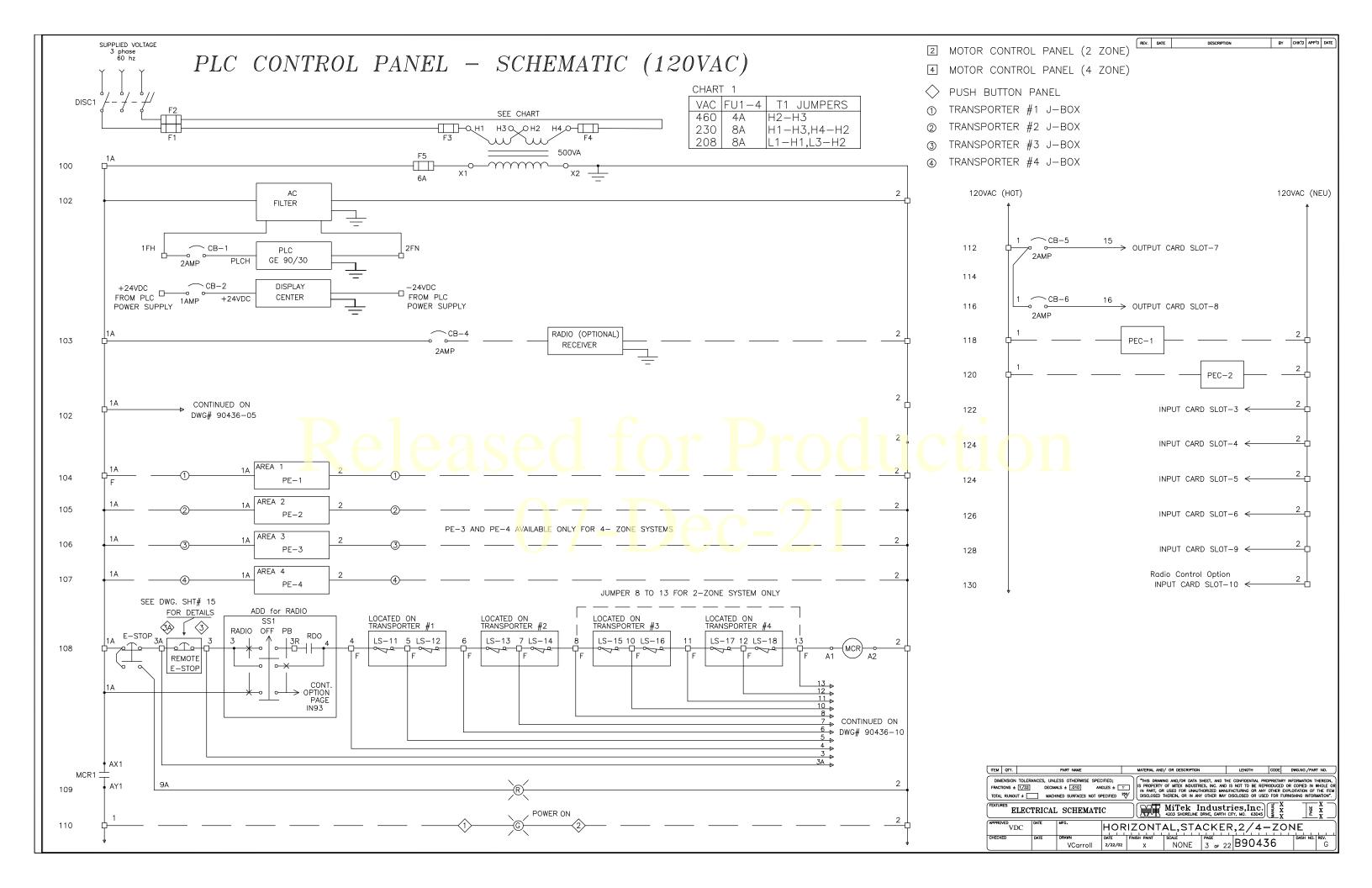


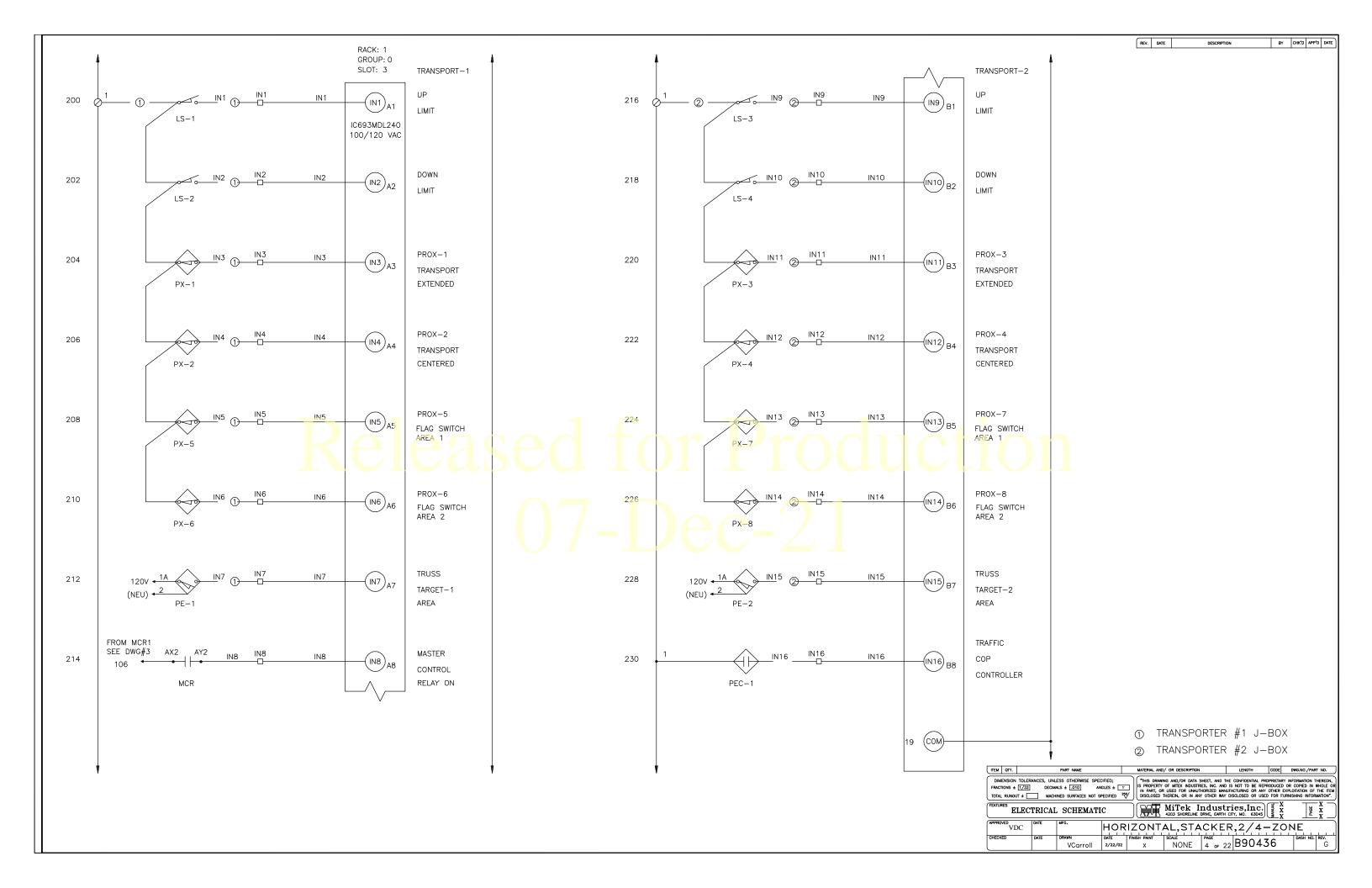
Figure 3: Power and Communications Connections

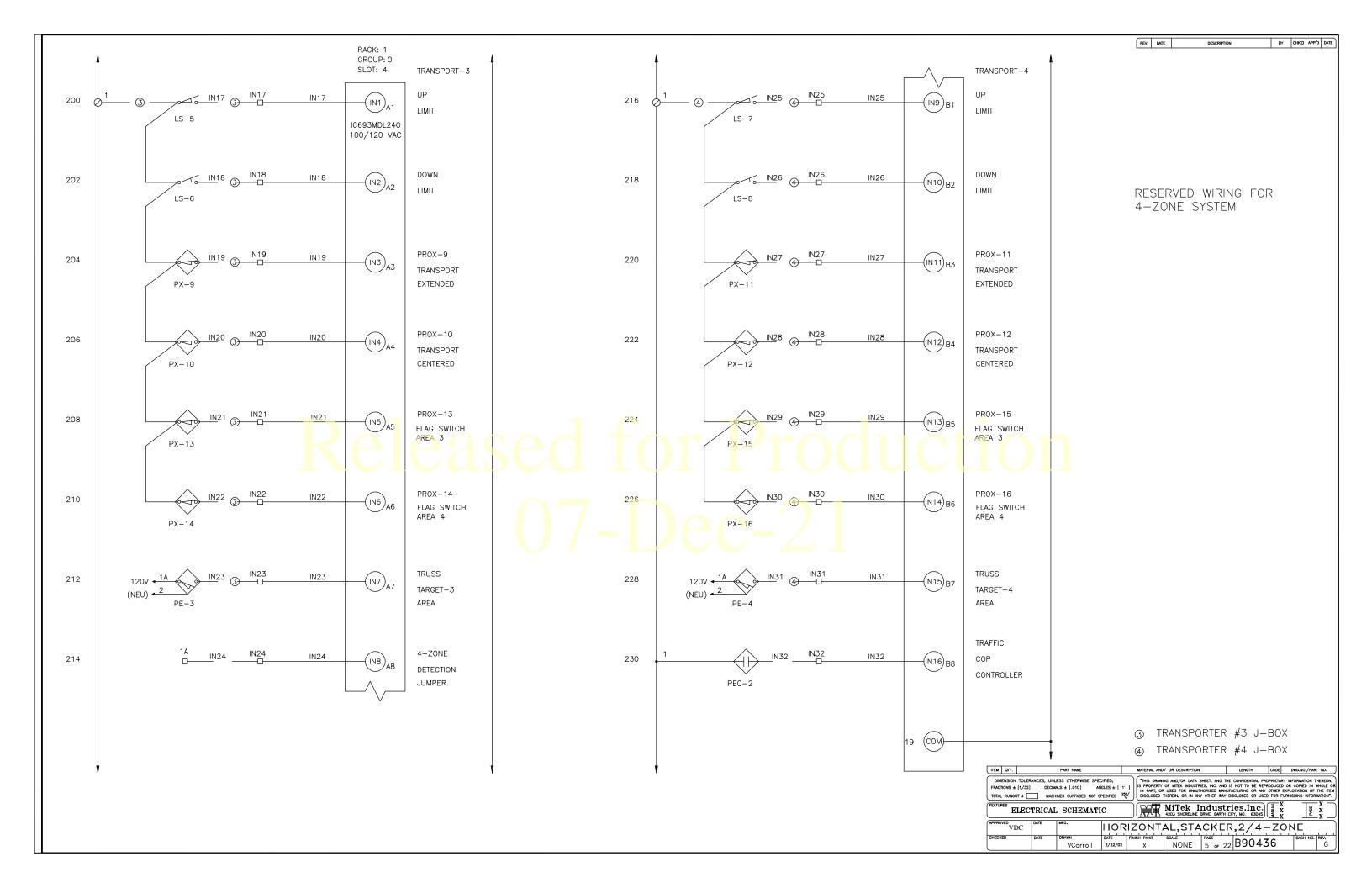
- 3. Tighten the terminal screws.
- 4. Put the protective cover back in place.
- 5. Connect the communications cable from the PLC to the touch screen at the 24-pin connection. See Figure 3.
- 6. Restore power to the machine.

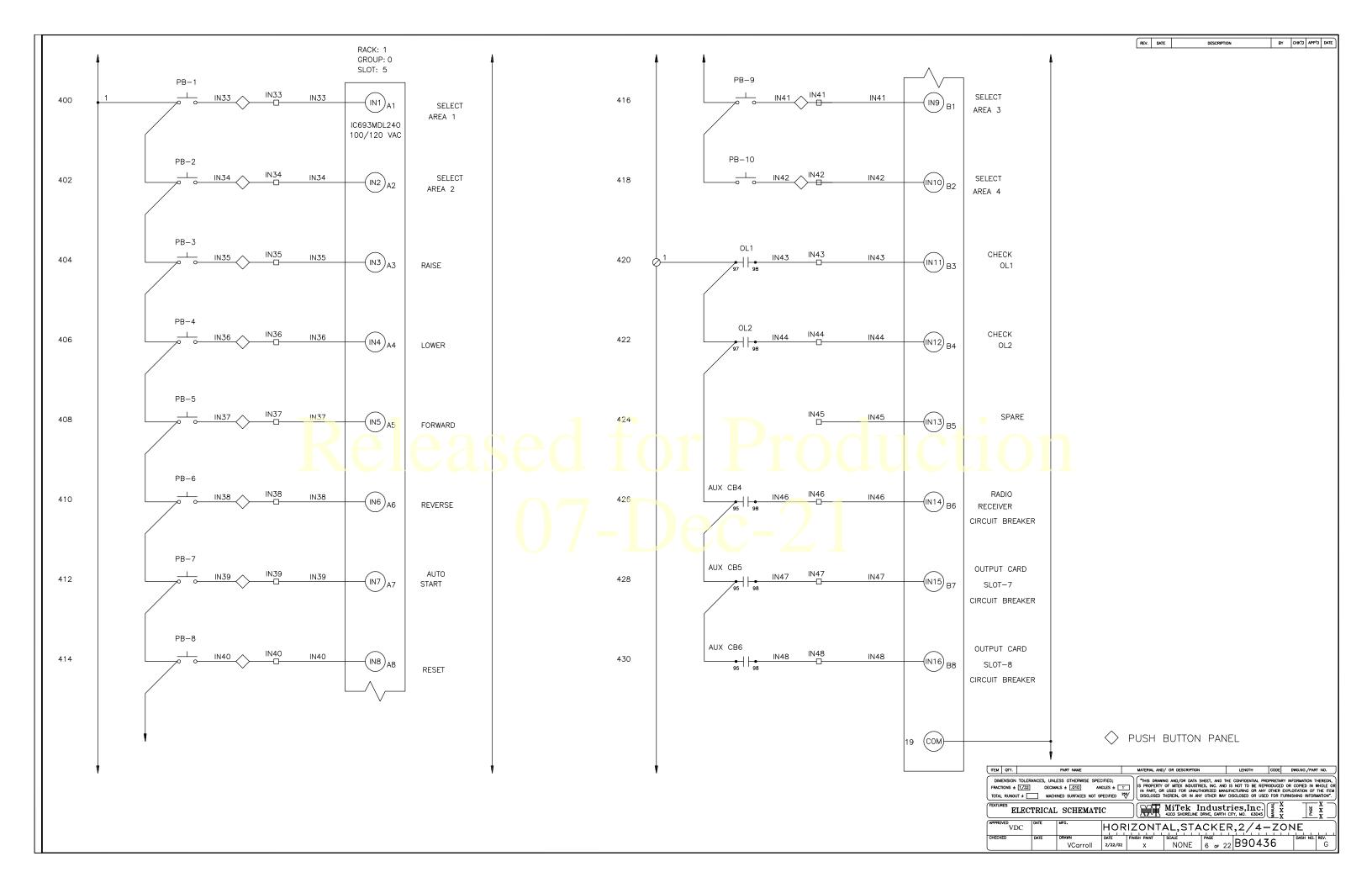


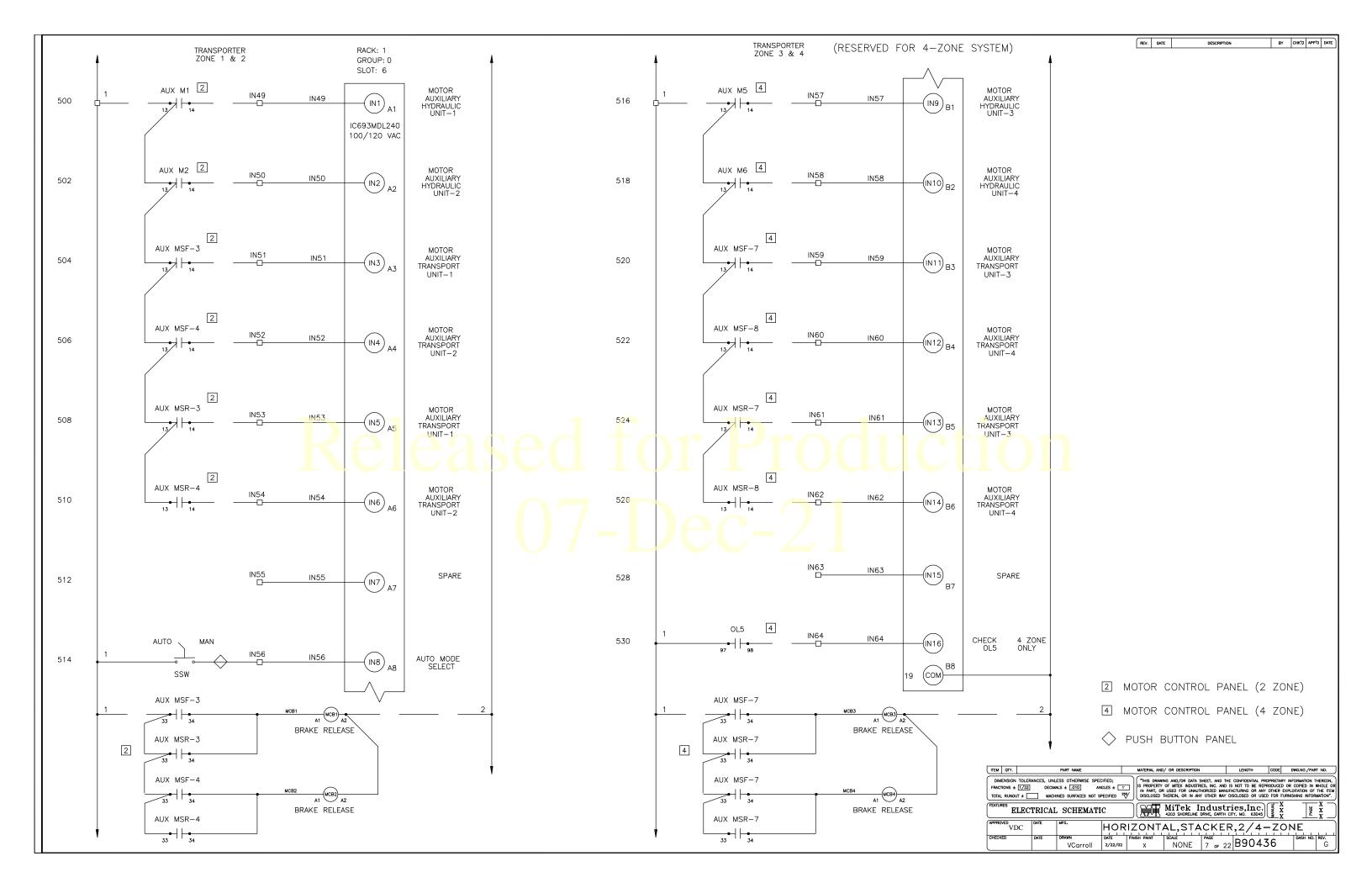


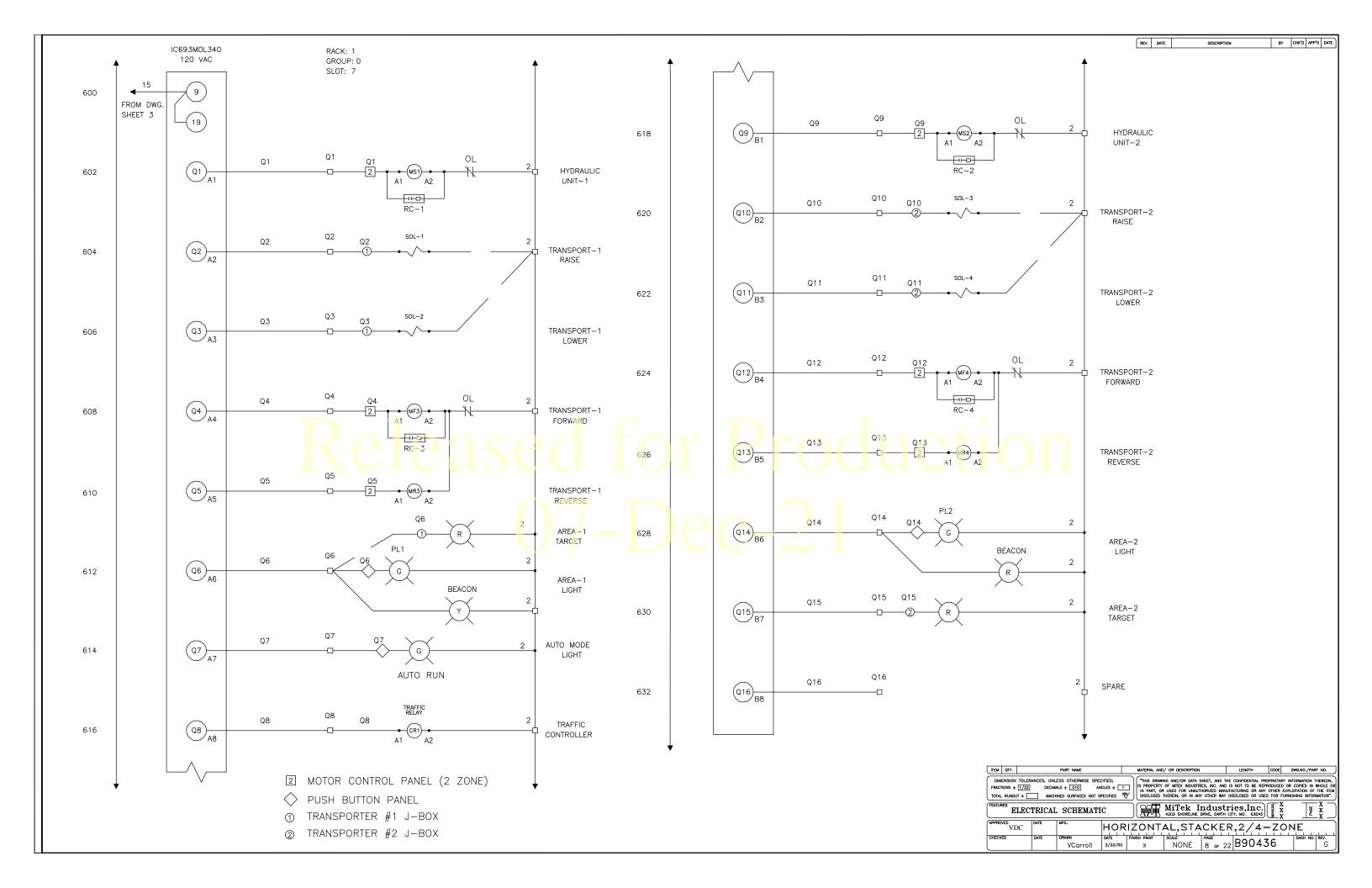


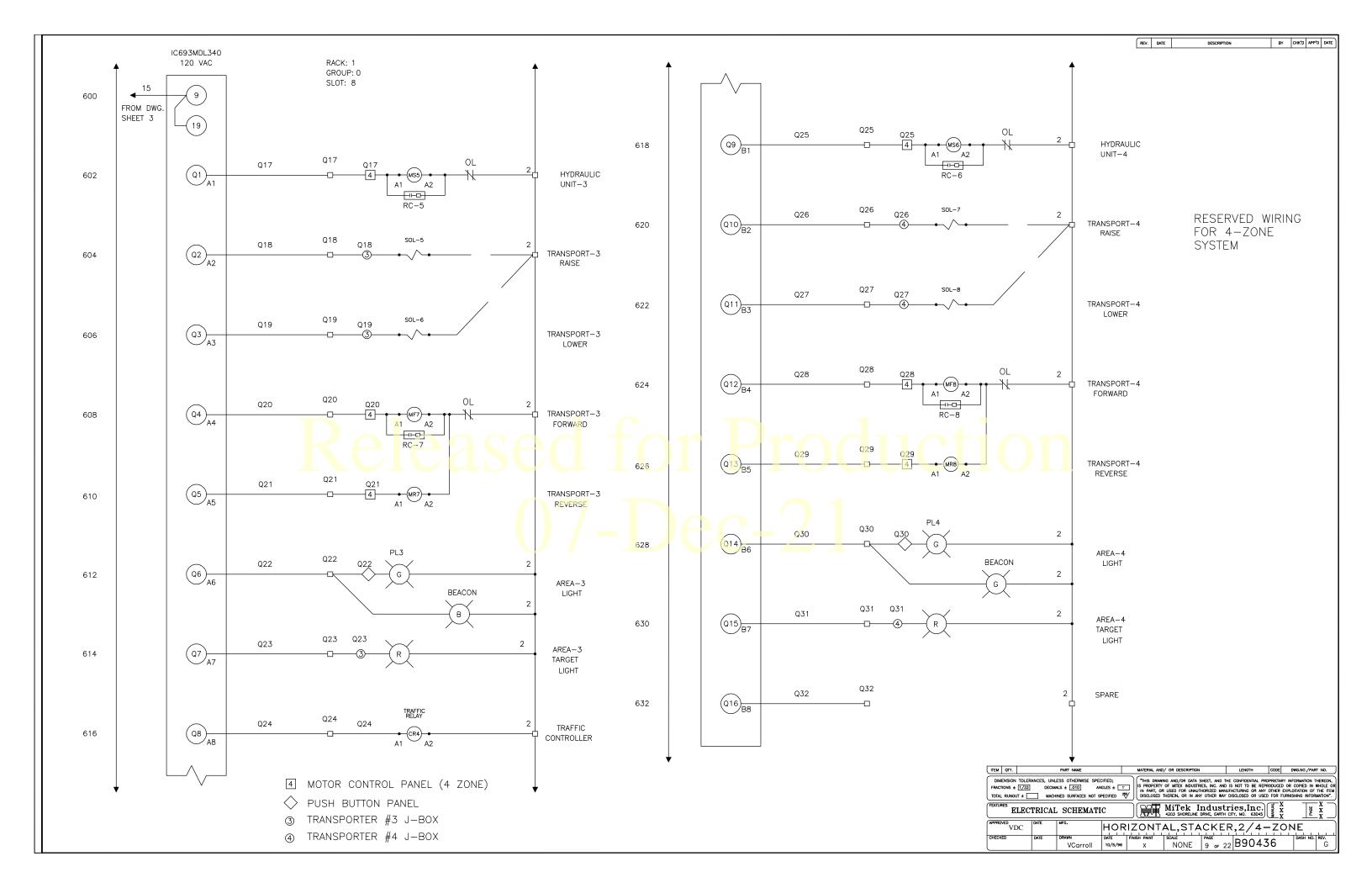


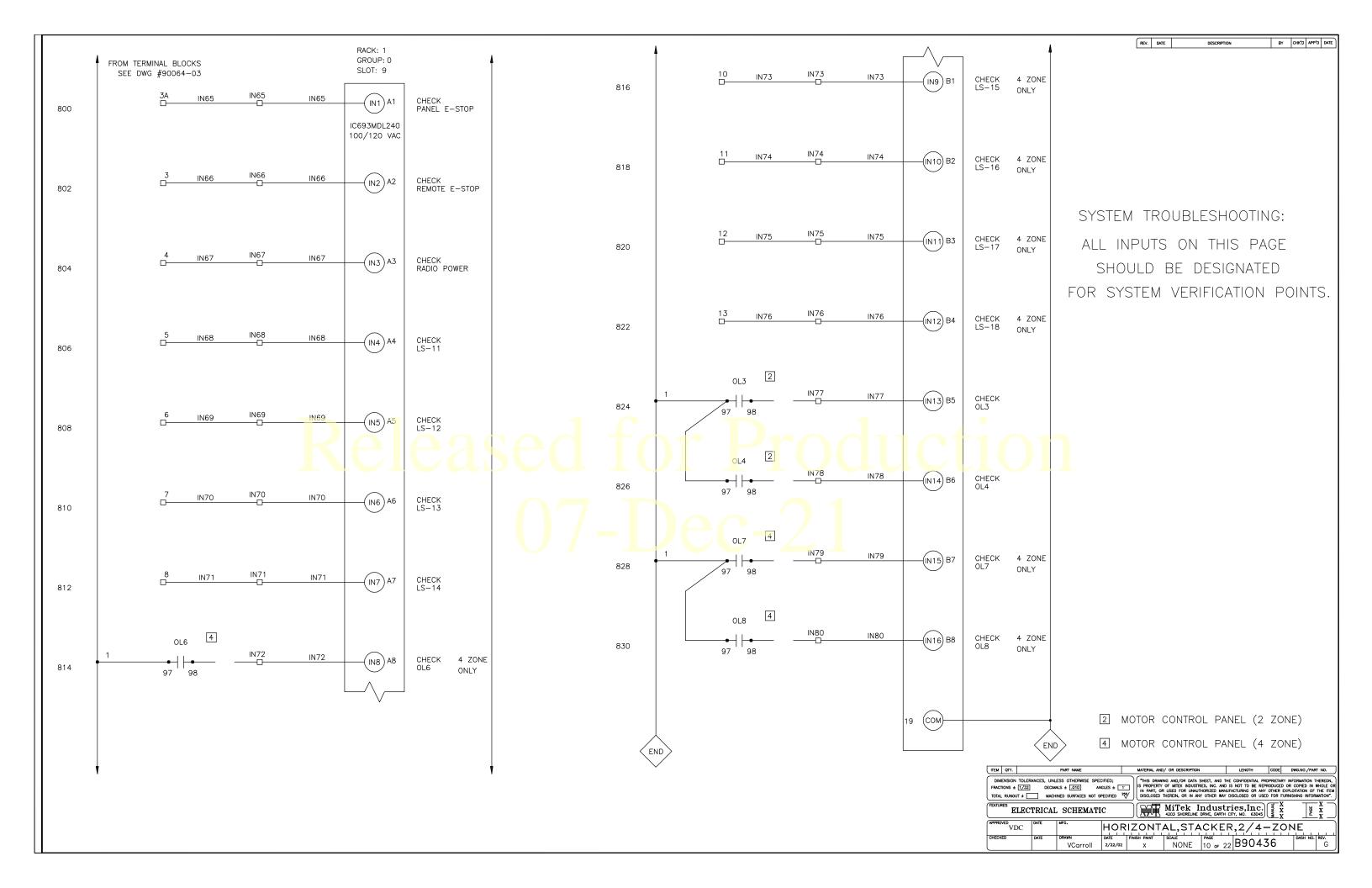


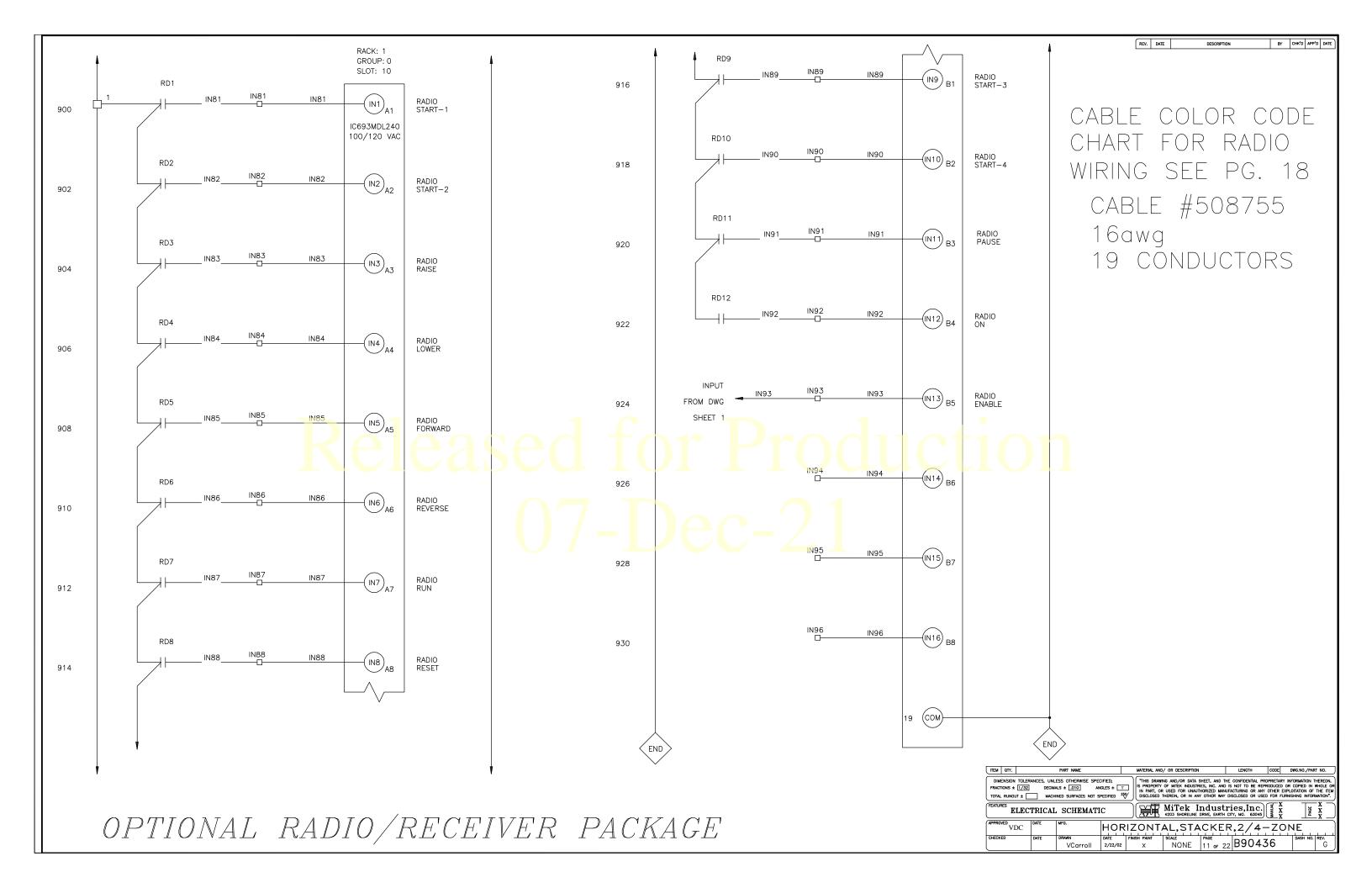


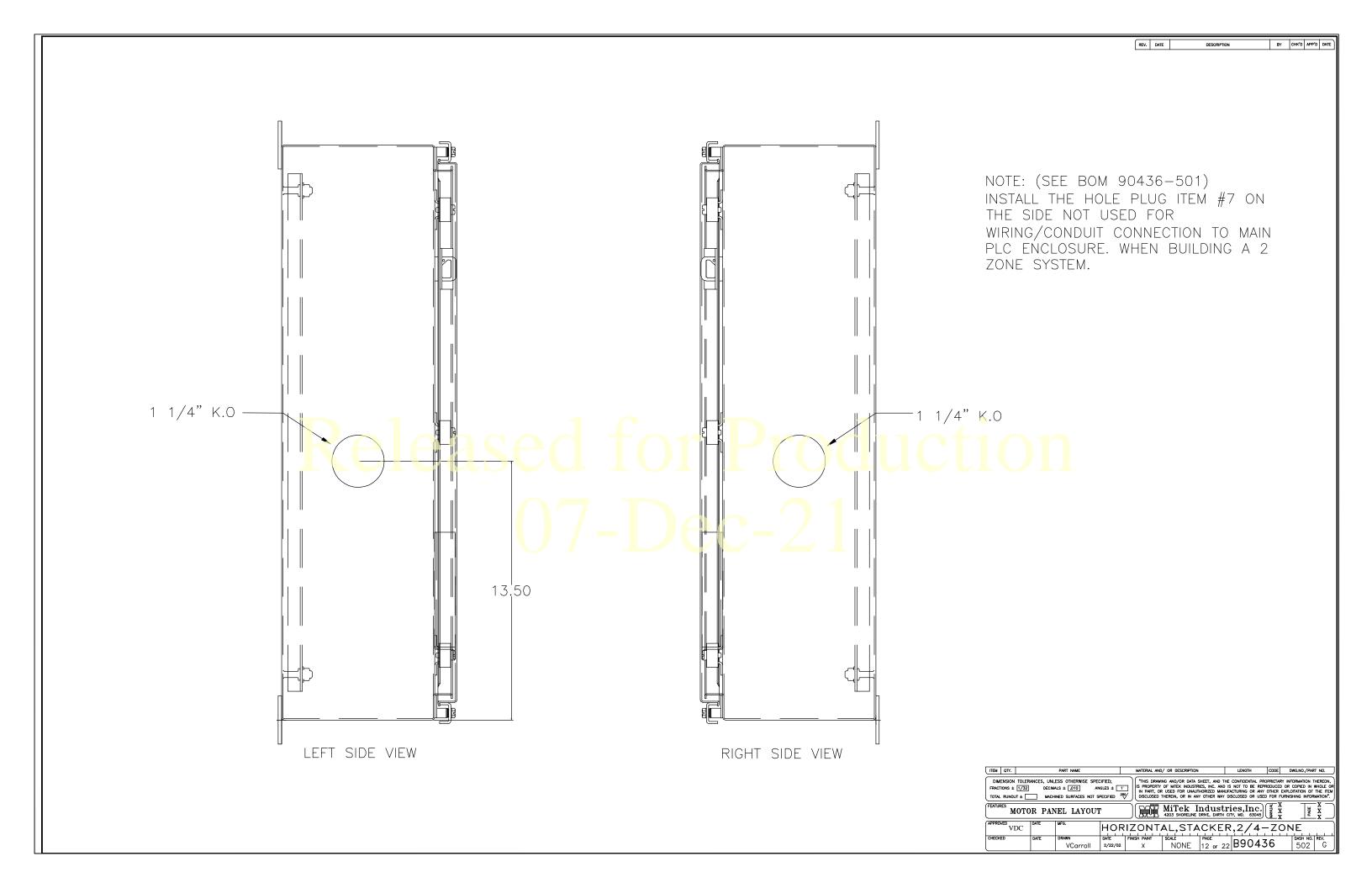


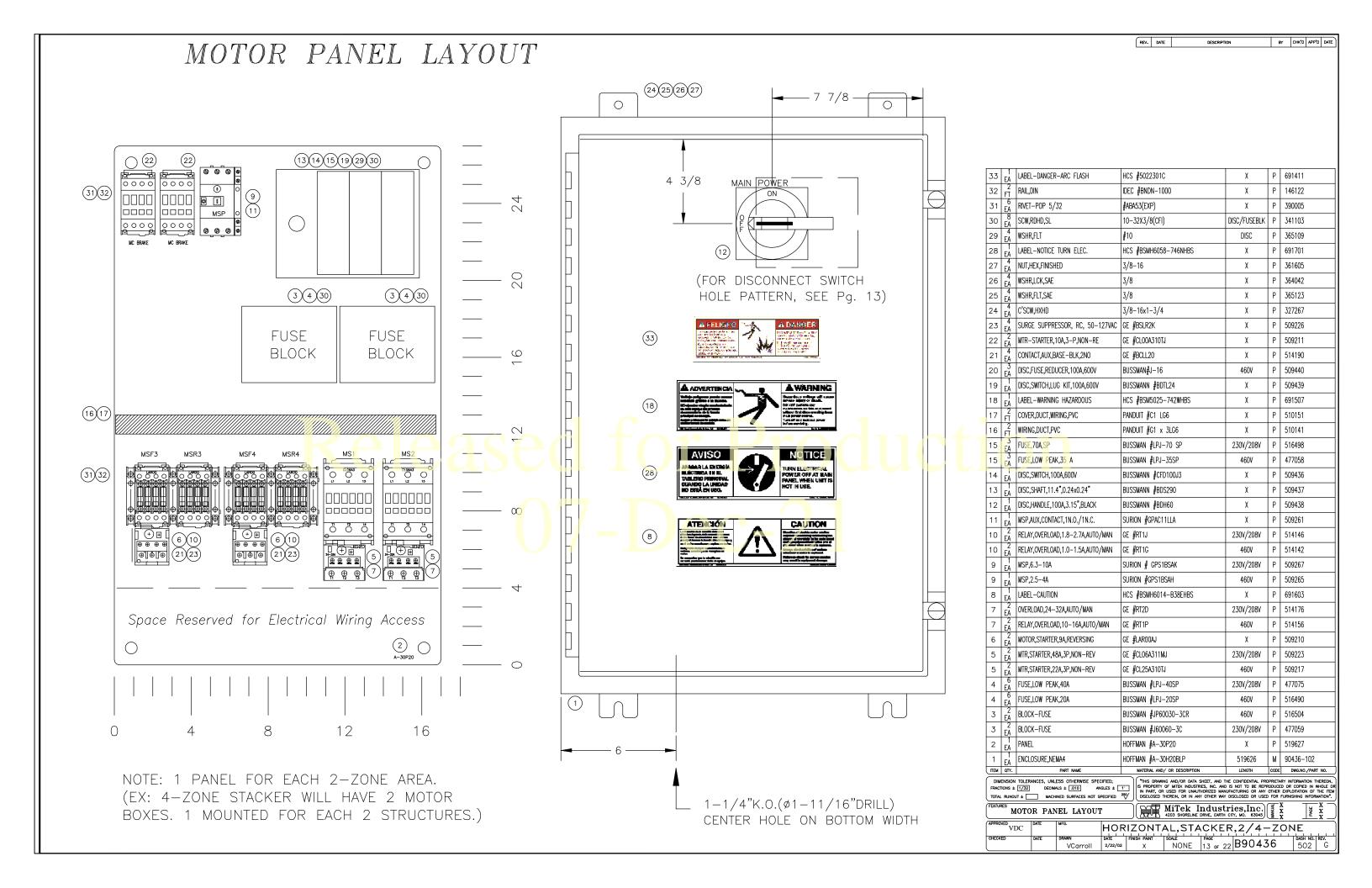


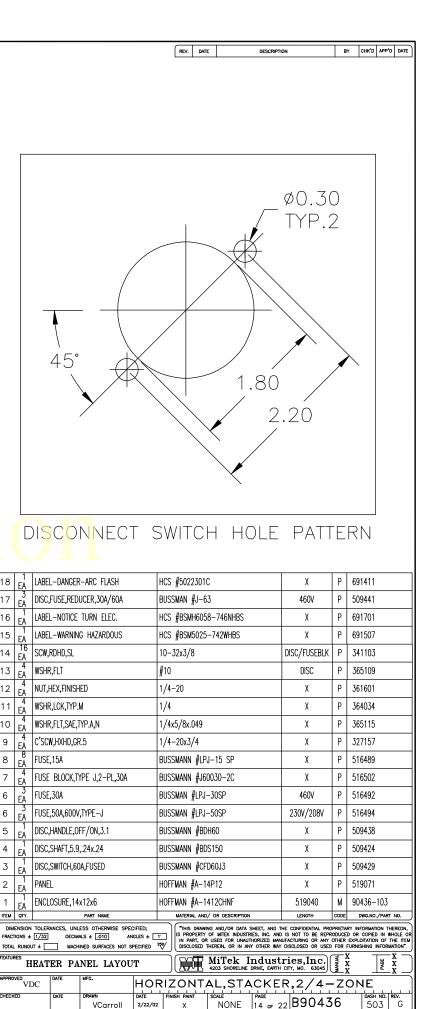












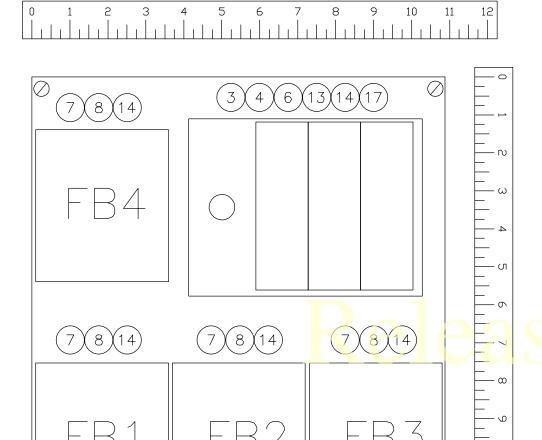
WSHR,FLT

FUSE,15A

FUSE,30A

VDC

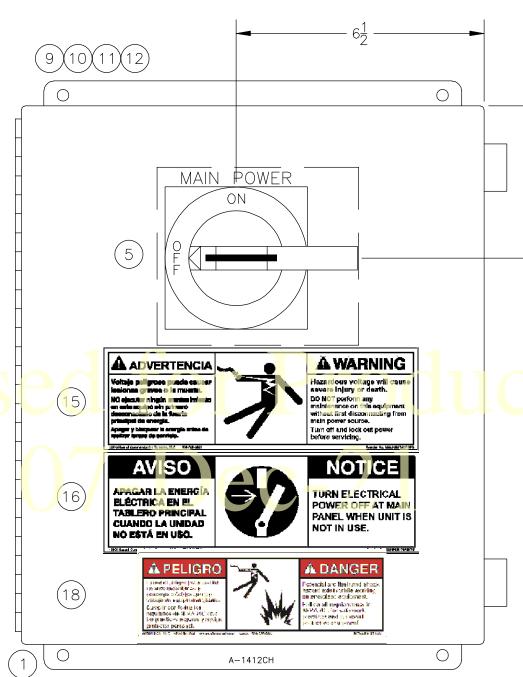
PANEL #3



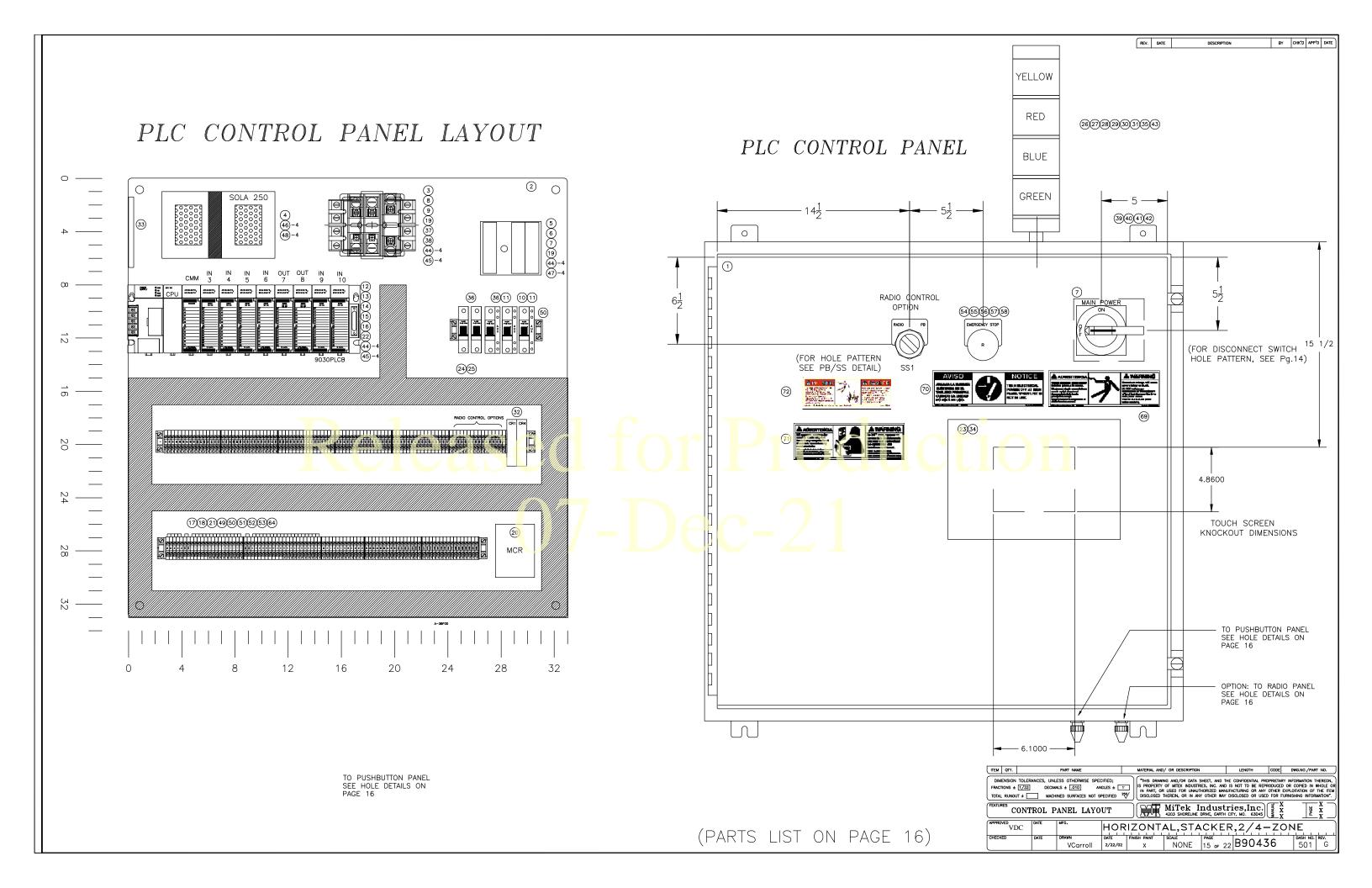
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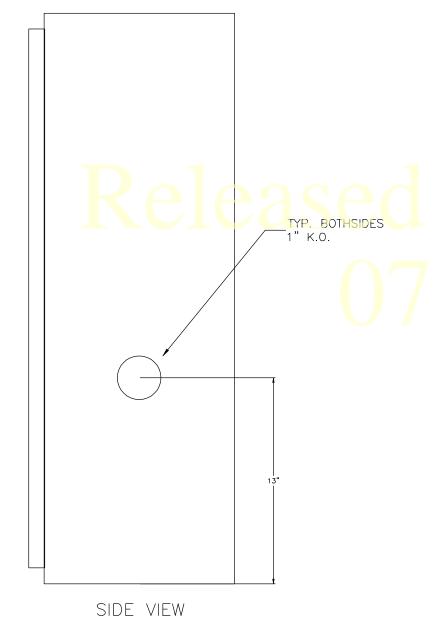
- 17



Hydraulic Heater Panel





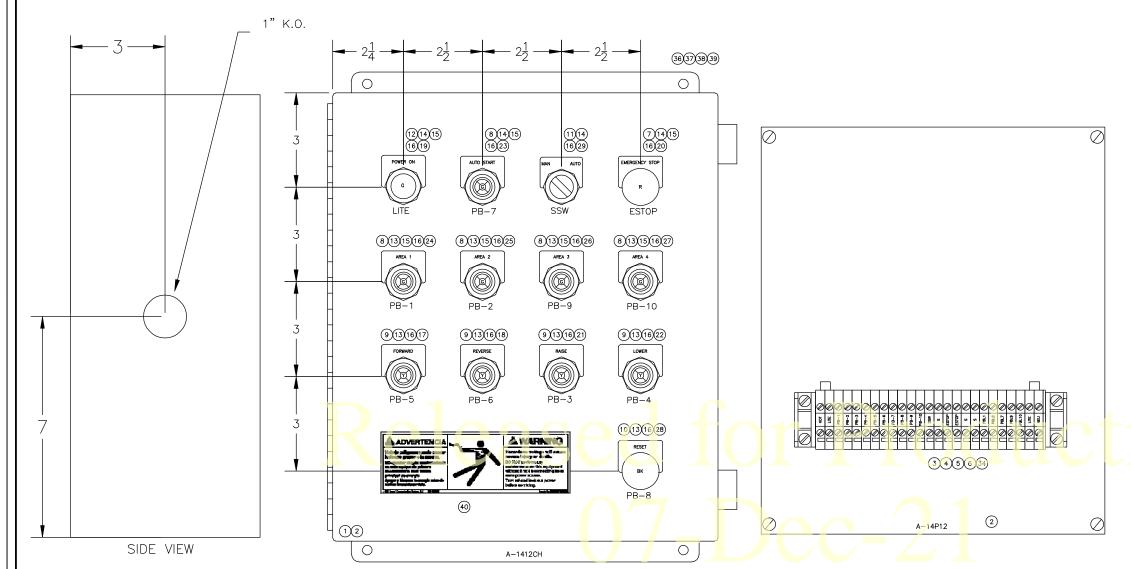


							22	EÀ	PLC,COMMUNICATION,90-30	GE #IC693CMM311	X	P	504415
							21	1 EA	TERM,MARKER,KIT,H-STACKER,4-ZONE	ENTRELEC #RC610	Х	Р	518310
							20	EA	RELAY,CONTROL	GE# CR120B02202	Х	Р	514071
72	1 EA	LABEL-DANGER-ARC FLASH	HCS #5022301C	Х	P	691411	19	2 EA	FUSE,8 A	BUSS #LPJ-8SP	208V/230V	Р	516487
71	1 EA	LABEL—WARNING DO NOT START	HCS #BSM6000-B39WHBS	Х	Р	691518	19	2 EA	FUSE,4 A	BUSS #LPJ-4SP	460V	Р	516484
70	EA	LABEL-NOTICE TURN ELEC.	HCS #BSMH6058-746NHBS	X	Р	691701	18	5 EA	END,SECTION,ADO-ADO	ENTRELEC #199341.05	Х	Р	518203
69	EA	LABEL-WARNING HAZARDOUS	HCS #BSM5025-742WHBS	Х	Р	691507	17	69 EA	TERMINAL,BLOCK,ADOADO	ENTRELEC #199051.26	Х	Р	518202
68	EA	HORIZ,STKR,4-ZN,PNL,LAYOUT,PLYWOOD	SEE DRAWING	Х	М	C70304	16	2 EA	PLC,OUTPUT,120V,16POINT	GE #IC693MDL340	Х	Р	504405
67	400 FT	WIRE,MTW,	#16 AWG	Х	Р	508006	15	6 EA	PLC,INPUT,AC,16POINT	GE #IC693MDL240	Х	Р	504403
66	200 FT	WIRE,COLORS	12 THHN	Х	Р	508862	14	EA	PLC,POWER SUPPLY,120VAC	GE #IC693PWR321	Х	Р	504407
65	200 FT	WIRE,COLORS	8 THIN	Х	Р	508864	13	1 EA	PLC,RACK,10-SLOT	GE #IC693CHS391	Х	Р	504412
64	7 FT	MOUNTING RAIL,DIM	IDEC #BND-1000	Х	Р	146122	12	EA	PLC,CPU,16K	GE #IC693CPU331	Х	Р	504402
63	13 EA	TY-WRAP,7-1/4",WHITE,MED	RAYBRO #TY-525M	Х	Р	508701	11	Z EA	CIRCUIT-BREAKER,AUX-CONT,1NO/1NC	GE #VAUX1	Х	Р	516466
62	30 EA	TY-WRAP,MED,5-1/2	TY-524M	Х	Р	508710	10	1 EA	CIRCUIT-BREAKER,1-POLE,1 A,277VAC	GE #V07101	Х	Р	516422
61	30 EA	TY-WRAP,LIGHT,3-1/2	TY-523M	Х	Р	508700	9	EA	FUSE,10A	BUSSMANN #FNQ-R-10	Х	Р	516385
60	15 EA	PAD,PRESSURE,TYWRAP	#TC-5342A	Х	Р	504313	8	2 EA	FUSE,CLASS-CC,8AMP	BUSSMANN #FNQ-R-8	208V/230V	Р	516391
59	75 EA	TY-WRAP,7-1/4",BLACK	TY-525MX	Х	Р	508704	8	2 EA	FUSE,CLASS-CC,4AMP	BUSSMANN #FNQ-R-4	460V	Р	516389
58	EA	NAMEPLATE,E-STOP	GE #P9ACPBS229	Х	Р	513683	7	EA	DISC,HANDLE,OFF/ON	BUSSMANN #BDH106	Х	Р	509423
57	EA	NAMEPLATE,HOLDER	GE #P9ARTBS	Х	Р	513676	6	1 EA	DISC,SHAFT,10.4",.2x.2,PISTOL-HANDLE	BUSSMAN #CDS49P	Х	Р	509399
56	EA	LIGHT,120VAC,X-FORM	GE #P9PTNVJ	Х	Р	513652	5	1 EA	DISC,SWITCH,30A,FUSED	BUSSMANN #BDCF30J6	Х	Р	509422
55	1 EA	CONTACT,BLOCK,1NO/NC	GE #P98IVN	Х	Р	513651	4	1 EA	CONDITIONER,250VA	SOLA #63-23-125-4	Х	Р	509108
54	EA	OPER,P-B,RED,MUSHROOM	GE #P9CET4RL1	Х	Р	513654	3	1 EA	TRANSFORMER,1000VA	ACME #TA-2-81309	208V	Р	509174
53	5 EA	JUMPER,BAR,10-POLE,BJM6	ENTRELEC #168973.07	Х	Р	518143	3	1 EA	TRANSFORMR 1000VA	ACME #TA2-81217	460V/230V	Р	509087
52	6 EA	END,SECTION,COMPRESSION-CLAMP	ENTRELEC #199336.20	Х	Р	518221	2	1 EA	PANEL	HOFFMAN #A-36P36	χ	Р	477085
51	116 EA	TERMINAL,BLOCK,ADO-FIELD	ENTRELEC #199034.15	Х	Р	518220	1	1 EA	ENCLOSURE	HOFFMAN #A-363612LP	519041	М	90436-101
50	6 EA	END,STOP,screwless	ENTRELEC #199408.02	Х	Р	518192	ПЕМ	_	PART NAME	MATERIAL AND/ OR DESCRIPTION	LENGTH	CODE	DWG.NO./PART NO.
49	20 EA	RIVET-POP,5/32	#ABA53	Х	Р	390005	FRAC1	L SNOL	N TOLERANCES, UNLESS OTHERWISE SPECIFIED;	I IN PART, OR USED FOR UNAUTHORIZED MAN	HE CONFIDENTIAL PRO D IS NOT TO BE REPR UFACTURING OR ANY	OTHER	O OR COPIED IN WHOLE OR EXPLOITATION OF THE ITEM
48	4 EA	SCW,RDHD,SL	1/4-20x3/8	L-CONDITIONER	Р	341151	FEATUR	RFS	UT ± MACHINED SURFACES NOT SPECIFIED	DISCLOSED THEREIN, OR IN ANY OTHER WAY		3 ;	7 — v ≺
47	4 EA	WSHR,FLT	#10	DISC SW	Р	365109	(APPRO	VED	SSEMBLY 501 PARTS LIST	4203 SHORELINE DRIVE, EARTH		- N	
46	4 EA	WSHR,LCK,TYP.M	1/4	L-CONDITIONER	Р	364034	CHECK	V	DC HO DATE DRAWN DATE	RIZONTAL, STACKE			DASH NO. REV.
ПЕМ	QTY.	PART NAME	MATERIAL AND/ OR DESCRIPTION	LENGTH	CODE	DWG.NO./PART NO.			VCarroll 2/22/0	FINISH PAINT SCALE PAGE 2 X NONE 16 of 2	₂ B9043	6	501 G

		_		REV. DATE	DESCRIPTION	В	Y CHK'D APP'D DATE
	45	8 EA	WSHR,LCK,#10,TYP.M	WSHR,LCK,#10,TYP.M	XFMR/PLC	Р	364026
	44	12 EA	SCW,RDHD,SL	10-32x3/8	XFMR/DISC/PLC	Р	341103
	43	2 EA	LOCKNUT,FLEX,BL-75,3/4,GALV	3/4	BEACON	Р	511193
	42	4 EA	NUT,HEX,FINISHED	3/8-16	MAIN ENCL.	Р	361605
	41	4 EA 4	WSHR,LCK,SAE	3/8	MAIN ENCL.	Р	364042
	40	4 EA	WSHR,FLT,SAE	3/8	MAIN ENCL.	Р	365123
	39	4 EA	C'SCW,HXHD	3/8-16x1-3/4	MAIN ENCL.	Р	327267
	38	1 EA	KIT,FUSE,PRIMARY XFORMER	ACME #PL112700	208V	Р	516400
	37	1 EA 4	KIT,FUSE,SECONDARY,XFMR	ACME #PL112603	208V	Р	516401
	36	4 EA	CIRCUIT BRKR,1-POLE,2 A,277VAC	GE #V07102	Х	Р	516423
	35	1 EA	NIPPLE,BI.SCH80,CLOSE	3/4	BEACON	Р	714601
	34	1 EA	RS232,CABLE,TCP/CMM311	TCP #HMI-CAB-C53	Х	Р	504455
	33		GROUNDING,BAR	SQUARE-D #PK7GTA	Х	Р	504229
	32	EA 2 EA	RELAY,MODULE,RB122AR	ENTRELEC #010011.17	X	P	514186
	31	1	LENS,MODULE,BLUE	EDWARDS #102-LM-B	BEACON	P	513526
	30	EA 1	LENS,MODULE,AMBER	EDWARDS #102-LM-A	BEACON	P	513520
		EA 1	LENS,MODULE,GREEN	EDWARDS #102-LM-G		Р	513525
	29	1 EA 1	· · ·	"	BEACON		
	28	1 EA	LENS,MODULE,RED	EDWARDS #102-LM-R	BEACON	Р	513527
	27	EA 4	BEACON,TOWER,BASE,120VAC,120V,3/4"	EDWARDS #120PMBS-N5	BEACON	P	513521
	26	EA 12	BEACON,LIGHT,HLGEN,STDY	EDWARDS #102LS-FINH-N5	BEACON	Р	513528
	25	FT 12	COVER,DUCT,WIRING,PVC	PANDUIT #C2 LG6	Х	Р	510152
	24	FT 1 EA	WIRING,DUCT,PVC	PANDUIT #G2 x 3LG6	Х	Р	510142
	23	EÅ	TOUCHSCREEN,6"DISPLAY	TCP #CQPKSTDN0000,	Х	Р	504299
	22	EÅ	PLC,COMMUNICATION,90-30	GE #IC693CMM311	X	Р	504415
	21	EA	TERM,MARKER,KIT,H-STACKER,4-ZONE	ENTRELEC #RC610	Х	Р	518310
	20	1 EA	RELAY,CONTROL	GE# CR120B02202	X	Р	514071
	19	EA 2 EA	FUSE,8 A	BUSS #LPJ-8SP	208V/230V	Р	516487
	19	2 EA	FU <mark>SE,</mark> 4 A	BUSS #LPJ-4SP	460V	Р	516484
	18	5 EA	END,SECTION,ADO-ADO	ENTRELEC #199341.05	Х	Р	518203
	17	69 EA	TERMINAL,BLOCK,ADOADO	ENTRELEC #199051.26	Х	Р	518202
	16	2 EA	PLC,OUTPUT,120V,16POINT	GE #IC693MDL340	Х	Р	504405
	15	6 EA	PLC,INPUT,AC,16POINT	GE #IC693MDL240	Х	Р	504403
	14	1	PLC,POWER SUPPLY,120VAC	GE #IC693PWR321	Х	Р	504407
	13	1 EA	PLC,RACK,10-SLOT	GE #IC693CHS391	Х	Р	504412
\exists	12	1	PLC,CPU,16K	GE #IC693CPU331	Х	Р	504402
	11	EA 3	CIRCUIT-BREAKER,AUX-CONT,1NO/1NC	GE #VAUX1	Х	Р	516466
	10	EA 1	CIRCUIT-BREAKER,1-POLE,1 A,277VAC	GE #V07101	Х	P	516422
\dashv	9	EA 1 EA	FUSE,10A	BUSSMANN #FNQ-R-10	X	P	516385
\dashv	8	2	FUSE,CLASS-CC,8AMP	BUSSMANN #FNQ-R-8	208V/230V	P	516391
-	8	EĀ 2	FUSE,CLASS-CC,4AMP	BUSSMANN #FNQ-R-4	460V	P	516389
-		EA 1		BUSSMANN #BDH106		P	
	7	EA 1	DISC,HANDLE,OFF/ON DISC,SHAFT,10.4",.2x.2,PISTOL—HANDLE	-	X	P	509423 509399
	6	EA 1		BUSSMAN #CDS49P	X	L.	
_	5	EA 1	DISC,SWITCH,30A,FUSED	BUSSMANN #BDCF30J6	Х	P	509422
_	4	EA 1	CONDITIONER,250VA	SOLA #63-23-125-4	X	P	509108
4	3	EA 1	TRANSFORMER,1000VA	ACME #TA-2-81309	208V	Р	509174
	3	EĄ	TRANSFORMR 1000VA	ACME #TA2-81217	460V/230V	Р	509087
_	2	EĄ	PANEL	HOFFMAN #A-36P36	Х	Р	477085
_	1	EA	ENCLOSURE	HOFFMAN #A-363612LP	519041	М	90436-101
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PUSH BUTTON PANEL

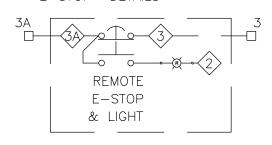


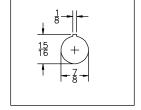
SEE PAGE 17 FOR CABLE WIRING & TERMINAL BLOCK DETAILS

ALL PUSH BUTTONS AND PILOT LIGHTS
WILL BE TERMINATED TO THE PROPER
TERMINAL BLOCK. A LIST OF ALL CONNECTIONS
ARE AS FOLLOWS:

PUSH BU	TTON w/ PILOT LIGHT	PUSH B	UTTON ONLY	PILOT	LIGHT ONLY
PB-1 PBL1	AREA 1	PB-3	RAISE	LITE	POWER ON
PB-2 PBL2	AREA 2	PB-4	LOWER		
PB-9 PBL9	AREA 3	PB-5	FORWARD	SELECT	OR SWITCH
PB-10 PBL10	AREA 4	PB-6	REVERSE	SSW	AUTO/MAN
PB-7 PBL7	AUTO START	PB-8	RESET		
E-STOP					

FROM THIS DWG, PAGE 3 E-STOP DETAILS





PB/SS HOLE PATTERN

1						
40	EA	LABEL-WARNING HAZARDOUS	HCS #BSM5025-742WHBT		Р	691509
39	EA.	WASHR,LCK,TYP.M	1/4		Р	364034
38	EA	NUT,HEX,FINISHED	1/4–20		Р	361601
37	4 EA	WSHR,FLT,SAE,TYP.A,N	1/4x5/8x.049		Р	365115
36	4 EA 30	C'SCW,HXHD,GR.5	1/4-20x3/4		Р	327157
35	30 FT	WIRE,MTW,RED	#16 AWG		Р	508006
35	2 FT	WIRE,MTW,WHITE	#16 AWG		Р	508006
34	∃_	MOUNTING,RAIL,DIN	IDEC #BND-1000		Р	146122
33	20 EA	TY-WRAP,MED.,5-1/2	#TY-524M		Р	508710
32	20 EA	TY-WRAP,LIGHT,3-1/2	#TY-523M		Р	508700
31	10 FA	PAD,PRESSURE,TYWRAP	#TC-5342A		Р	504313
30	25 EA	TY-WRAP,7-1/4",BLACK	TY-525MX		Р	508704
29	1 EA	NAMEPLATE, MAN OFF AUTO	GE #P9ACPBS269		Р	513699
28	1 EA	NAMEPLATE, RESET	GE #P9ACPBS291		Р	513748
27	1 EA	NAMEPLATE, FIG.A, AREA 4, BLACK	GE #P9ARTBSEN		Р	513747
26	1 EA	NAMEPLATE, FIG.A, AREA 3, BLACK	GE #P9ARTBSEN		Р	513746
25	1 EA	NAMEPLATE, FIG.A, AREA 2, BLACK	GE #P9ARTBSEN		Р	513745
24	1 EA	NAMEPLATE, FIG.A, AREA 1, BLACK	GE #P9ARTBSEN		Р	513744
23	1 EA	NAMEPLATE,AUTO START	GE #P9ACPBS219		Р	513685
22	1 EA	NAMEPLATE, LOWER	GE #P9ACPBS217		Р	513687
21	1	NAMEPLATE, RAISE	GE #P9ACPBS216		Р	513686
20	1 EA	NAMEPLATE,E-STOP	GE #P9ACPBS229		Р	513683
19	1 EA	NAMEPLATE,POWER-ON	GE #P9ACPBS240		Р	513682
18	1 EA	NAMEPLATE, REVERSE	GE #P9ACPBS215		Р	513681
17	1 EA	NAMEPLATE,FORWARD	GE #P9ACPBS214		Р	513680
16	13 EA	NAMEPLATE,HOLDER	GE #P9ARTBS		Р	513676
15	7 EA	LIGHT,120VAC,X-FORM	GE #P9PTNVJ		Р	513652
14	4 FA	CONTACT,BLOCK,1NO/1NC	GE #P9BIIVN		Р	513651
13	EA 9 EA	CONTACT,BLOCK,1-N.O.	GE #P9B10VN		Р	513649
12	1 EA	LIGHT,GREEN,LENS	GE #P9CLVD		Р	513646
11	1 EA	SWITCH,2-POSITION,MAINTAINED	GE #P9CSMDON		Р	513644
10	1 EA 4	BUTTON,BLACK,MUSHROOM,MMNTRY	GE #P9CEM4NN		Р	513658
9	4 EA	BUTTON,YEL,EXTENDED,MMNTRY	GE #P9CPNGS		Р	513657
8	5 EA	PUSH-BUTTON,GREEN,EXT,ILLUM,MMTRY	GE #P9CPLVSD		Р	513664
7	1 EA	OPER,P-B,RED,MUSHROOM	GE #P9CET4RL1		Р	513654
6	1 EA	JUMPER,BAR,10-POLE,BJM6	ENTRELEC #168973.07		Р	518143
5	1 EA	END,SECTION,COMPRESSION-CLAMP	ENTRELEC #199336.20		Р	518221
4	25 EA	TERMINAL,BLOCK,ADO-FIELD	ENTRELEC #199034.15		Р	518220
3	2 EA	END,STOP,screwless	ENTRELEC #199 408.02		Р	518192
2	1 EA	PANEL 14x12	HOFFMAN #A-14P12		Р	519071
1	1 EA	ENCLOSURE 14x12x06	HOFFMAN #A-1412CHNF	519040	М	90436-104
ITEM	QTY.	PART NAME	MATERIAL AND/ OR DESCRIPTION	LENGTH	CODE	DWG.NO./PART NO.

FEATURES
PUSH BUTTON PANEL LAYOUT

| MITCH INDUSTRIES, Inc. |
4203 SHORELINE DRIVE, EARTH CITY, MO. 63045 |

HORIZONTAL, STACKER, 2/4-ZONE

(APPROVED VDC

REV.	DATE	DESCRIPTION	BY	CHK*D	APP'D	DATE	ı

Cable Color Code Chart for PB Panel

Cable #508406 16awg 25 Conductor

Wire# Color

White

1 Red

Gnd Green

3 Orange

3A Blue

IN33 White/Black

IN34 Red/Black

IN35 Green/Black

IN36 Orange/Black

IN37 Blue/Black

IN38 Black/White

IN39 Red/White

IN40 Green/White

IN41 Blue/White

IN42 Black/Red

IN56 White/Red

Q6 Orange/Red

Q7 Blue/Red

Q14 Red/Green

Q22 Orange/Green

Q30 Black

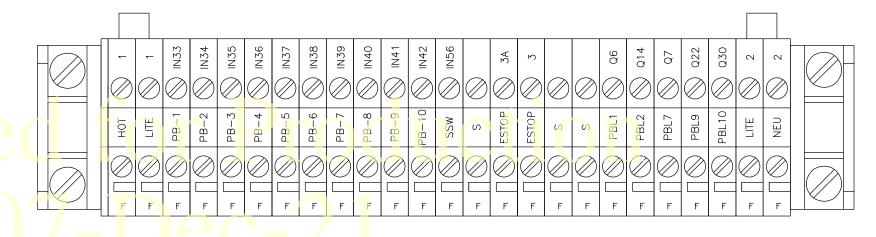
Spare Black/White/Red

Spare White/Black/Red

Spare Red/Black/White

Spare Green/Black/White

PUSH BUTTON PANEL TERMINALS



TIEM OFV. PART NAME MATERIAL AND/ OR DESCRIPTION LENGTH CODE DWG.NO./PART NO.

DIMENSION TOLERANCES, UNLESS OTHERWISE SPECIFIED;
FRACTIONS ± [7/32] DECIMALS ± [.0:10] ANGLES ± [T]:

TOTAL RUNOUT ± MACHINED SURFACES NOT SPECIFIED 240/

BY CLOSED THERBUN, OR IN ANY OTHER WISCLESCHED OR ANY OTHER EXPLOITATION OF THE ITIM

BY CLOSED THERBUN, OR IN ANY OTHER WISCLESCHED UNDITHORIZED MANUFACTURING OR ANY OTHER EXPLOITATION OF THE ITIM

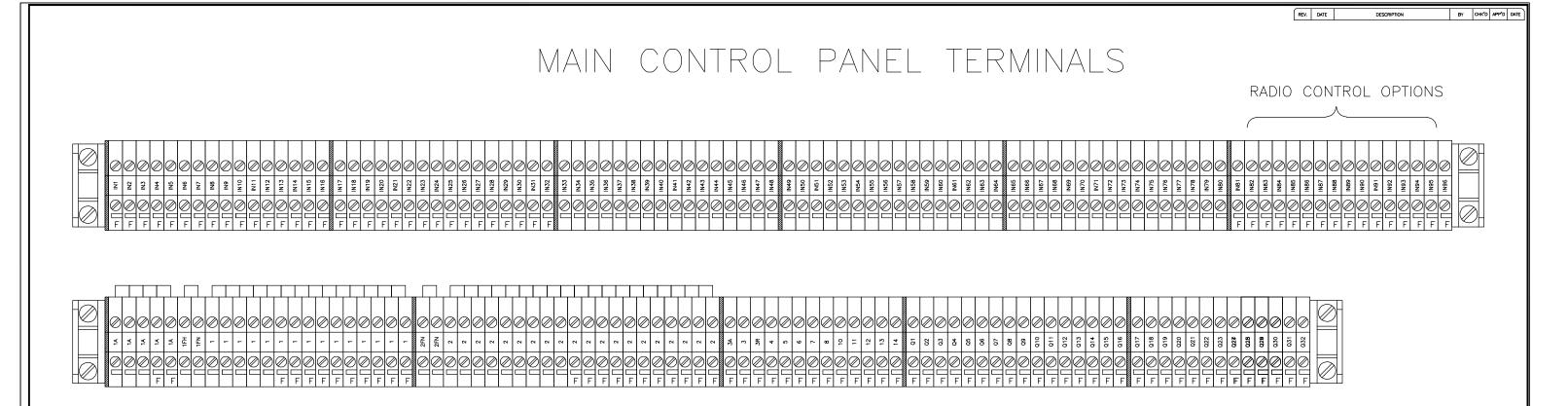
BY CLOSED THERBUN, OR IN ANY OTHER WISCLESCHED OR USED FOR FURNISHING INFORMATION.

TERMINAL BLOCK LAYOUT

MITCH INDUSTRIES, Inc.

3 X X X X X X

APPROVED VDC DATE WFG. HORIZONTAL, STACKER, 2/4-ZONE CHECKED DATE DRAWN VCarroll 2/22/02 FINSH PAINT SCALE NONE 18 of 22 B90436 DASH NO. REV. G



Released for Production

CABLE COLOR CODE CHART FOR RADIO WIRING

CABLE #508755 16awg 19 CONDUCTOR

Wire#	Color	Wire#	Color
2	Brown	IN85	Brown/Red
1	Red	IN86	Black/Blue
Gnd	Brown/Black	IN87	Yellow
3R	Orange	IN88	Yellow/Black
4	Blue	IN89	Black/Red
CB-4	Red/Blue	IN90	Yellow/Red
IN81	Red/Black	IN91	Orange/Red
IN82	Orange/Blue	IN92	Blue/Red
IN83	Orange/Black	Spare	Black
IN84	Blue/Black	-	

ITEM QTY.		PART NAME		MATERIAL AN	D/ OR DESCRIPTION	N	LENGTH	CODE	DWG.NO./PAF	RT NO.
FRACTIONS ± 1/32 TOTAL RUNOUT ±	DECIM	ESS OTHERWISE SPEC ALS ±D10 AN INED SURFACES NOT SE	GLES ± 1	IS PROPERTY IN PART, O	OF MITEK INDUST R USED FOR UNAU THEREIN, OR IN A	RIES, INC. AND ITHORIZED MAN NY OTHER WAY	HE CONFIDENTIAL P IS NOT TO BE RE UFACTURING OR AN DISCLOSED OR US	PRODUCED OF COMPANY OF THE PRODUCED OF THE PRO	R COPIED IN PLOITATION OF	WHOLE OR THE ITEM
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CHECKED	DATE	DRAWN	DATE F	INISH PAINT	SCALE	PAGE	. R904	36	DASH NO.	REV.

NOTES:

1 ITEMS 13-16 SHIP LOOSE

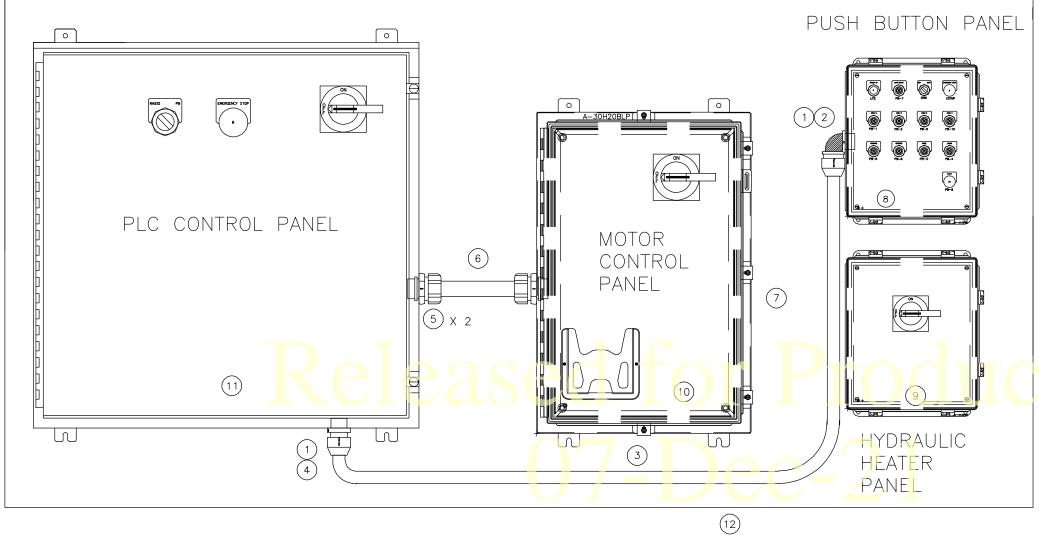


TABLE FOR 2 ZONES SYSTEMS

ASSY	ITEM 11	ITEM 10	ITEM 9	ITEM 16
90436-520-575V	-501-460V	-502-460V	-503-460V	509171
90436-520-460V	-501-460V	-502-460V	-503-460V	_
90436-520-230V	-501-230V	-502-230V	-503-230V	_
90436-520-208V	-501-208V	-502-208V	-503-208V	_

-520 IS A 2 ZONE SYSTEM

tion

	1	-t	(1015) = 0 5005		_	
16	ΕÀ	T'FORMER,600/480,3PH,30KVA	(ACME) T-2-52705-1	575V	Р	509171
15	EA	TRAFFIC COP S/A-HORZ. STACKER		Х	М	70530
14	EA	PHOTOEYE,RECEVR,CABLE-CON	(AB) 42SRR-6007	Х	Р	477012
13	EA	PHOTOEYE,LIGHT,CABLE-CON	(AB) 42SRL-6006	Х	Р	477011
12	1 EA	PLYW00D	1" X 4' X 8'	Х	Р	85000640000
11	1 EA	CONTROL PANEL ENCLOSURE ASSY	ASSY-501	Х	Р	SEE TABLE
10	1 EA	MTR ENCLOSURE ASSY	ASSY-502	Х	Р	SEE TABLE
9	1 EA	HEATER ENCLOSURE ASSY	ASSY-503	Х	Р	SEE TABLE
8	EA	PUSH BUTTON ENCLOSURE ASSY	ASSY-504	Х	Р	90436-504
7	1 EA	HOLE PLUG 1 1/4" GASKETED	HOFFMAN A-S125	Х	Р	513131
6	1 FT	CONDUIT-EMT	1-1/4	Х	Р	510110
5	2 EA	CONN,FLEX,STR,5235	T&B 1-1/4	Х	Р	511095
4	1 EA	CONN,CABLE,STR,1"CRD,870/1.020	T&B #2678	Х	Р	511493
3	25 FT	CABLE,16/25,DIA=0.906	BELDON #9622	Х	М	508406
2	1 EA	CONN,CABLE,90DEG,1",870/1.020	T&B #2687	Х	Р	511510
1	2 EA	LOCKNUT,FLEX,1",GALV	APPLETON #BL-100	Х	Р	511194
ПЕМ	QTY.	PART NAME	MATERIAL AND/ OR DESCRIPTION	LENGTH	CODE	DWG.NO./PART NO.

DIMENSION TOLEPANCES, UNLESS OTHERWISE SPECIFIED;
FRACTIONS ± [1/32] DECAMAS ± [0.10] ANGLES ± [1]
TOTAL RUNDUT ± MACHINED SURFACES NOT SPECIFIED 200

FEATURES

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	APPROVED VDC		MFG.	HOR	IZONT	AL,STA	CKER	,2/4-ZON	1E
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Į			VCarroll	2/22/02	Х	NONE	20 of 22	B90436	520 G

NOTES:

1 ITEMS 13-16 SHIP LOOSE

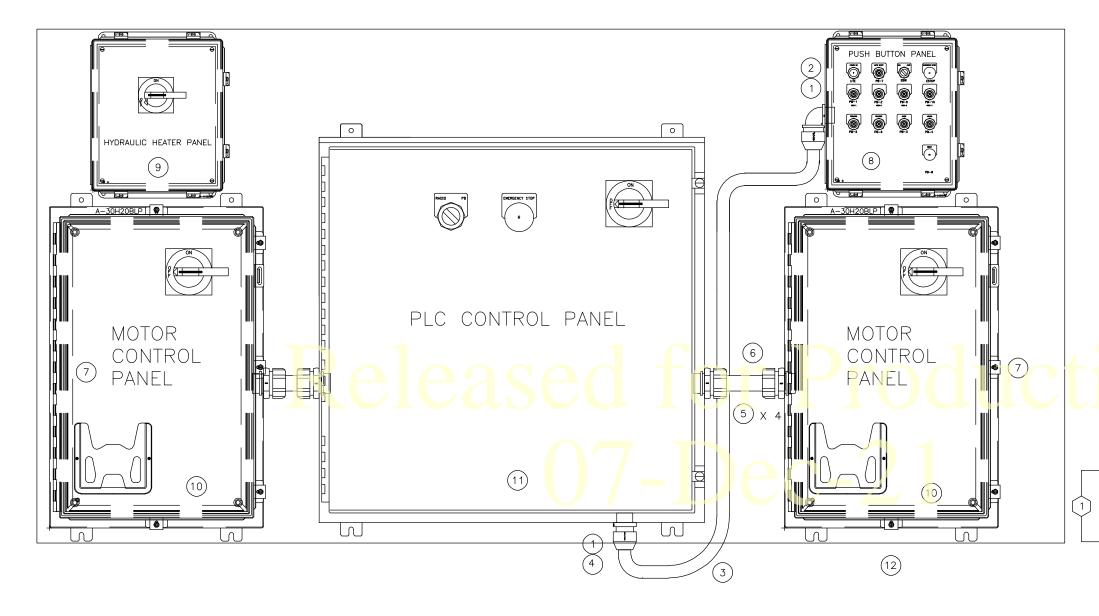


TABLE FOR 4 ZONES SYSTEMS

ASSY	ITEM 11	ITEM 10	ITEM 9	ITEM 16
90436-540-575V	-501-460V	-502-460V	-503-460V	509171
90436-540-460V	-501-460V	-502-460V	-503-460V	_
90436-540-230V	-501-230V	-502-230V	-503-230V	_
90436-540-208V	-501-208V	-502-208V	-503-208V	_

-540 IS A 4 ZONE SYSTEM

16	1 EA	T'FORMER,600/480,3PH,30KVA	(AGM E) T-2-52705-1	575V	Р	509171
15	4 EA	TRAFFIC COP S/A-HORZ. STACKER	SEE DRAWING	Х	М	D70530
14	2 EA	PHOTOEYE,RECEVR,CABLE-CON	(AB) 42SRR-6007	Х	Р	477012
13	2 EA	PHOTOEYE,LIGHT,CABLE—CON	(AB) 42SRL-6006	Х	Р	477011
12	1 EA	PLYW00D	1" X 4' X 8'	Х	Р	85000640000
11	1 Ea	CONTROL PANEL ENCLOSURE ASSY	ASSY-501	Х	Р	SEE TABLE
10	2 EA	MTR ENCLOSURE ASSY	ASSY-502	Х	Р	SEE TABLE
9	1 EA	HEATER ENCLOSURE ASSY	ASSY-503	Х	Р	SEE TABLE
8	1 EA	PUSH BUTTON ENCLOSURE ASSY	ASSY-504	Х	Р	90436-504
7	2 EA	HOLE PLUG 1 1/4" GASKETED	HOFFMAN A-S125	Х	Р	513131
6	2 FT	CONDUIT-EMT	1–1/4	Х	Р	510110
5	4 EA	CONN,FLEX,STR,5235	T&B 1-1/4	Х	Р	511095
4	1 EA	CONN,CABLE,STR,1"CRD,870/1.020	T&B #2678	Х	Р	511493
3	25 FT	CABLE,16/25,DIA=0.906	BELDON #9622	Х	М	508406
2	1 EA	CONN,CABLE,90DEG,1",870/1.020	T&B #2687	Х	Р	511510
1	2 EA	LOCKNUT,FLEX,1",GALV	APPLETON #BL-100	Х	Р	511194
ITEM	QTY.	PART NAME	MATERIAL AND/ OR DESCRIPTION	LENGTH	CODE	DWG.NO./PART NO.

DIMENSION TOLERANCES, UNLESS OTHERWISE SPECIFIED;

FRACTIONS ± [7,32]

DECIMAL ± [3:0]

ANGLES ± [1]

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REV. DATE DESCRIPTION BY CHK'D APP'D

RESERVED

Released for Production 07-Dec-21

ITEM OTY.		PART NAME		MATERIAL AND	/ OR DESCRIPTION	. [LENGTH	CODE	DWG.NO./PART N	NO.
DIMENSION TOLERANCES, UNLESS OTHERWISE SPECIFIED; FRACTIONS ± [1/32] DECIMALS ± [0:10] ANGLES ± [1] TOTAL RUNOUT ± MACHINED SURFACES NOT SPECIFED 200/ SPECIFIED 200/ MACHINED SURFACES NOT SPECIFED 200/ MACHINED										
	MITEK Industries, Inc.									
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