

ELEVATOR EC CONTROLS
SIMPLE. SOLID. SUPPORTABLE.

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211 WEST 14TH STREET NY PE1

16-18651

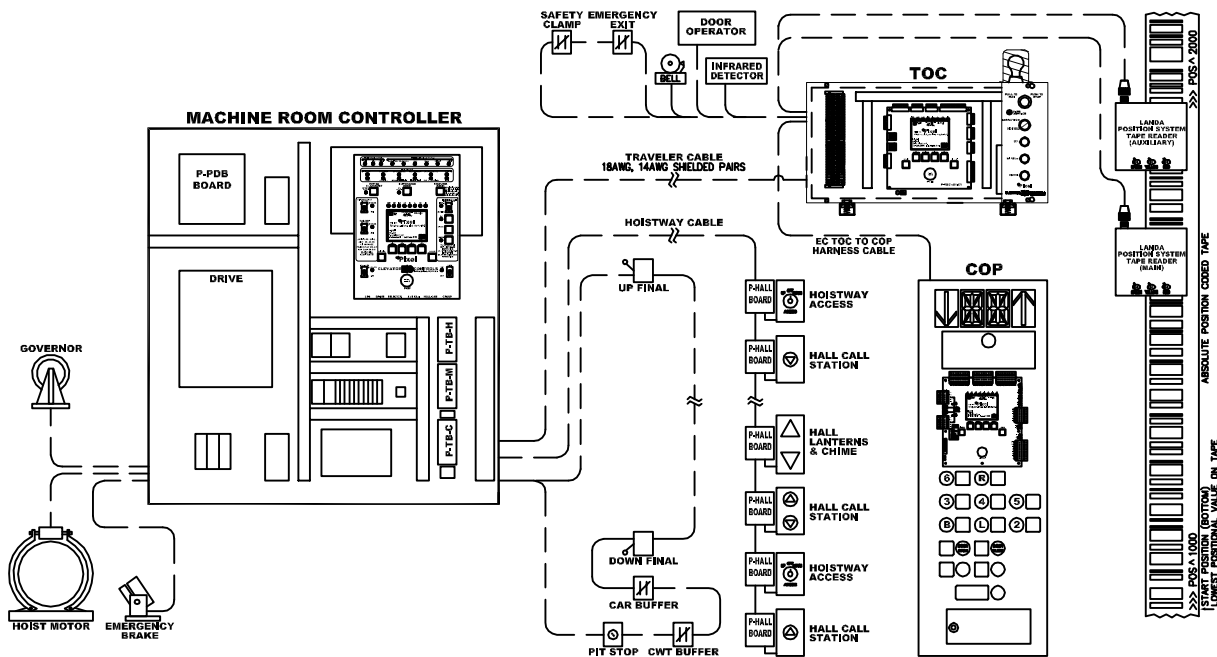
SIMPLEX

PIXEL AC-VECTOR-S

TABLE OF CONTENTS

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TYPICAL Pixel CONTROLLER INTERCONNECTION OVERVIEW



PIXEL CONSTRUCTION MODE OPERATION

CONSTRUCTION MODE OPERATION ALLOWS QUALIFIED ELEVATOR PERSONAL TO RUN THE CAR ON CARTOP & MACHINE ROOM WITH MINIMAL FIELD WIRING. THE TOP OF CAR BOX (TOC), LANDA POSITION SYSTEM & P-COP BOARD ARE NOT REQUIRED TO RUN THE CAR ON CONSTRUCTION MODE. THE MAXIMUM SPEED IS 50FPM OR PROGRAMMED INSPECTION SPEED, WHICHEVER IS LESS.

1 COMPLETE POWER, HOIST MOTOR AND BRAKE CONNECTIONS (REFER TO PAGE QR4 FOR HOISTWAY WIRING DIAGRAMS)

- ☐ A. VERIFY DISCONNECT POWER IS WITHIN 10% OF SPECIFIED VOLTAGE ON PAGE QR4 (OR PAGE 1)
- ☐ B. WIRE THE DISCONNECT TO CONTROLLER PER PAGE QR4 (OR PAGE 1)
- ☐ C. VERIFY THE HOIST MOTOR AND BRAKE DATA PLATES MATCH THE JOB PRINTS (PAGES 1 & 2)
- ☐ D. WIRE THE HOIST MOTOR AND MAIN BRAKE TO CONTROLLER PER PAGE QR4 (OR PAGES 1 & 2)
- ☐ E. WIRE THE VELOCITY ENCODER TO THE DRIVE ENCODER CARD PER PAGE QR4 (OR PAGE 1)
- ☐ F. IF AN INDEPENDENT MACHINE BRAKE IS USED FOR THE EMERGENCY BRAKE WIRE TO CONTROLLER PER PAGE QR4 (OR PAGE 2)

2 PLACE PIXEL CONTROL SYSTEM ON CONSTRUCTION MODE OPERATION

- ☐ IF THE PIXEL P-MP BOARD DISPLAYS "CONSTRUCTION" AT THE TOP OF THE LCD SKIP TO STEP 3
- ☐ A. PIXEL SWITCH PRESETTING: MACHINE ROOM INSPECTION=INSP POSITION, TEST=TEST POSITION & CAPTURE=CAPTURE POSITION
- ☐ B. FROM THE HOME SCREEN, SELECT "INSTALL" MENU USING THE TOUCH & GO KNOB
- ☐ C. ONCE IN THE INSTALLATION MENU SELECT "CONSTRUCTION MODE" USING THE TOUCH & GO KNOB
- ☐ D. AT THE CONSTRUCTION MODE MENU PRESS THE "ENABLE" SOFT KEY. IF CONSTRUCTION MODE IS "ACTIVE" SKIP TO STEP 3

3 INSTALL REQUIRED INSPECTION AND SAFETY DEVICES (REFER TO DIAGRAM TO THE RIGHT)

- ☐ A. GOVERNOR OVERSPEED SWITCH (TERMINALS GOV & 4A)
- ☐ B. CARTOP RUN BOX STOP SWITCH (TERMINALS SAFC & 4A)
- ☐ C. CARTOP RUN BOX INSPECTION SWITCH (TERMINALS ICT & 4A)
- ☐ D. CARTOP RUN BOX INSPECTION ENABLE, UP & DOWN BUTTONS (TERMINALS ICTE, ICTU, ICTD & 4A)

4 INSTALL REQUIRED CONSTRUCTION MODE TEMPORARY JUMPERS, IF DEVICES ARE NOT AVAILABLE AT THIS TIME

- ☐ A. HOISTWAY SAFETY STRING (TERMINALS SAFH TO SAFC)
- ☐ B. TOP DOOR LOCK (TERMINALS DLAT TO 4A)
- ☐ C. FRONT INTERMEDIATE DOOR LOCKS (TERMINALS DLSF TO 4A)
- ☐ D. BOTTOM DOOR LOCK (TERMINALS DLAB TO 4A)
- ☐ E. FRONT CAR GATE (TERMINALS CGF TO 4A)
- ☐ F. IF REAR DOORS ARE APPLICABLE, REAR INTERMEDIATE DOOR LOCKS (TERMINALS DLSR TO 4A)
- ☐ G. IF REAR DOORS ARE APPLICABLE, REAR CAR GATE (TERMINALS CGR TO 4A)
- ☐ H. HOISTWAY ACCESS INSPECTION SWITCH (TERMINALS IA TO 4A)
- ☐ I. IN-CAR INSPECTION ENABLE (TERMINALS IIC TO 4A)

NOTE: FOR CARTOP INSPECTION OPERATION ONLY, PLACE THE HOISTWAY AND CAR DOOR LOCK SWITCHES IN THE "BYPASS" POSITION AND SKIP THE INSTALLATION OF THE TEMPORARY DOOR LOCK JUMPERS (STEP 4: B-G). MACHINE ROOM INSPECTION WILL NOT OPERATE WITH HOISTWAY AND/OR CAR DOOR BYPASS SWITCHES IN THE BYPASS POSITION

5 DRIVE PARAMETER VERIFICATION AND SETUP

- ☐ A. VERIFY DRIVE PARAMETERS ON PAGE QR7 MATCH THE ELEVATOR INSTALLATION REQUIREMENTS
- ☐ B. MOTOR AUTO-TUNE (REFER TO PAGE QR7)
- ☐ C. VERIFY PROPER DIRECTIONAL MOVEMENT ON INSPECTION OPERATION (REFER TO PAGE QR7)
- ☐ D. VERIFY RUNNING SPEED VS. COMMANDED SPEED WITH A HANDHELD TACHOMETER
ADJUST THE SPEED AS REQUIRED BY MANIPULATING PARAMETERS (L1000A DRIVE):
E1-04 AND E1-06 SHOULD BE ADJUSTED TO EQUAL VALUES
E1-04 (MAX. OUTPUT FREQUENCY) – LOWER VALUES WILL DECREASE SPEED AND HIGHER VALUES WILL INCREASE SPEED
E1-06 (BASE FREQUENCY) – LOWER VALUES WILL DECREASE SPEED AND HIGHER VALUES WILL INCREASE SPEED

CAUTION: ONCE THE TOC BOX, LANDA POSITION SYSTEM & P-COP BOARD HAVE BEEN INSTALLED AND THE CAR IS READY TO RUN ON AUTOMATIC OPERATION. VERIFY ALL CONSTRUCTION MODE TEMPORARY JUMPERS HAVE BEEN REMOVED AND THE REQUIRED SAFETY DEVICES HAVE BEEN INSTALLED, BEFORE DISABLING CONSTRUCTION MODE.

PIXEL AUTOMATIC OPERATION

6 AUTOMATIC OPERATION REQUIRES THE INSTALLATION OF:

- ☐ HOISTWAY SAFETY DEVICES (PIT STOP SWITCH, COUNTERWEIGHT BUFFER, CAR BUFFER, UP & DOWN FINAL LIMITS...ETC)
- ☐ TOC BOX (CARTOP INSPECTION STATION, EMERGENCY EXIT, SAFETY CLAMP, LANDA POSITION SYSTEM, DOOR OPERATOR, INFRARED DETECTOR...ETC)
- ☐ DOOR LOCKS (CAR GATE(S), HOISTWAY DOOR LOCKS)
- ☐ EMERGENCY BRAKE (ROPE GRIPPER OR INDEPENDENT MACHINE BRAKE...ETC)
- ☐ CAR OPERATING PANEL (HOISTWAY ACCESS, EMERGENCY STOP, CAR CALLS, DOOR BUTTONS, INDEPENDENT SERVICE...ETC)
- ☐ FIRE ALARM INITIATING DEVICES (FIRE PHASE 1 RECALL SWITCH, FIRE SENSORS...ETC)
- ☐ IF APPLICABLE EARTHQUAKE DEVICES (SEISMIC SWITCH, RING & STRING...ETC)

7 PIXEL HOISTWAY POSITION SETUP OVERVIEW (REFER TO PIXEL MANUAL FOR DETAILS):

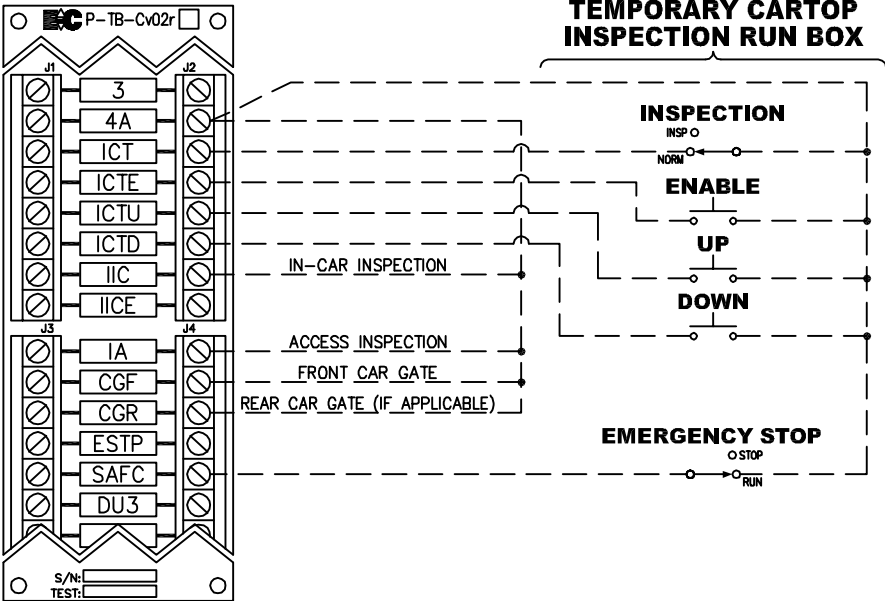
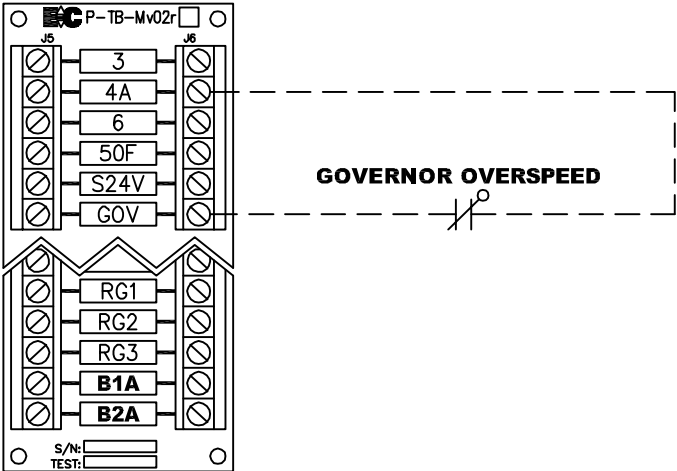
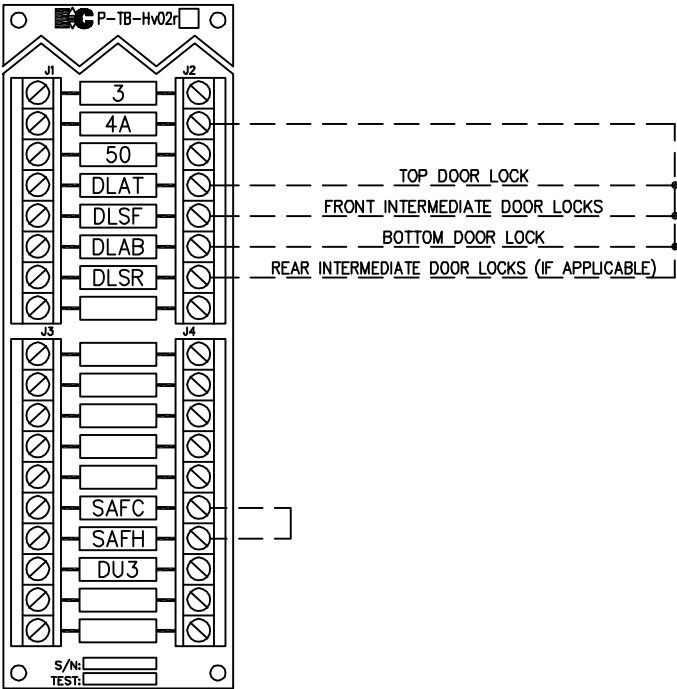
- ☐ A. TAPE READER OFFSET: INSTALL>LEARN FUNCTIONS>VIRTUAL LIMITS>TAPE READER OFFSET, THEN LEARN>SAVE
- ☐ B. FLOOR LANDING DOOR ZONES: INSTALL>LEARN FUNCTIONS>FLOOR SETUP>LANDING NUMBER, THEN DOOR ZONE POSTION>LEARN>SAVE
NOTE: ALWAYS LEARN THE BOTTOM LANDING DOOR ZONE FIRST. THIS NORMALIZES THE HOISTWAY POSITION AND THE BOTTOM LANDING WILL BE SET TO 1.2 FEET. THE VIRTUAL DOWN NORMAL LIMIT WILL BE AUTOMATICALLY SET TO 1.0 FEET.
- ☐ C. BOTTOM (BAL) AND TOP (TAL) HOISTWAY ACCESS LIMIT ZONES: INSTALL>LEARN FUNCTIONS>VIRTUAL LIMITS>BAL & TAL, THEN LEARN>SAVE

8 DISABLE CONSTRUCTION MODE OPERATION

- ☐ A. PIXEL SWITCH PRESETTING: MACHINE ROOM INSPECTION=INSP POSITION, TEST=TEST POSITION & CAPTURE=CAPTURE POSITION
- ☐ B. FROM THE HOME SCREEN, SELECT "INSTALL" MENU USING THE TOUCH & GO KNOB
- ☐ C. ONCE IN THE INSTALLATION MENU SELECT "CONSTRUCTION MODE" USING THE TOUCH & GO KNOB
- ☐ D. AT THE CONSTRUCTION MODE MENU PRESS THE "DISABLE" SOFT KEY, THE CONSTRUCTION MODE MENU WILL NOW DISPLAY "DISABLED"

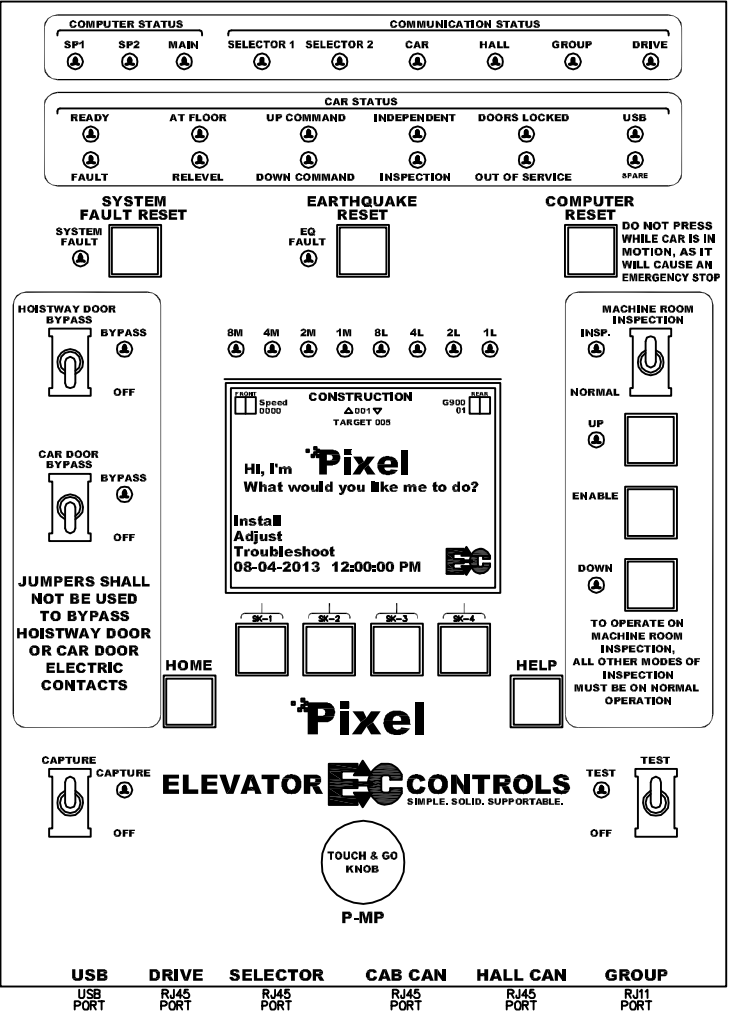
9 PIXEL HOISTWAY TERMINAL SLOWDOWN SETUP (REFER TO PIXEL MANUAL FOR DETAILS):

- ☐ A. TURN OFF MACHINE ROOM INSPECTION & PLACE THE CAR ON TEST MODE. CLEAR ANY FAULTS THAT ARE DISPLAYED.
- ☐ B. REGISTER CAR CALLS TO INTERMEDIATE FLOORS USING THE AUTO CALL SIMULATION SCREEN: TROUBLESHOOT>AUTO CALL SIMULATION>RUN TO FLOOR 00.. DO NOT REGISTER CALLS TO THE TERMINAL LANDINGS UNTIL ETS IS LEARNED.
- ☐ C. BOTTOM & TOP EMERGENCY TERMINAL SLOWDOWN LIMITS: INSTALL>LEARN FUNCTIONS>ETS LEARN>FOLLOW ON SCREEN INSTRUCTIONS, THEN SAVE

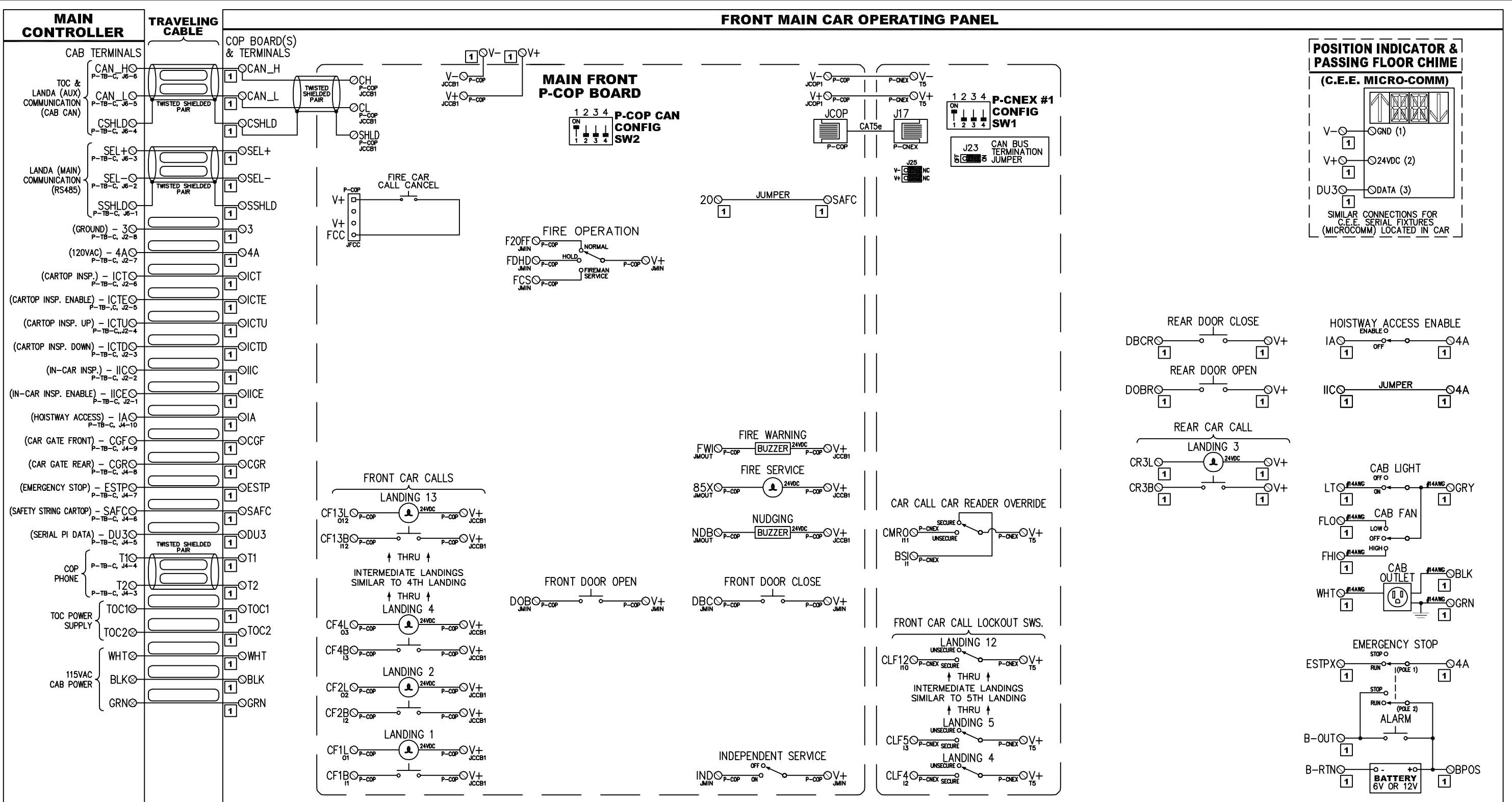


P-MP BOARD SWITCH GEAR NOTES:

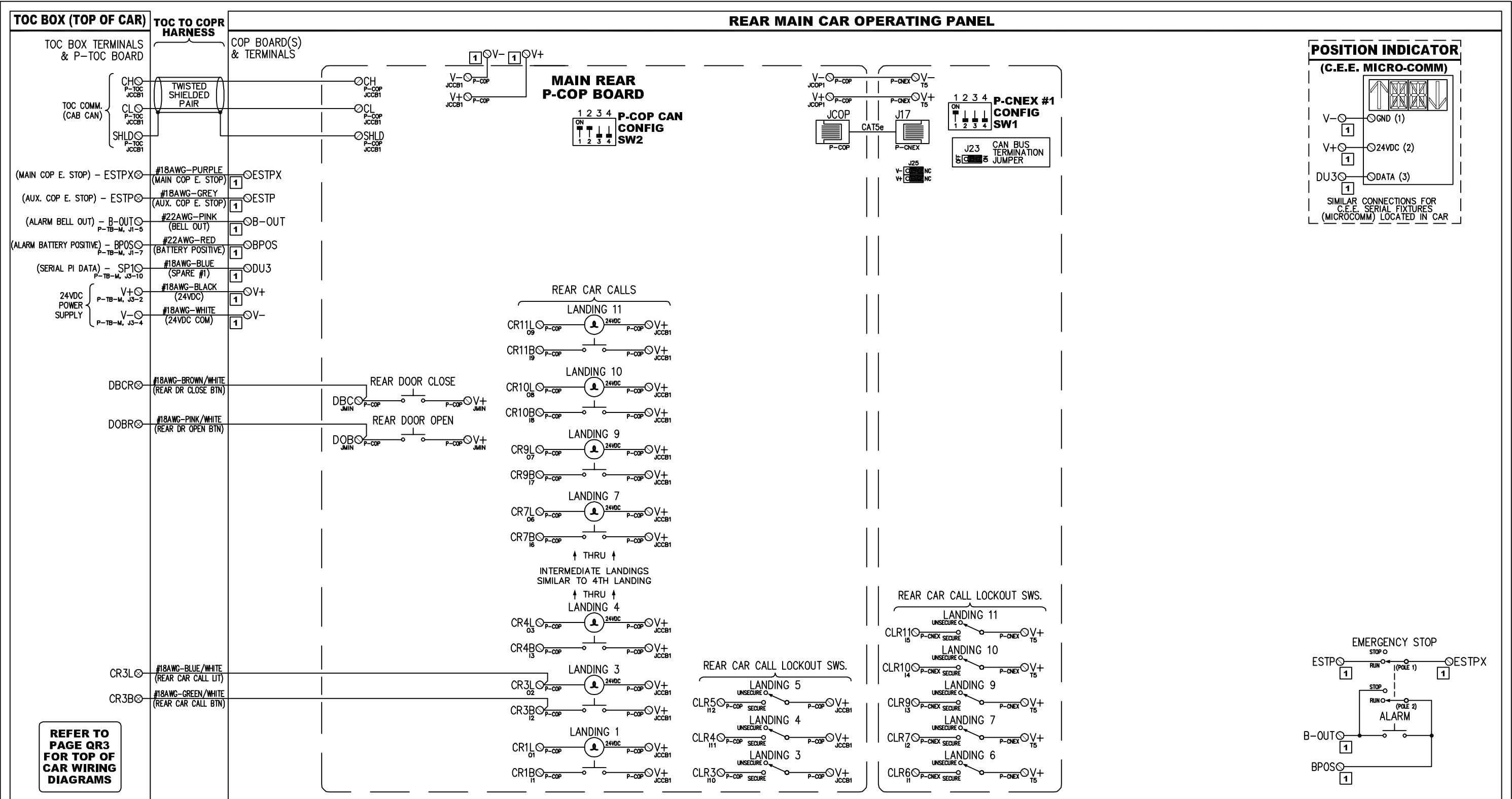
- MACHINE ROOM INSPECTION DIRECTIONAL CONTROL REQUIRES UP OR DOWN AND THE ENABLE BUTTON TO BE PUSHED SIMULTANEOUSLY
- CAPTURE SWITCH: DISABLES HALL CALL OPERATION TO COMMANDEER FOR FOR TEST MODE
- TEST SWITCH: DISABLES DOOR & HALL CALL OPERATION FOR TESTING
- HOISTWAY DOOR BYPASS SWITCH: BYPASSES HOISTWAY DOOR SAFETY CIRCUIT ONLY OPERATIONAL ON CARTOP & IN-CAR INSPECTION MODES
- CAR DOOR BYPASS SWITCH: BYPASSES CAR DOOR SAFETY CIRCUIT ONLY OPERATIONAL ON CARTOP & IN-CAR INSPECTION MODES



PIXEL QUICK START UP INSTRUCTIONS			
JOB NAME: 211 WEST 14TH STREET NY PE1			
CUSTOMER: G-TECH ASSOCIATES, LLC.			
ENGINEERED BY: Jason Kirlis	DATE: 12/28/16	REVISION DATE:	
		CONTROLLER MODEL: PIXEL AC-VECTOR-S	
6150 WAREHOUSE WAY SACRAMENTO, CA 95828 USA PHONE: (800)829-8106 FAX: (916)428-1728 www.elevatorcontrols.com		JOB NUMBER: 16-18651	
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1 TERMINAL PROVIDED BY COP MANUFACTURER OR CUSTOMER



1 TERMINAL PROVIDED BY COP MANUFACTURER OR CUSTOMER

REFER TO PAGE QR3 FOR TOP OF CAR WIRING DIAGRAMS

COP FIXTURE REQUIREMENTS			
FIXTURE DESCRIPTION:	VOLTAGE	CONTINUOUS	MAXIMUM
CAR CALL INDICATOR	24VDC	0.2A	0.5A
FIRE INDICATOR	24VDC	0.2A	0.5A
FIRE BUZZER	24VDC	0.2A	0.5A
MISCELLANEOUS FIXTURES	24VDC	0.2A	0.5A
PASSING FLOOR CHIME	24VDC	0.5A	2A
CAR LANTERNS & CHIME	24VDC	0.5A	2A

PIXEL INSTALLATION: REAR COP WIRING DIAGRAMS

JOB NAME:
211 WEST 14TH STREET NY PE1

CUSTOMER:
G-TECH ASSOCIATES, LLC.

ENGINEERED BY:
Jason Kirlis

DATE:
12/28/16

REVISION DATE:

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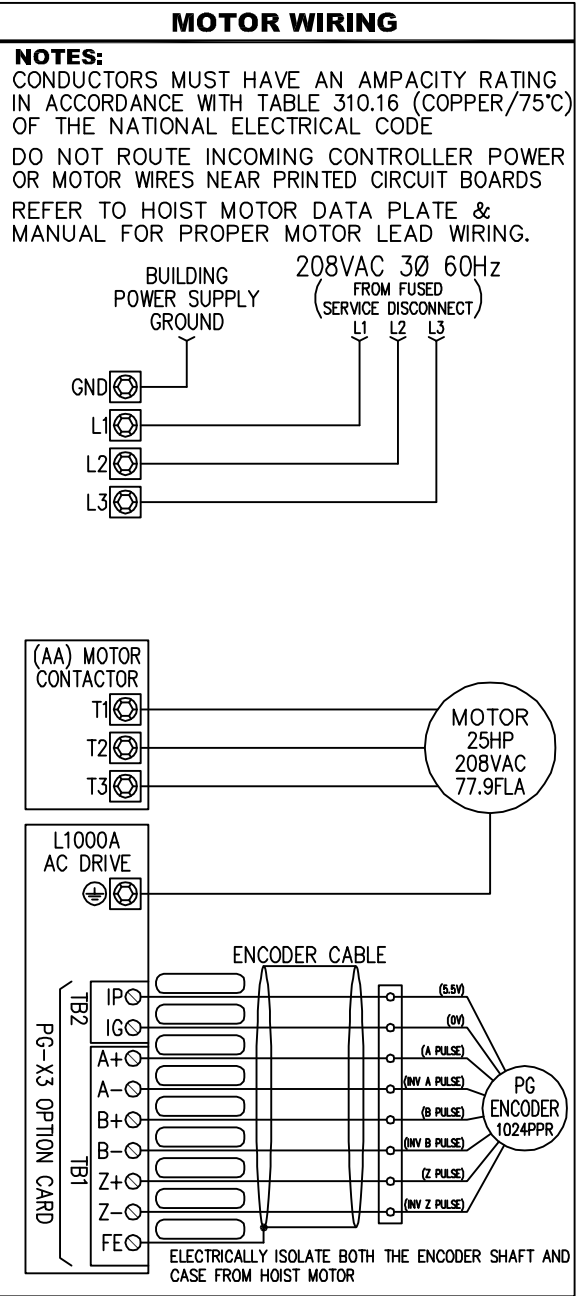
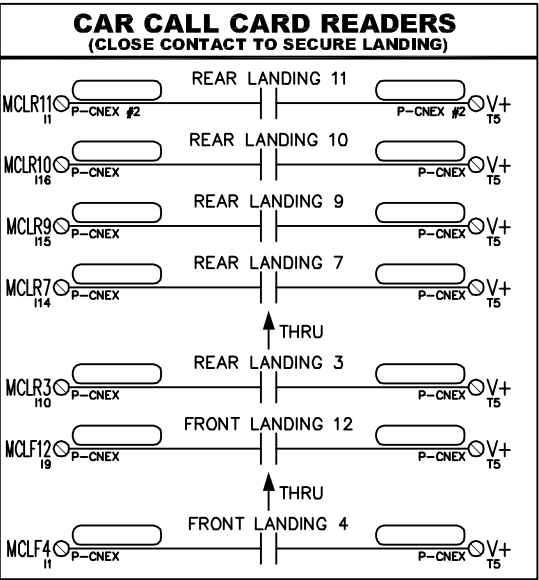
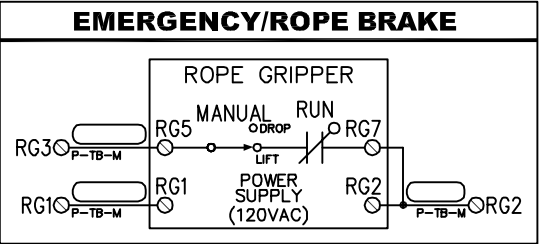
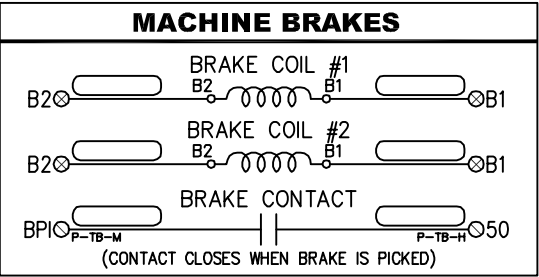
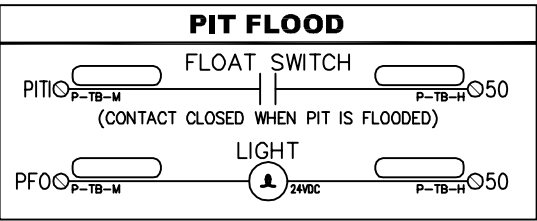
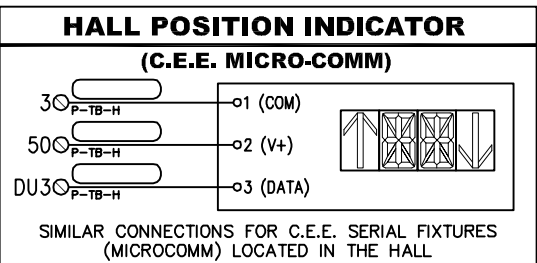
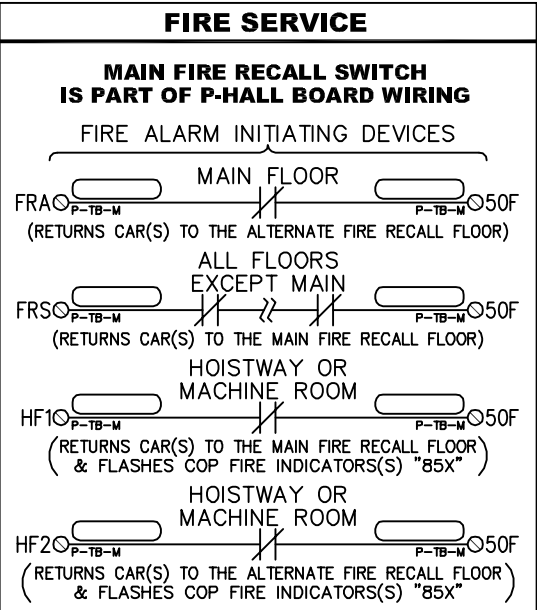
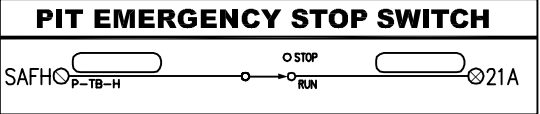
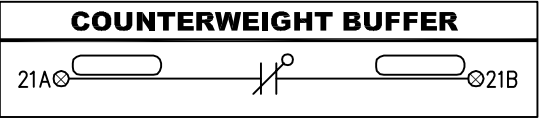
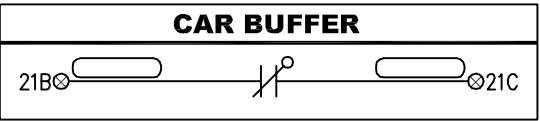
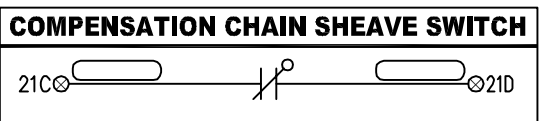
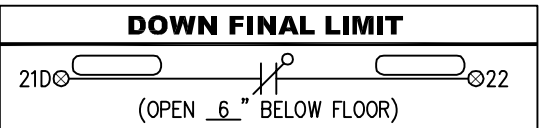
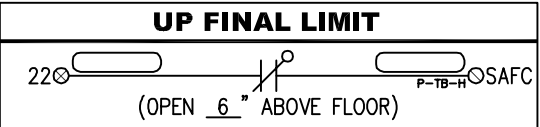
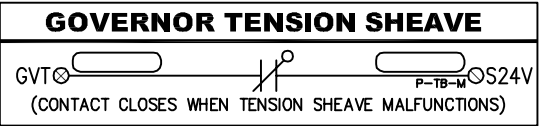
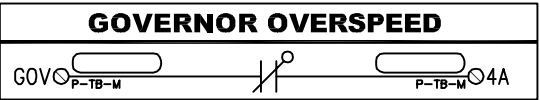
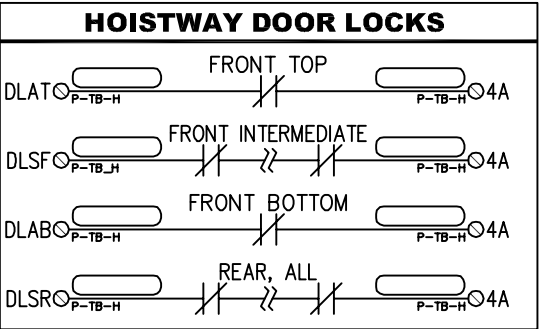
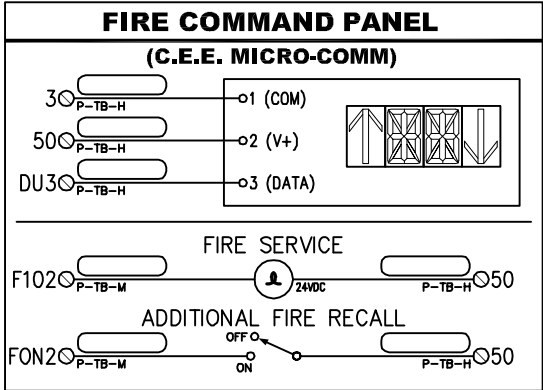
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16-18651

CONTROLLER ID:
SIMPLEX

PAGE NUMBER:
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03/26/16



FLOOR OPENINGS				
BLDG. LDG.	FLOOR LABEL	(ELEV. #PE1)	F	R
13	R	X		
12	11	X		
11	10	X	X	
10	9	X	X	
9	8	X	X	
8	7	X		
7	6	X	X	
6	5	X	X	
5	4	X	X	
4	3	X	X	
3	2		X	
*2	G	X		
1	C	X	X	
SPEED:		350fpm		
CAPACITY:		2,500lbs		

CONTROLLER TO HOISTWAY CONNECTIONS									
3	4A							50	50F
SAFH	21A	21B	21C	21D	22	SAFC	GVT		DU3
FRA	FRS	HF1	HF2						
DLAT	DLSF	DLAB	DLSR					F102	FON2

WIRE COUNT

23 #18 AWG

0 #14 AWG

0 SHIELDED PAIR

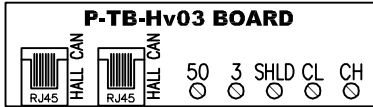
1 CAT5e CABLE

10% SPARE WIRES IS RECOMMENDED

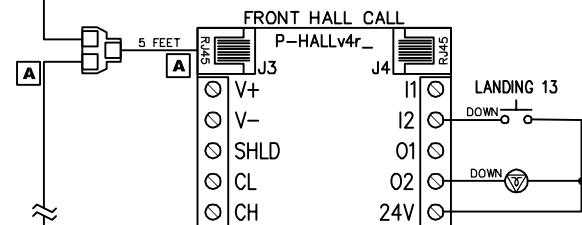
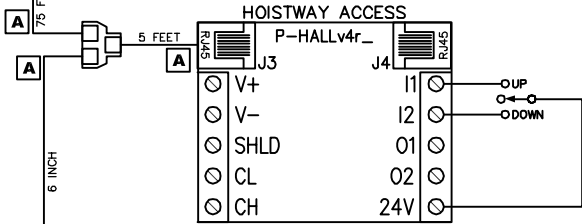
1 TERMINAL IS NOT PROVIDED IN CONTROLLER. REFERENCE POINT ONLY.

PIXEL INSTALLATION: HOISTWAY & MACHINE ROOM WIRING DIAGRAMS			
JOB NAME:			
211 WEST 14TH STREET NY PE1			
CUSTOMER:			
G-TECH ASSOCIATES, LLC.			
ENGINEERED BY:	DATE:	REVISION DATE:	
Jason Kirlis	12/28/16		
		CONTROLLER MODEL:	
6150 WAREHOUSE WAY SACRAMENTO, CA 95828 USA PHONE: (800)829-8106 FAX: (916)428-1728 www.elevatorcontrols.com		PIXEL AC-VECTOR-S	
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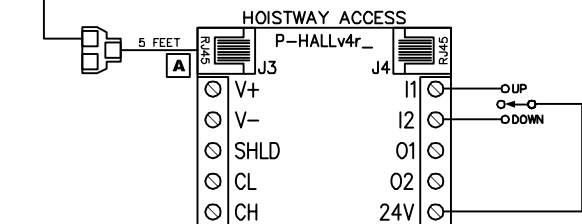
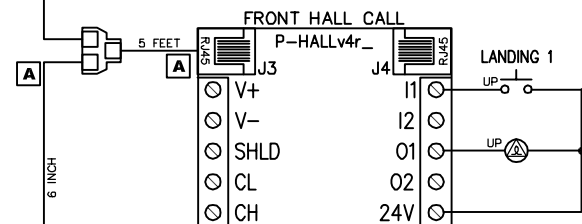
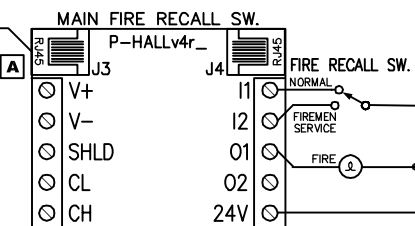
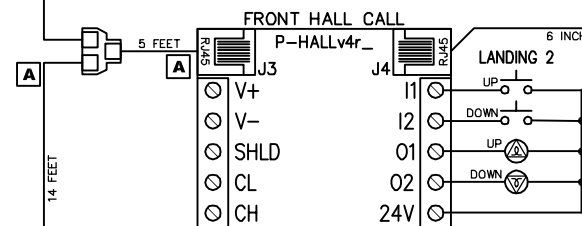
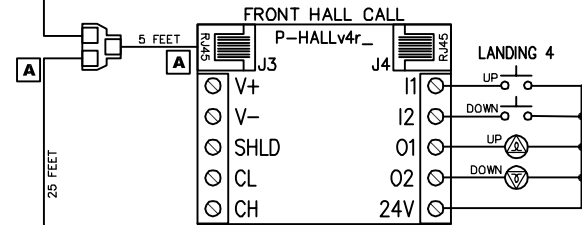
TYPICAL P-HALL BOARD INTERCONNECTIONS



- A** HALL CAN COMMUNICATION CABLES ARE CAT5e TERMINATED WITH RJ45 CONNECTOR AND WIRED TO 568-B STANDARDS.
1. CONNECT THE HALL CALL FIXTURE TO THE P-HALL BOARD I/O AS SHOWN BELOW.
 2. CONFIGURE THE P-HALL BOARD DIP SWITCH SETTINGS FOR THE CORRESPONDING HALL FIXTURE. (REFERENCE P-HALL CONFIGURATION TABLE)
 3. USING HALL CAN CABLES AND SPLITTERS TO INTERCONNECT THE P-HALL BOARDS AS SHOWN BELOW, THESE CABLES PROVIDE HALL CAN COMMUNICATION & POWER (24VDC/GND) TO EACH P-HALL BOARD.
 4. ALL SERIAL HALL FIXTURES MUST BE RATED 24VDC/0.5A MAX. PEAK/0.2A MAX. CONTINUOUS.



INTERMEDIATE LANDINGS
SIMILAR TO 4th LANDING



QTY:	EC P/N:	PART DESCRIPTION:
15	17-002-114v04	P-HALLv04 BOARD
14	10-008-009	RJ45 SPLITTER
3	19-001-023-06in	CAN CABLE: 6 INCH
14	19-001-023-05ft	CAN CABLE: 5 FEET
0	19-001-023-07ft	CAN CABLE: 7 FEET
10	19-001-023-14ft	CAN CABLE: 14 FEET
1	19-001-023-25ft	CAN CABLE: 25 FEET
1	19-001-023-X	CAN CABLE: 75 FEET

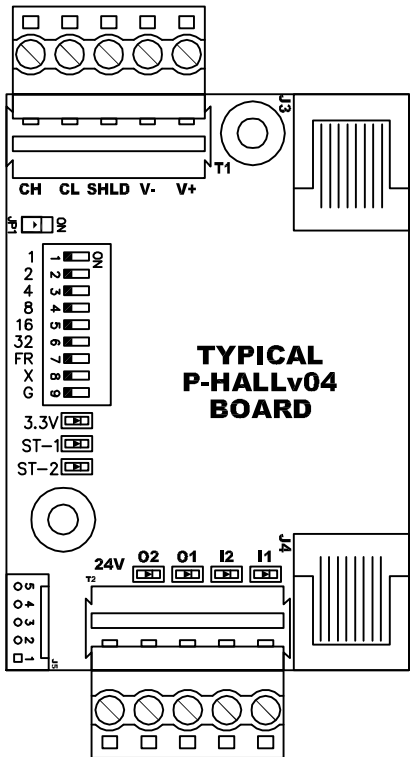
P-HALL BOARD CONFIGURATION TABLE

1. SET P-HALL BOARD DIP SWITCHES FOR THE RESPECTIVE LANDING NUMBER AND FUNCTION, USING THE BELOW CONFIGURATION TABLE.
2. SET P-HALL BOARD JP1 SWITCH FOR THE RESPECTIVE FUNCTION BY SLIDING THE SWITCH INTO THE APPROPRIATE POSITION, USING THE BELOW CONFIGURATION TABLE.

DIP SWITCHES (1) THRU (32) LANDING ADDRESS SELECTION			DIP SWITCHES (FR), (X) & (G) FUNCTION SELECTION		
LANDING NUMBER	JP1 IS OFF	FLOOR DESIGNATION	FRONT HALL CALL	FRONT HOSPITAL CALL	FRONT HALL LANTERN
	JP1	1 2 4 8 16 32 FR X G	FR X G	FR X G	FR X G

13	JP1	1 2 4 8 16 32 FR X G
12	JP1	1 2 4 8 16 32 FR X G
11	JP1	1 2 4 8 16 32 FR X G
10	JP1	1 2 4 8 16 32 FR X G
9	JP1	1 2 4 8 16 32 FR X G
8	JP1	1 2 4 8 16 32 FR X G
7	JP1	1 2 4 8 16 32 FR X G
6	JP1	1 2 4 8 16 32 FR X G
5	JP1	1 2 4 8 16 32 FR X G
4	JP1	1 2 4 8 16 32 FR X G
2	JP1	1 2 4 8 16 32 FR X G
1	JP1	1 2 4 8 16 32 FR X G

DIP SWITCHES (1) thru (G) FUNCTION SELECTION			
LANDING NUMBER	MISCELLANEOUS FUNCTIONS	JP1 IS ON	FUNCTION SETTINGS
13	HOISTWAY ACCESS TOP	JP1	1 2 4 8 16 32 FR X G
1	HOISTWAY ACCESS BOTTOM	JP1	1 2 4 8 16 32 FR X G
2	MAIN FIRE RECALL	JP1	1 2 4 8 16 32 FR X G



FRONT P-HALL HOISTWAY WIRING DIAGRAMS

JOB NAME:
211 WEST 14TH STREET NY PE1

CUSTOMER:
G-TECH ASSOCIATES, LLC.

ENGINEERED BY: Jason Kirlis DATE: 12/28/16 REVISION DATE:

ELEVATOR CONTROLS

6150 WAREHOUSE WAY
SACRAMENTO, CA 95828 USA
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CONTROLLER MODEL:
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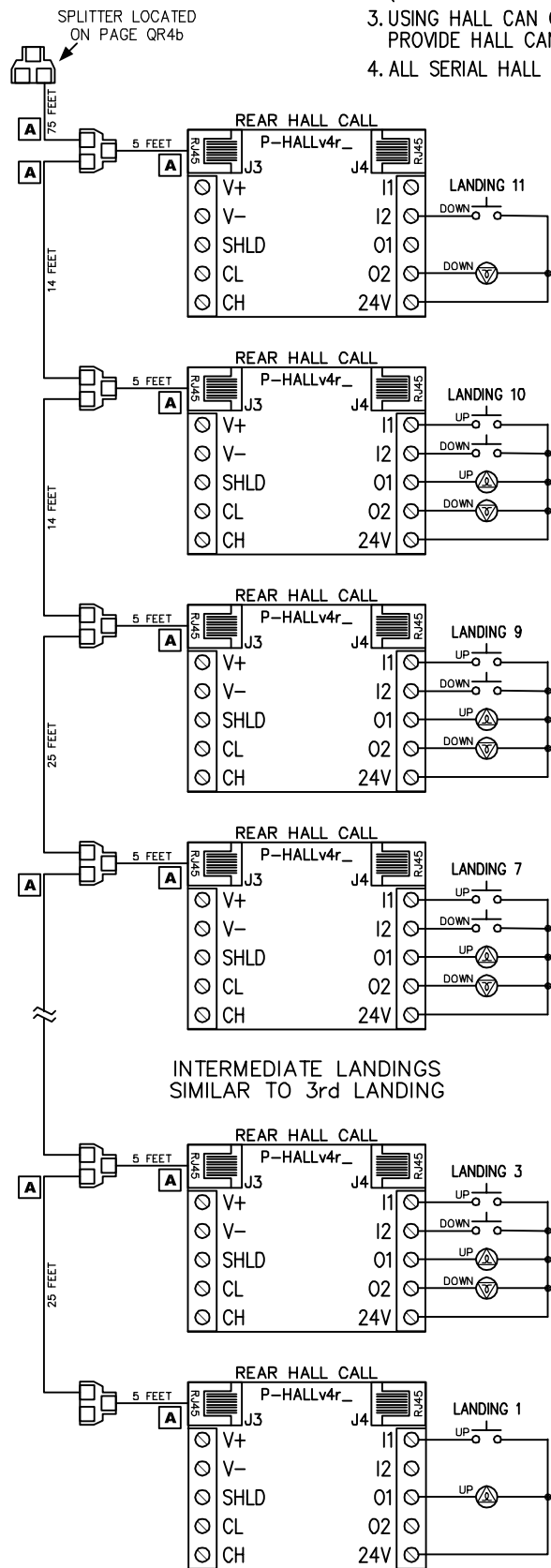
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PAGE NUMBER:
SIMPLEX QR4b

TYPICAL P-HALL BOARD INTERCONNECTIONS

A HALL CAN COMMUNICATION CABLES ARE CAT5e TERMINATED WITH RJ45 CONNECTOR AND WIRED TO 568-B STANDARDS.

1. CONNECT THE HALL CALL FIXTURE TO THE P-HALL BOARD I/O AS SHOWN BELOW.
2. CONFIGURE THE P-HALL BOARD DIP SWITCH SETTINGS FOR THE CORRESPONDING HALL FIXTURE.
(REFERENCE P-HALL CONFIGURATION TABLE)
3. USING HALL CAN CABLES AND SPLITTERS TO INTERCONNECT THE P-HALL BOARDS AS SHOWN BELOW, THESE CABLES PROVIDE HALL CAN COMMUNICATION & POWER (24VDC/GND) TO EACH P-HALL BOARD.
4. ALL SERIAL HALL FIXTURES MUST BE RATED 24VDC/0.5A MAX. PEAK/0.2A MAX. CONTINUOUS.

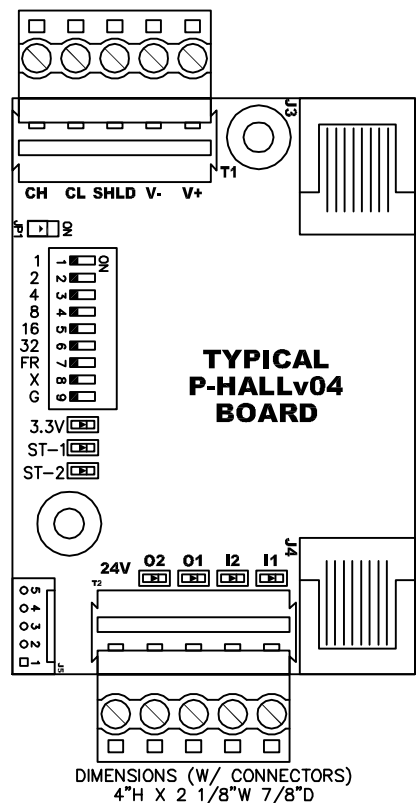


QTY:	EC P/N:	PART DESCRIPTION:
9	17-002-114v04	P-HALLv04 BOARD
9	10-008-009	RJ45 SPLITTER
0	19-001-023-06in	CAN CABLE: 6 INCH
9	19-001-023-05ft	CAN CABLE: 5 FEET
0	19-001-023-07ft	CAN CABLE: 7 FEET
6	19-001-023-14ft	CAN CABLE: 14 FEET
2	19-001-023-25ft	CAN CABLE: 25 FEET
1	19-001-023-X	CAN CABLE: 75 FEET

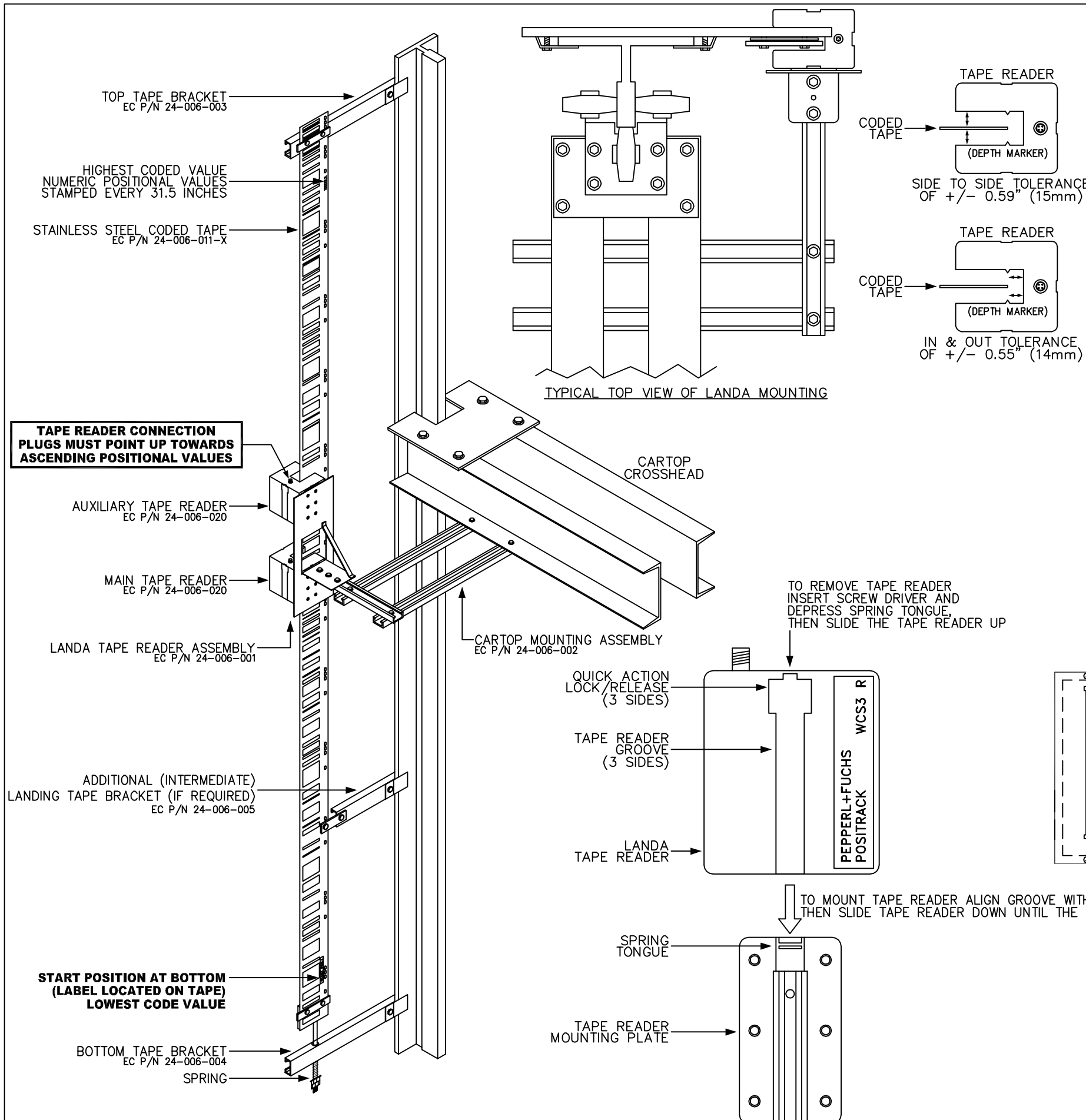
P-HALL BOARD CONFIGURATION TABLE

1. SET P-HALL BOARD DIP SWITCHES FOR THE RESPECTIVE LANDING NUMBER AND FUNCTION, USING THE BELOW CONFIGURATION TABLE.
2. SET P-HALL BOARD JP1 SWITCH FOR THE RESPECTIVE FUNCTION BY SLIDING THE SWITCH INTO THE APPROPRIATE POSITION, USING THE BELOW CONFIGURATION TABLE.

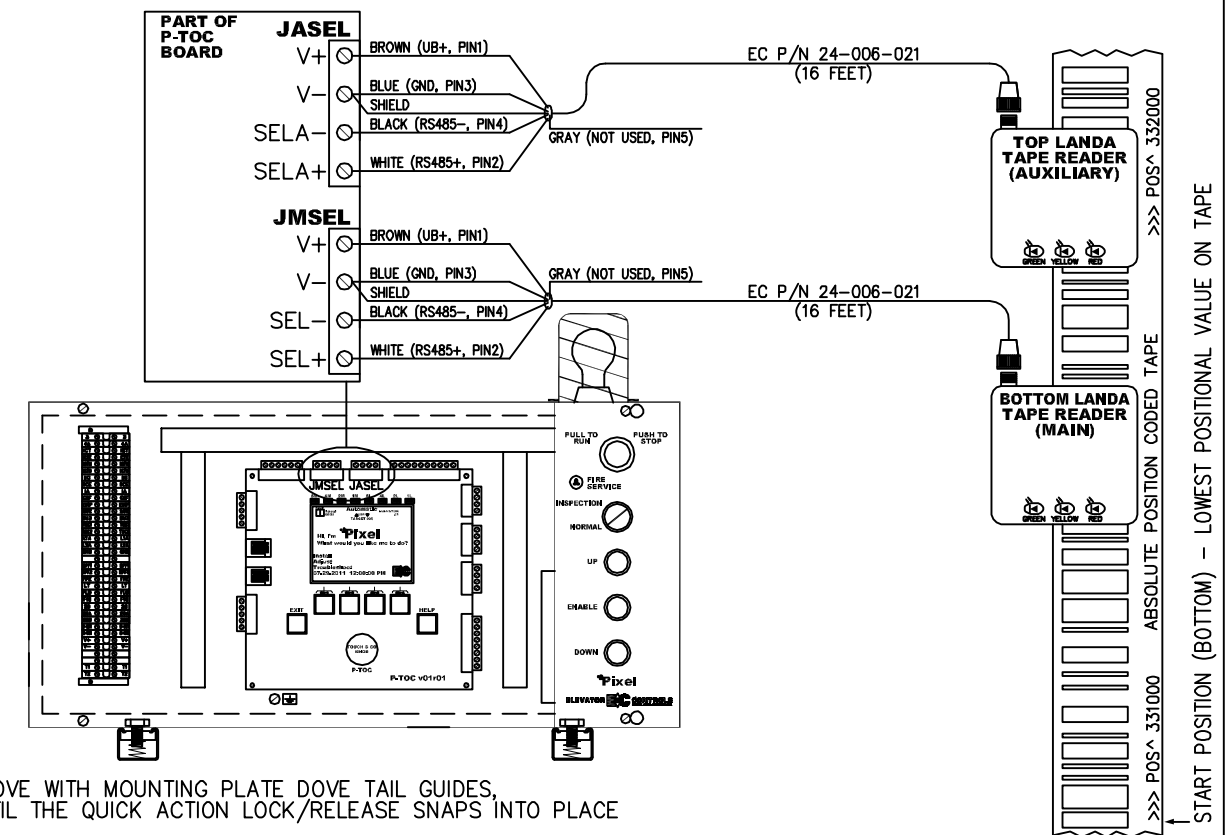
DIP SWITCHES (1) THRU (32) LANDING ADDRESS SELECTION				DIP SWITCHES (FR), (X) & (G) FUNCTION SELECTION			DIP SWITCHES (1) thru (6) FUNCTION SELECTION								
LANDING NUMBER	JP1 IS OFF	FLOOR DESIGNATION						REAR HALL CALL	REAR HOSPITAL CALL	REAR HALL LANTERN	LANDING NUMBER	MISCELLANEOUS FUNCTIONS	JP1 IS ON	FUNCTION SETTINGS	
			ON												
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REAR P-HALL HOISTWAY WIRING DIAGRAMS	
JOB NAME: 211 WEST 14TH STREET NY PE1	
CUSTOMER: G-TECH ASSOCIATES, LLC.	
ENGINEERED BY: Jason Kirlis	DATE: 12/28/16
REVISION DATE:	
 ELEVATOR CONTROLS	
6150 WAREHOUSE WAY SACRAMENTO, CA 95828 USA PHONE: (800)822-8108 FAX: (916)428-1728 www.elevatorcontrols.com	
CONTROLLER MODEL: PIXEL AC-VECTOR-S	
JOB NUMBER: 16-18651	
CONTROLLER ID: M_PIXEL-QR4b.dwg	PAGE NUMBER: 11/14/16
SIMPLEX QR4Rb	



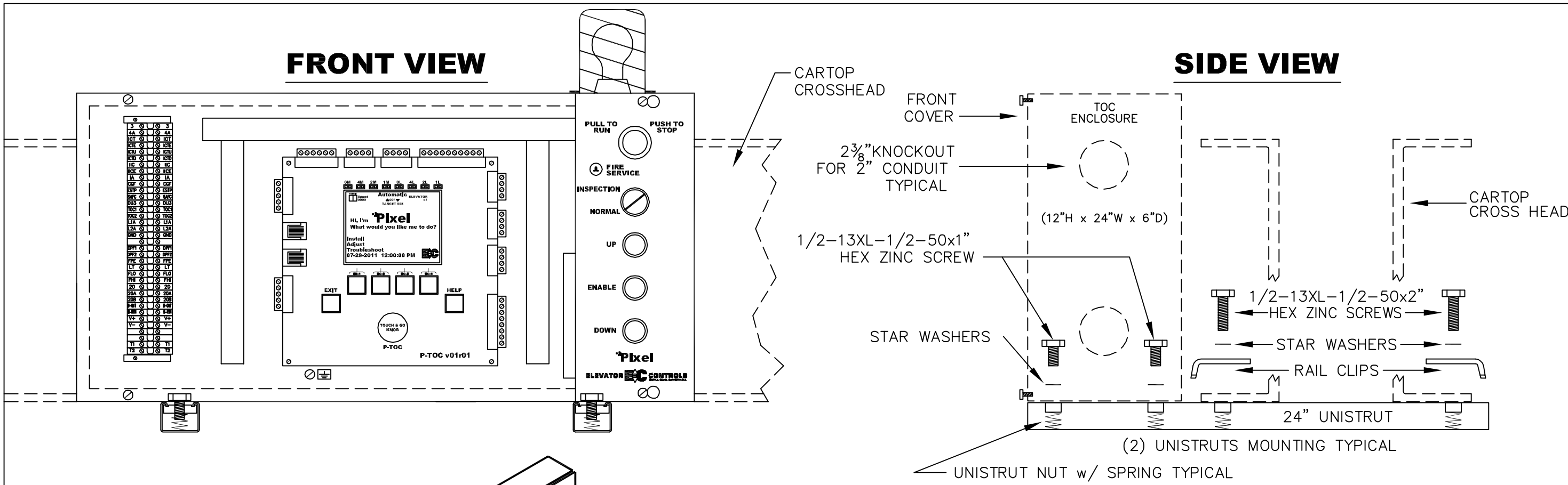
- INSTALLATION:**
- 1 ATTACH TOP AND BOTTOM TAPE BRACKETS TO RAIL USING CLIPS AND HARDWARE PROVIDED.
 - 2 HANG STAINLESS STEEL CODED TAPE FROM TAPE BRACKETS. VERIFY START POINT (LOWEST POSITIONAL VALUE) IS AT BOTTOM. THE TAPE HAS POSITIONAL VALUES STAMPED INTO THE TAPE EVERY 31.5 INCHES.
 - 3 ADJUST TAPE BRACKETS SO THE STAINLESS STEEL CODED TAPE IS IN PROPER VERTICAL ALIGNMENT (FRONT TO BACK AND SIDE TO SIDE).
 - 4 ADJUST THE SPRING ON THE BOTTOM TAPE BRACKET TO APPLY TENSION ONTO THE TAPE.
 - 5 MOUNT THE LANDA POSTION SYSTEM ONTO THE CARTOP USING UNISTRUTS AND HARDWARE (TYPICAL MOUNTING SHOWN TO THE LEFT).
 - 6 TAPE READER ORIENTATION CAN BE ADJUSTED BY USING THE QUICK ACTION LOCK/RELEASE FEATURE (SEE PICTURE BELOW)
 - 7 ALIGN TAPE READERS SO THAT THE TAPE IS CENTERED INSIDE READERS WHILE ALIGNED TO DEPTH MARKERS AT ANY POSITION IN THE HOISTWAY. TOLERANCES: $\pm 0.59"$ (15mm) SIDE TO SIDE AND $\pm 0.55"$ (14 mm) IN & OUT FROM CENTER OF TAPE READER.
 - 8 RUN THE CAR FROM TOP TO BOTTOM TO VERIFY THE ABOVE RUNNING TOLERANCES ARE NOT EXCEEDED AND ADJUST ACCORDINGLY.
 - 9 CONNECT THE BOTTOM TAPE READER (MAIN) TO THE P-TOC BOARD JMSEL TERMINALS USING THE LANDA CABLE (EC P/N 24-006-021). TAPE READER PLUG ALWAYS POINTS UP TOWARD ASCENDING POSITION VALUE.
 - 10 CONNECT THE TOP TAPE READER (AUXILIARY) TO THE P-TOC BOARD JASEL TERMINALS USING THE LANDA CABLE (EC P/N 24-006-021). TAPE READER PLUG ALWAYS POINTS UP TOWARD ASCENDING POSITION VALUE..



PIXEL INSTALLATION: LANDA POSITION SYSTEM			
JOB NAME:			
211 WEST 14TH STREET NY PE1			
CUSTOMER:			
G-TECH ASSOCIATES, LLC.			
ENGINEERED BY:	DATE:	REVISION DATE:	
Jason Kirlis	12/28/16		
		CONTROLLER MODEL:	
6150 WAREHOUSE WAY SACRAMENTO, CA 95828 USA PHONE: (800)829-8106 FAX: (916)428-1728 www.elevatorcontrols.com		PIXEL AC-VECTOR-S	
M_PIXEL-QR5.dwg		JOB NUMBER:	
FILE: J18651_QR5.dwg		16-18651	
		CONTROLLER ID:	PAGE NUMBER:
		SIMPLEX	QR5

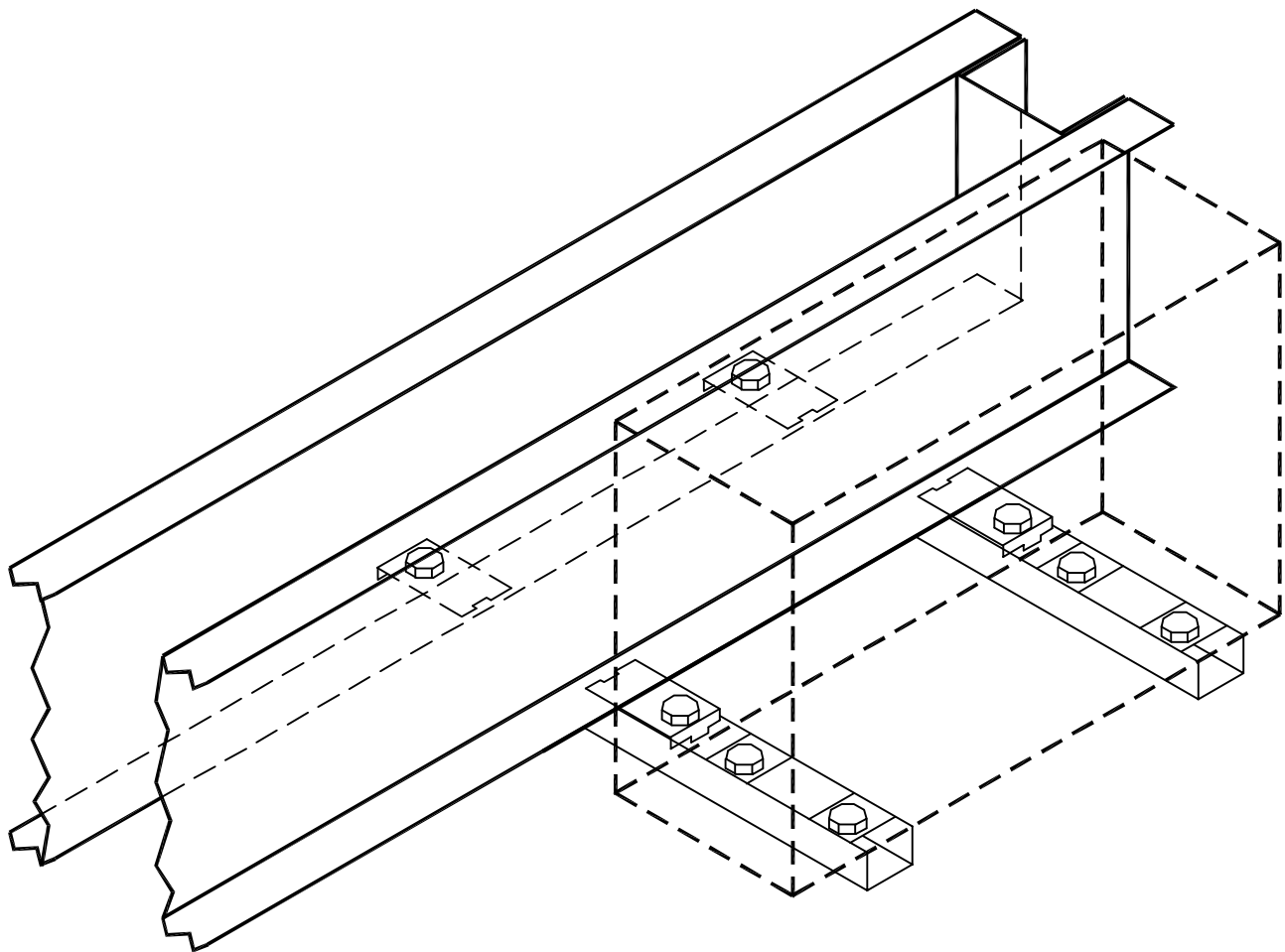
FRONT VIEW

SIDE VIEW



PIXEL TOC (TOP OF CAR) BOX MOUNTING INSTRUCTIONS

1. THE TOC BOX IS TYPICALLY MOUNTED TO THE CARTOP USING THE UNISTRUTS AND RAIL CLIPS (PROVIDED BY ELEVATOR CONTROLS), AS SHOWN IN THIS DIAGRAM. CHOOSE A MOUNTING LOCATION CLOSE TO THE LANDA POSITION SYSTEM (16 FOOT CABLES).
2. IF THIS MOUNTING TECHNIQUE CANNOT BE USED, IT IS UP TO THE INSTALLER TO MOUNT THE CARTOP ASSEMBLY PROPERLY. VERTICAL MOUNTING AS SHOWN, IS PREFERRED. WHEN MOUNTING HORIZONTALLY, CAUTION SHOULD BE TAKEN AGAINST METAL DEBRIS THAT CAN CAUSE ELECTRICAL DAMAGE.
3. SEVERAL KNOCKOUTS HAVE BEEN PROVIDED FOR 2" CONDUIT CONNECTIONS. CONNECT TRAVELING CABLE, SELECTOR, DOOR OPERATOR(S) AND COP USING THESE KNOCKOUTS.



PIXEL INSTALLATION: TOC (TOP OF CAR) BOX MOUNTING			
JOB NAME:			
211 WEST 14TH STREET NY PE1			
CUSTOMER:			
G-TECH ASSOCIATES, LLC.			
ENGINEERED BY:	DATE:	REVISION DATE:	
Jason Kirlis	12/28/16		
ELEVATOR CONTROLS		CONTROLLER MODEL:	
		PIXEL AC-VECTOR-S	
		JOB NUMBER:	
		16-18651	
		CONTROLLER ID:	PAGE NUMBER:
		SIMPLEX	QR6
M_PIXEL-QR6.dwg			
FILE: J18651_QR6.dwg			

Basic Start-up Procedure

1. Review and become familiar with the Yaskawa L1000A quick start guide, EC manuals and EC schematics

2. Verify all interconnections to the drive & controller are made in accordance with the EC schematic and Yaskawa L1000A quick start guide.

3. Verify the drive parameters marked with an " » " are correct and match the actual motor and job site data.

4. Use the modified constants menu in the drive to verify the EC parameter settings on this sheet. record any parameter changes in the field setting column.

5. AUTO-TUNING Induction motor (IM), is a one step process rotational (ropes must be removed) or stationary.

a. Move one of the jumper legs from H1 to HC terminal (two legs are both installed into H1 terminal on the L1000A drive) terminals HC, H1 & H2 are now jumped together

b. (Regenerative drive applications only) Set H1-08=F, to disable base block

c. if the landa positioning system is not installed, place the controller on construction mode (install menu)

d. select induction motor auto-tune method below:

T1-01 = 0 (Rotational, ropes must be removed-most accurate)

For rotational auto-tune set H2-01 = 6 (Drive Ready)

This allows brake to lift during auto-tune process.

OR

T1-01 = 4 (Stationary, motor slip & no load current is available)

e. Enter the required auto-tuning data for the motor (refer to E2-11, E1-05, E2-01, E1-06, E2-04, F1-01, E2-03 & E2-02 for data) press the up key until "tuning ready?" is displayed on the keypad.

f. Using controller insp., press both the up & enable buttons continue to press both buttons until auto-tune is complete

g. Press the run key and the keypad will display "tune proceeding" until process is complete = "tune successful"

The auto-tuning process takes approximately 1-2 minutes.

h. Remove jumper from terminal HC & restore H2-01=0, if a rotational tune was completed.

(Regenerative drive applications only) Restore H1-08=9.

6. Verify motor rotation direction using contrroller inspection verify up command causes the elevator to move in the upward direction, if the motor rotates in the opposite direction, change b1-14 from 0 to 1. This switches the phase order to U-W-V.

Encoder setup: Using controller inspection check parameter U1-05 (Speed Feedback). Verify the value is positive in the up and negative in the down direction.

Change F1-05 from 0 to 1 if the values are reversed.

Basic Adjustment Procedure

1. Contract speed, adjust E1-04 "maximum output frequency" up or down to obtain contract speed.

Note: If contract speed can't be reached after setting E1-04 = E1-06, contact elevator controls.

2. Contract speed-response and control:

if slow response during acceleration, increase C5-01 then shorten C5-02. If vibration occurs, decrease C5-01 then lengthen C5-02.

3. Starting-response and rollback control:

If rollback occurs after the brake is lifted, increase C5-19 then shorten C5-20. If vibration occurs, decrease C5-19 then lengthen C5-20. If rollback persists, increase S3-02 in small adjustments. If required increase S3-01 in small adjustments.

4. Stopping-response and control:

If stopping with poor accuracy, check analog pattern, jerk and deceleration rates. Increase S3-03 in small adjustments. If vibration occurs, decrease S3-03. Increase S1-05, if additional brake engagement time is required.

Saving And Uploading Parameters

After completely setting up the drive parameters, save the values as user-set defaults by setting O2-03 = 1 and pressing the enter key. The display will return to 0.

To restore values saved in user-set defaults (O2-03), set A1-03 = 1110 (uploads only the parameters saved in O2-03)

L1000A CLOSED LOOP FLUX VECTOR, PIXEL AC VECTOR FOR INDUCTION MOTOR CONTROLLERS

Number	Parameter Name	Unit	Range	Default	EC Setting	Field Setting	Notes
A1-01	Access Level Selection	—	0-2	2	2		2=Adv. Access
A1-02	Control Method Selection	—	0,2,3,7	2	3		3=Closed Loop
b1-01	Speed Reference Selection	—	0-3	0	2		2=MOD BUS
b1-02	Up/Down Command Selection	—	0-3	1	2		2=MOD BUS
» b1-14	Phase Order Selection	—	0-1	0	0		0=U-V-W
C1-01	Acceleration Ramp 1	SEC	0.00-600.00	1.50	1.00		
C1-02	Deceleration Ramp 1	SEC	0.00-600.00	1.50	0.20		
C1-03	Acceleration Ramp 2	SEC	0.00-600.00	1.50	0.00		
C1-04	Deceleration Ramp 2	SEC	0.00-600.00	1.50	0.00		
C1-09	Fast Stop Ramp	SEC	0.00-600.00	1.50	0.50		
C2-01	Jerk At Accel Start	SEC	0.00-10.00	0.50	0.00		
C2-02	Jerk At Accel End	SEC	0.00-10.00	0.50	0.00		
C2-03	Jerk At Decel Start	SEC	0.00-10.00	0.50	0.00		
C2-04	Jerk At Decel End	SEC	0.00-10.00	0.50	0.00		
C2-05	Jerk Below Leveling Speed	SEC	0.00-10.00	0.50	0.00		
C5-01	Spd Cntrl Lp Proportional Gain 1	—	0.00-300.00	40.00	15.00		
C5-02	Spd Cntrl Lp Integral Time 1	SEC	0.000-10.000	0.50	0.50		
C5-06	Spd Cntrl Lp Primary Delay Constant	SEC	0.000-0.500	0.004	0.100		
C5-19	Spd Cntrl Lp Proportional Gain During Position Lock	—	0.00-300.00	40.00	15.00		
C5-20	Spd Cntrl Lp Integral Time During Position Lock	SEC	0.000-10.000	0.10	0.10		
C6-03	Carrier Frequency	KHz	1.0-15.0	B	8		
C6-06	PWM Method	—	0-2	0	0		0=2/3-PH Conversion
» E1-01	Input Voltage Setting	V	155-255	230	208		
» E1-04	Maximum Output Frequency	Hz	4.0-120.0	60	55		
» E1-05	Maximum Voltage (Motor)	V	0.0-255	200	208		
» E1-06	Base Frequency (Motor)	Hz	0.0-120.0	60	55		
» E2-01	Motor Rated Current	A	10-200% Rating	B	77.9		Rating= B
» E2-02	Motor Rated Slip	Hz	0.00-20.00	B	0.47		
» E2-03	Motor No-load Current	A	0-(E2-01)	B	35.1		
» E2-04	Number Of Motor Poles	#POLES	2-48	4	8		
E2-05	Motor Line-to-line Resistance	Ω	0.000-65.000	B	A		
E2-06	Motor Leakage Inductance	%	0.0-40.0	B	A		
E2-07	Motor Iron-core Sat Coefficient 1	—	0.00-0.50	0.50	A		
E2-08	Motor Iron-core Sat Coefficient 2	—	(E2-07)-0.75	0.75	A		
E2-09	Motor Mechanical Loss	%	0.0-10.0	0.0	0.0		
E2-11	Motor Rated Power	kW	0.00-650.00	B	18.65		kW = HP x 0.746
» F1-01	Encoder 1 Resolution	PPR	1-60000	1024	1024		
F1-02	Operation Sel. At PG Open Circuit (PG0)	—	0-3	1	0		0=Ramp To Stop
F1-03	Operation Selection At Overspeed	—	0-3	1	0		0=Ramp To Stop
F1-04	Operation Selection At Deviation	—	0-3	3	0		0=Ramp To Stop
» F1-05	Encoder 1 Rotation Direction Selection	—	0,1	0	0		
F1-10	Excessive Speed Deviation Detection Level	%	0-50	10	25		
H1-03	Terminal S3 Function Selection	—		24	20		20=Ext Flt Ramp To Stop
H1-04	Terminal S4 Function Selection	—		14	F		F=Not Used
H1-05	Terminal S5 Function Selection	—		3	F		F=Not Used
H1-06	Terminal S6 Function Selection	—		4	F		F=Not Used
H1-07	Terminal S7 Function Selection	—		5	15		15=Fast Stop N.O.
H1-08	Terminal S8 Function Selection	—		F	F		F=Not Used
H2-01	Terminal M1-M2 Function Selection (relay)	—		50	50		50=Brake Control
H2-02	Terminal M3-M4 Function Selection (relay)	—		51	F		F=Not Used
H2-03	Terminal M5-M6 Function Selection (relay)	—		6	F		F=Not Used
H3-02	Torque Compensation	—	0,2,3,14,1F	0	0		14=Pre-torque

*** Pixel Parameters ***

Speed Profile

Pattern Delay (ms)

400ms

Ramp To Stop

YES

Motor/Brake Timers

Brake Pick Delay (s)

0.2s

Brake Drop Delay (s)

0.2s

Zero Speed Hold Delay (s)

2.0s

Parameter Constrain Settings

Pattern Delay > = S1-04

Zero Speed Hold > S1-05 + S3-16

S1-04 > S3-10, and S1-05 > Brake Drop Delay

Zero Speed Hold > Brake Drop Delay

VVF YASKAWA L1000A DRIVE PARAMETER LIST

JOB NAME:

211 WEST 14TH STREET NY PE1

CUSTOMER:

G-TECH ASSOCIATES, LLC.

ENGINEERED BY:

Jason Kirlis

DATE:

12/28/16

REVISION DATE:

EC ELEVATOR CONTROLS

6150 WAREHOUSE WAY

SACRAMENTO, CA 95826 USA

PHONE: (800)829-8108 FAX: (916)428-1728

www.elevatorcontrols.com

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11/23/16

FILE: J18651_QR7.dwg

CONTROLLER MODEL:

PIXEL AC-VECTOR-S

JOB NUMBER:

16-18651

CONTROLLER ID:

SIMPLEX

PAGE NUMBER:

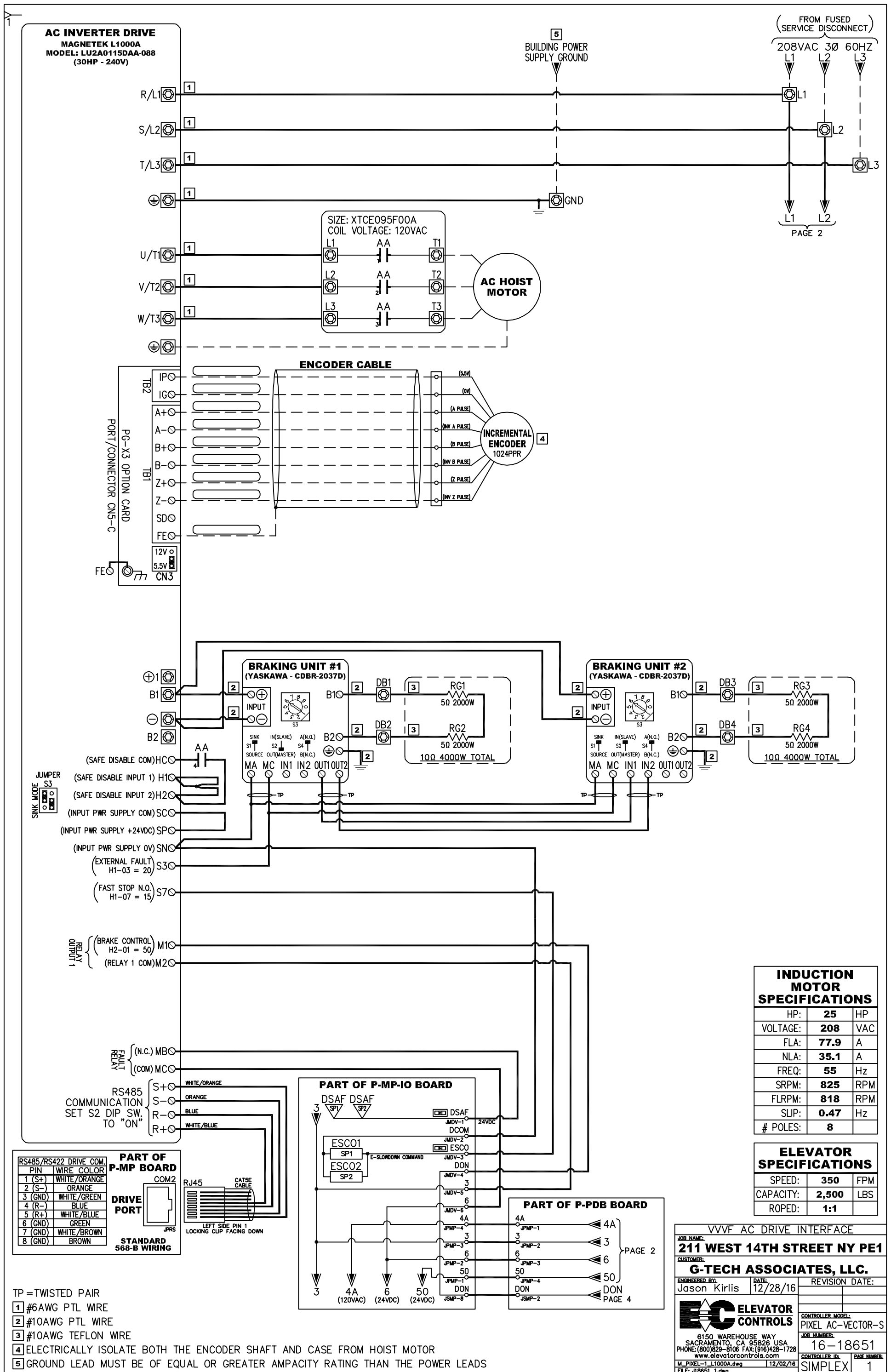
QR7

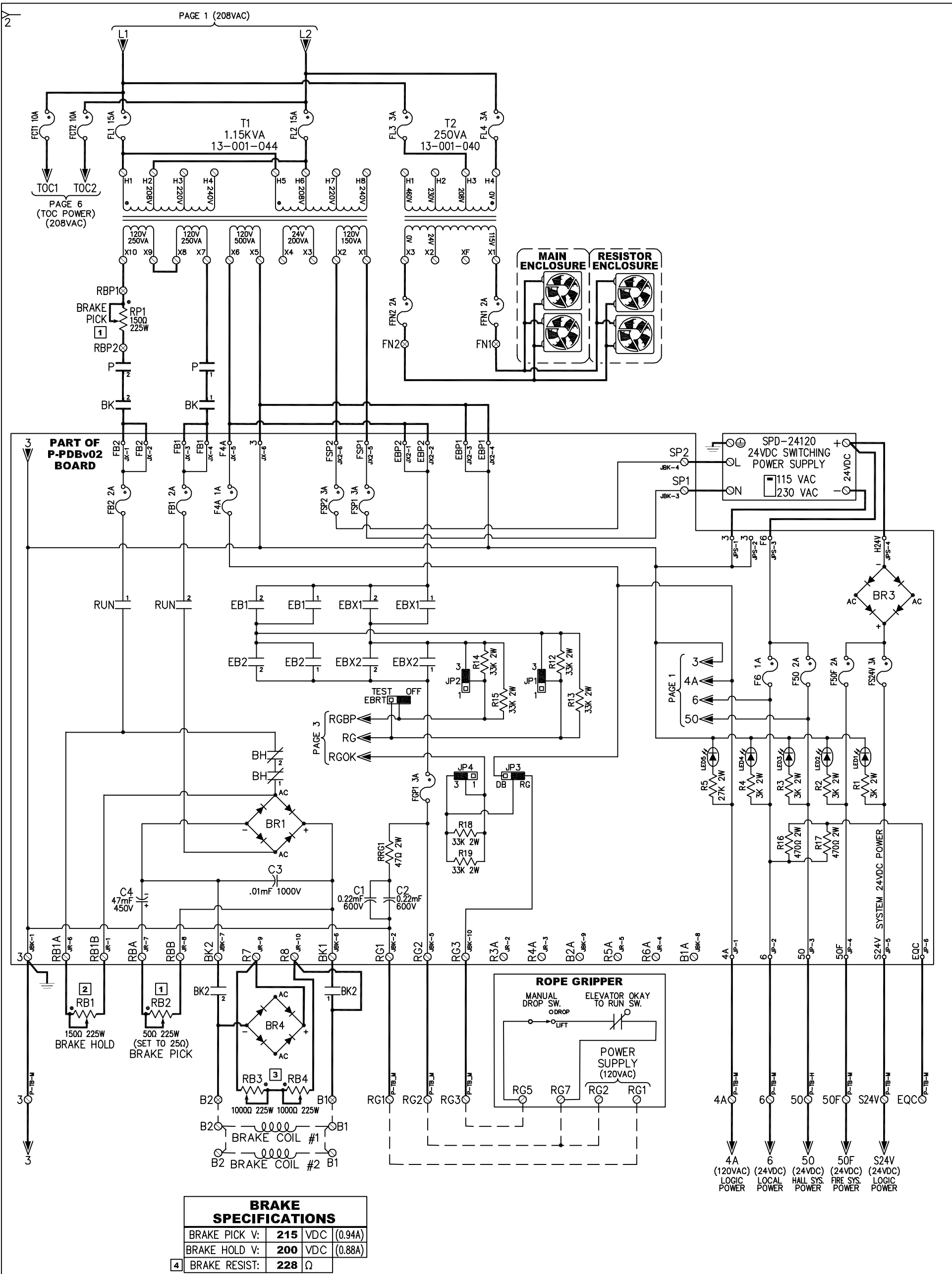
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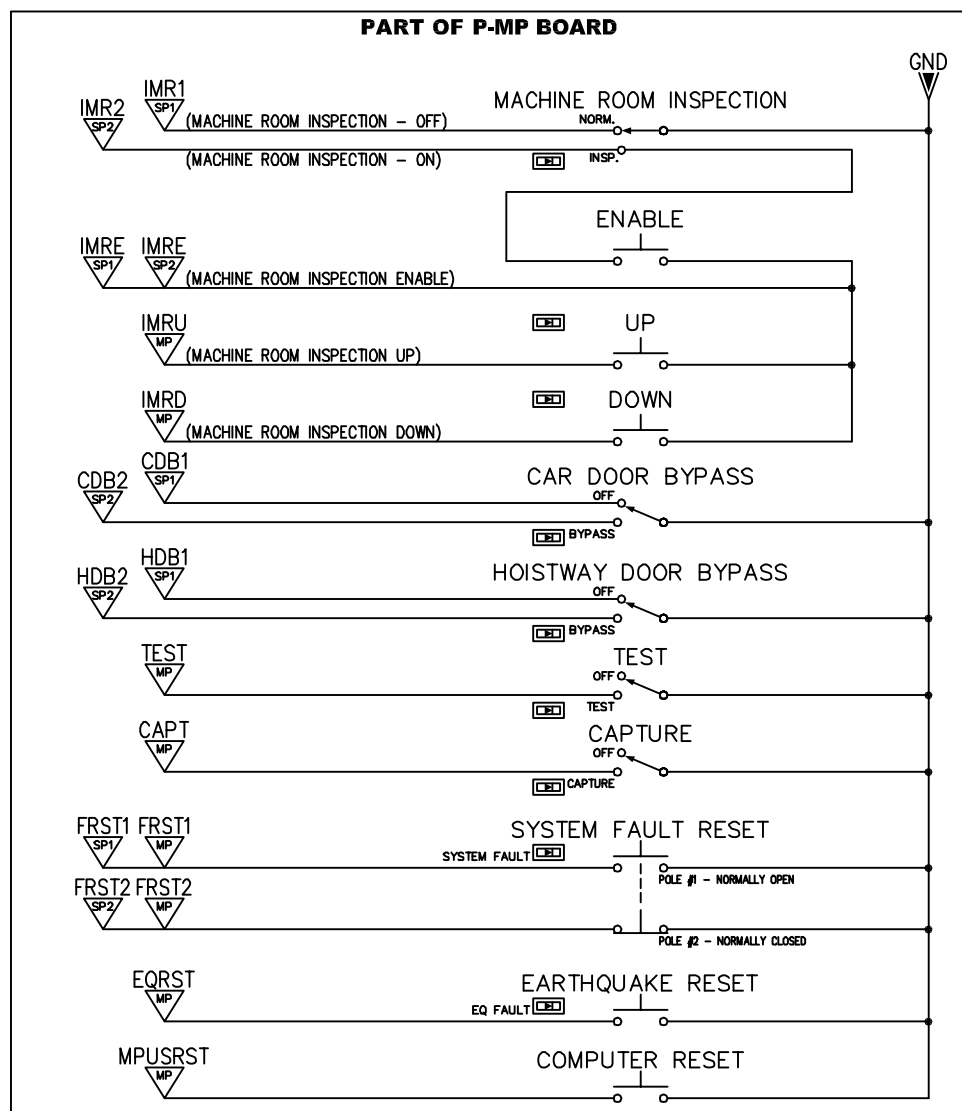
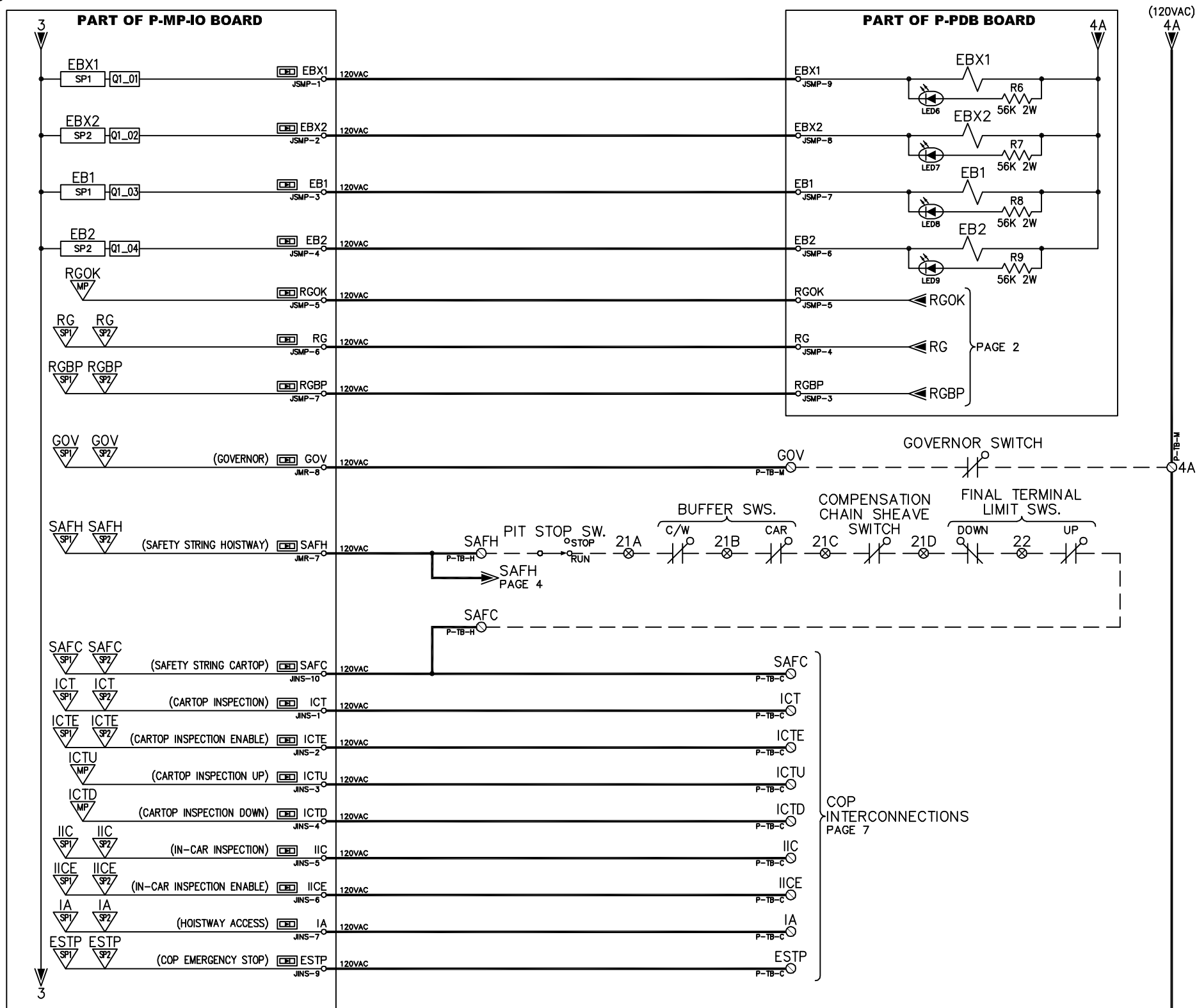
Parameter Is Modified During Auto-tuning Process

B

o2-04 (Drive Model Selection) Dependent Parameters

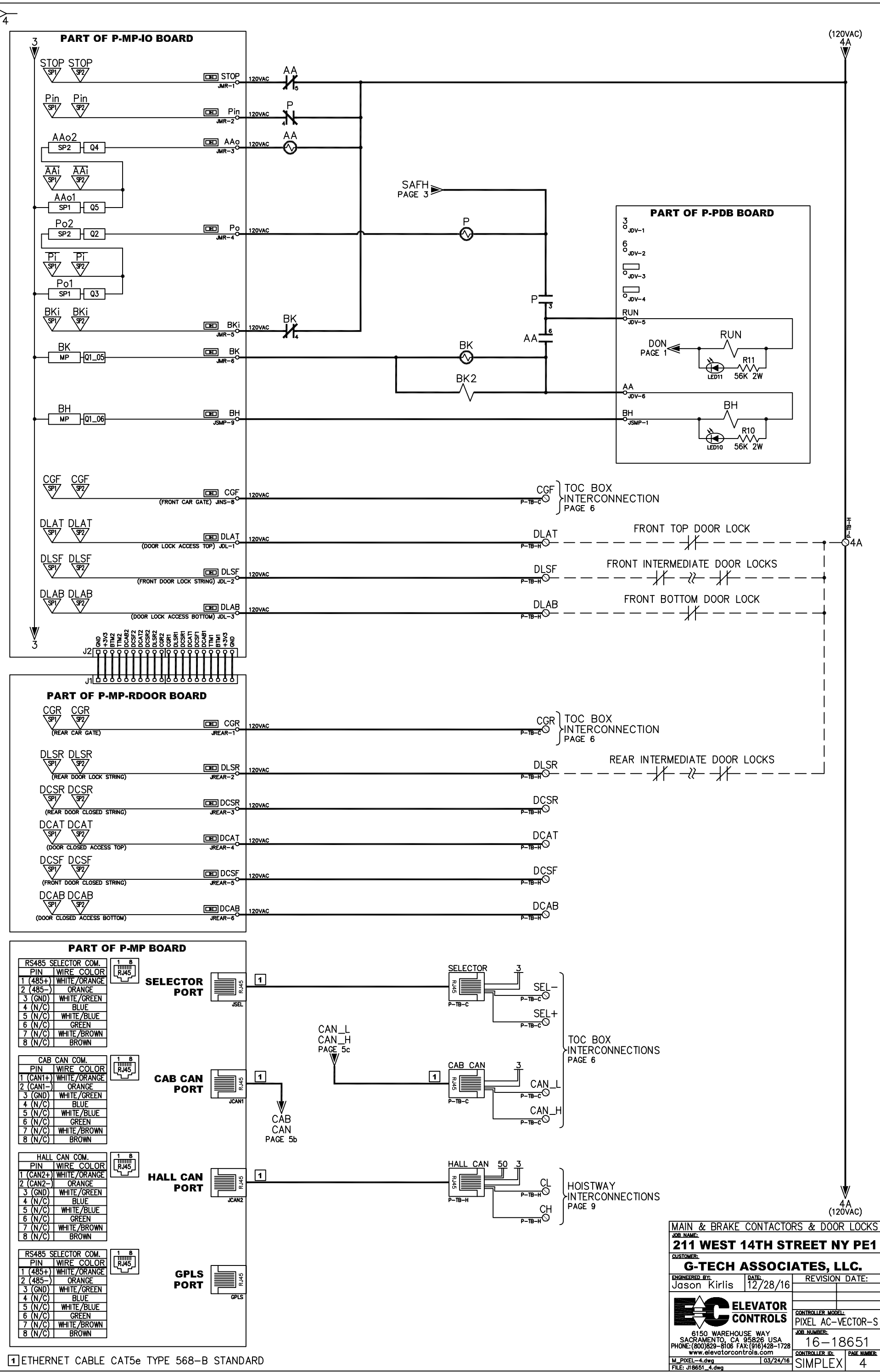


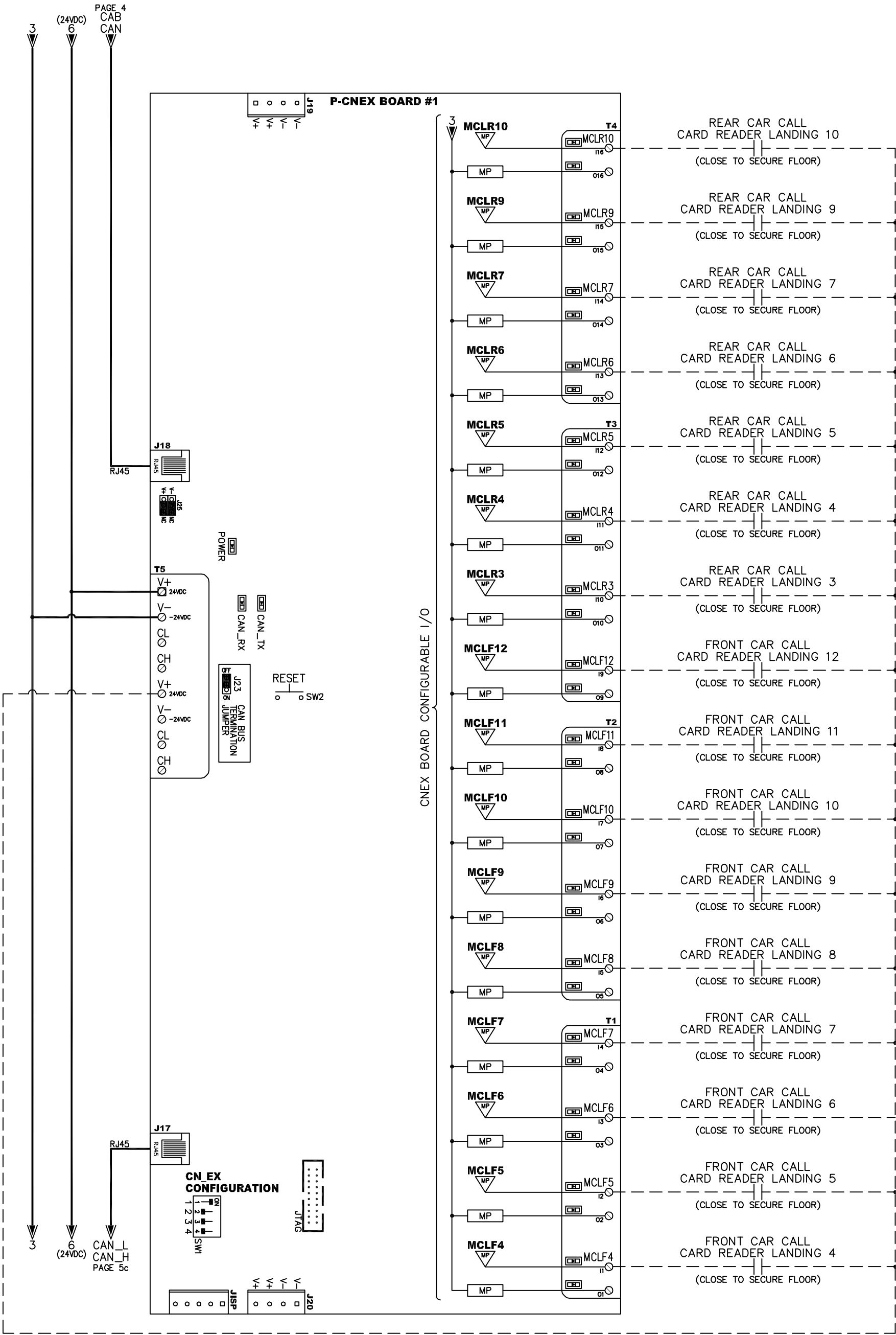




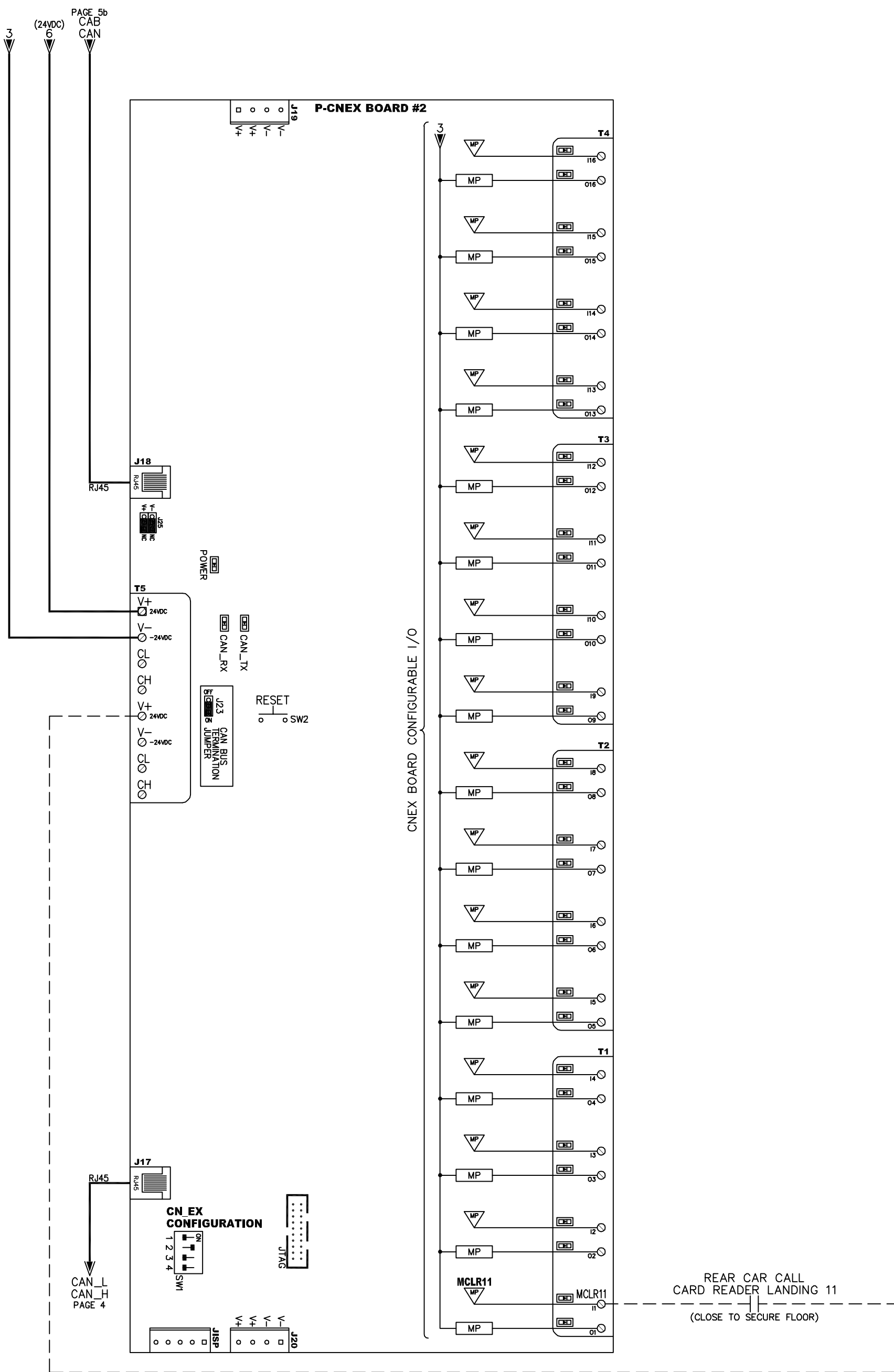
1 TERMINAL IS NOT PROVIDED IN CONTROLLER. REFERENCE POINT ONLY.
NOTE: REFER TO PAGE 9 FOR INSPECTION HOISTWAY ACCESS TOP AND BOTTOM DIRECTION SWITCHES


INSPECTION INPUTS & HOISTWAY SAFETY STRING	
JOB NAME: 211 WEST 14TH STREET NY PE1	
CUSTOMER: G-TECH ASSOCIATES, LLC.	
ENGINEERED BY: Jason Kirlis	DATE: 12/28/16
REVISION DATE:	
CONTROLLER MODEL: PIXEL AC-VECTOR-S	
JOB NUMBER: 16-18651	
M_PIXEL - 3_dwg	09/14/16
FILE: J18651_3_dwg	SIMPLEX 3





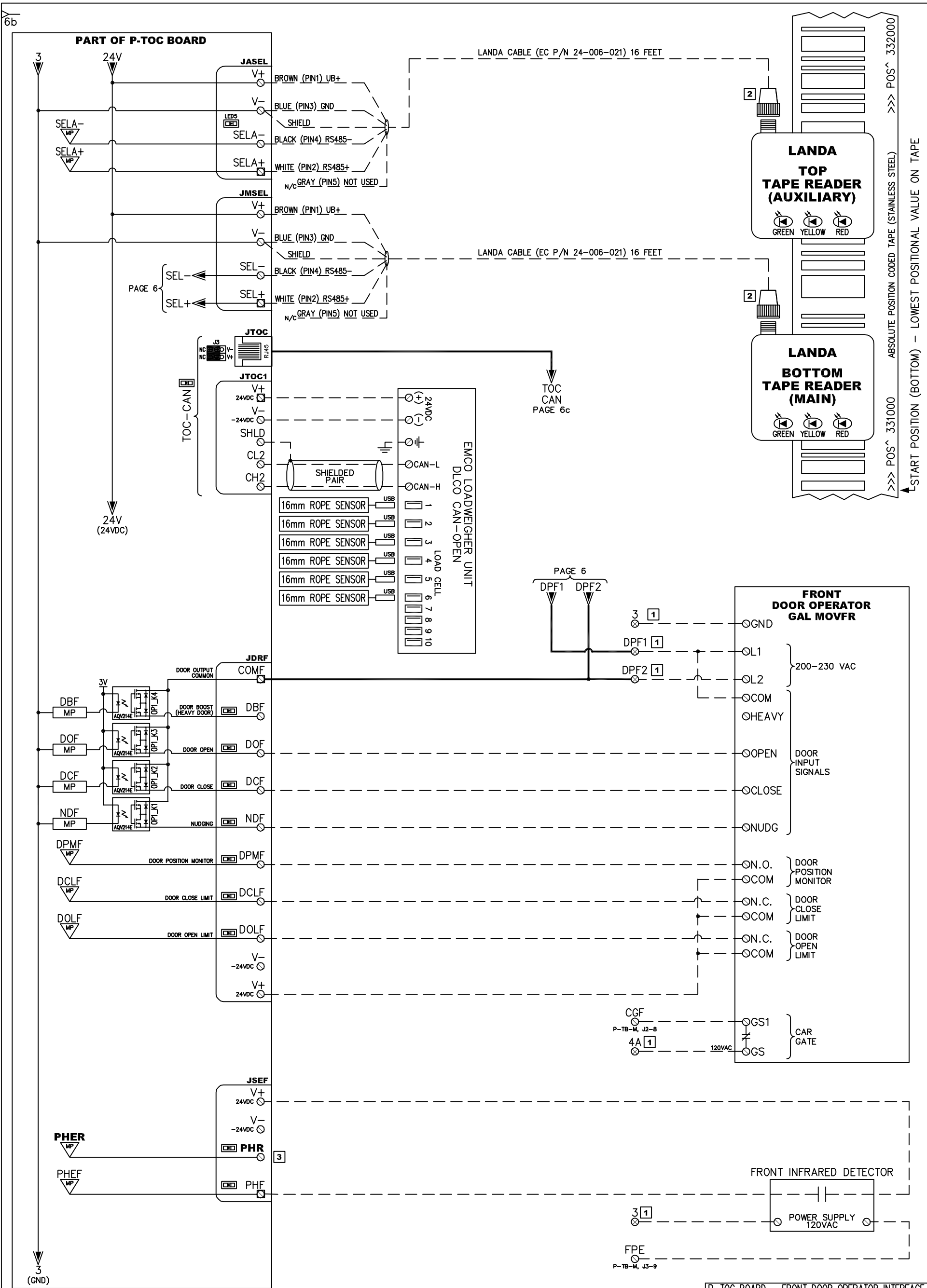
MP P-CNEX BOARD – EXPANSION I/O			
JOB NAME:			
211 WEST 14TH STREET NY PE1			
CUSTOMER:			
G-TECH ASSOCIATES, LLC.			
ENGINEERED BY:	DATE:	REVISION DATE:	
Jason Kirlis	12/28/16		
 ELEVATOR CONTROLS 6150 WAREHOUSE WAY SACRAMENTO, CA 95826 USA PHONE: (800)829-8106 FAX: (916)428-1728 www.elevatorcontrols.com		CONTROLLER MODEL:	
		PIXEL AC-VECTOR-S	
		JOB NUMBER:	
		16-18651	
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MP P-CNEX BOARD - EXPANSION I/O	
JOB NAME: 211 WEST 14TH STREET NY PE1	
CUSTOMER: G-TECH ASSOCIATES, LLC.	
ENGINEERED BY: Jason Kirlis	DATE: 12/28/16
REVISION DATE:	
 ELEVATOR CONTROLS	
6150 WAREHOUSE WAY SACRAMENTO, CA 95826 USA PHONE: (800)829-8106 FAX: (916)428-1728 www.elevatorcontrols.com	
CONTROLLER MODEL: PIXEL AC-VECTOR-S	
JOB NUMBER: 16-18651	
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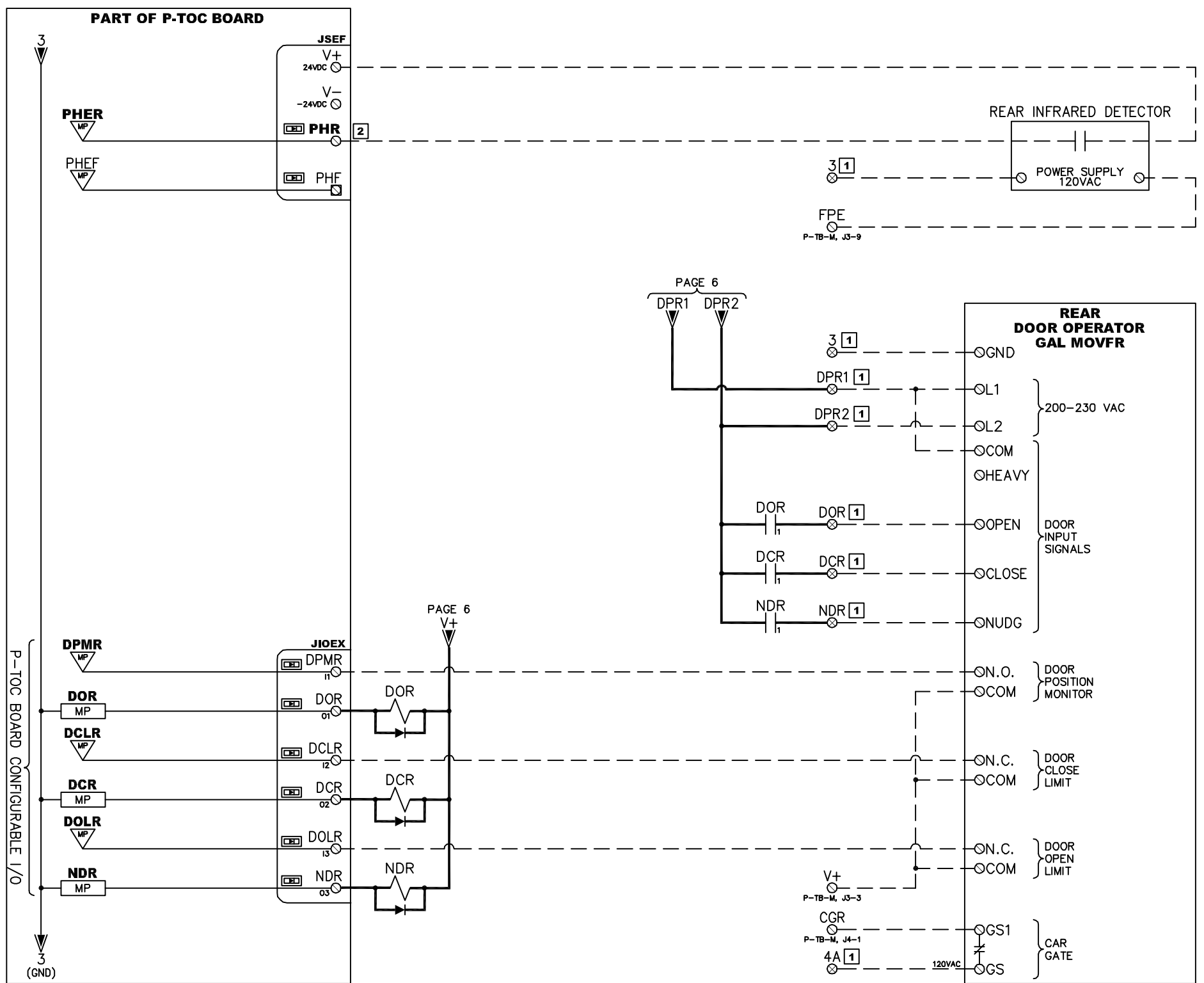
FUSE LIST					
FUSE TYPE	FUSES				
250V MDA	FCIS	FDPF1	FDPF2	FDPRI	FDPRI2
250V AGC	ALL OTHERS				

☐ 1 TERMINAL LOCATED IN COP (PROVIDED BY COP MANUFACTURER)
☐ 2 PANEL MOUNT TERMINAL LOCATED IN THE TOC (CARTOP CABINET)



- 1 PANEL MOUNT TERMINAL LOCATED IN THE TOC (CARTOP CABINET)
- 2 REFER TO PAGE QR5 FOR LANDA POSITION SYSTEM INSTALLATION INSTRUCTIONS
- 3 FOR REAR DOOR APPLICATIONS THE SEF INPUT IS RELABELED TO PHR

P-TOC BOARD - FRONT DOOR OPERATOR INTERFACE			
JOB NAME:			
211 WEST 14TH STREET NY PE1			
CUSTOMER:			
G-TECH ASSOCIATES, LLC.			
ENGINEERED BY:	DATE:	REVISION DATE:	
Jason Kirlis	12/28/16		
		CONTROLLER MODEL:	
		PIXEL AC-VECTOR-S	
6150 WAREHOUSE WAY SACRAMENTO, CA 95826 USA PHONE: (800) 829-8108 FAX: (916) 428-1728 www.elevatorcontrols.com		JOB NUMBER:	16-18651
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08/23/16		PAGE NUMBER:	6b

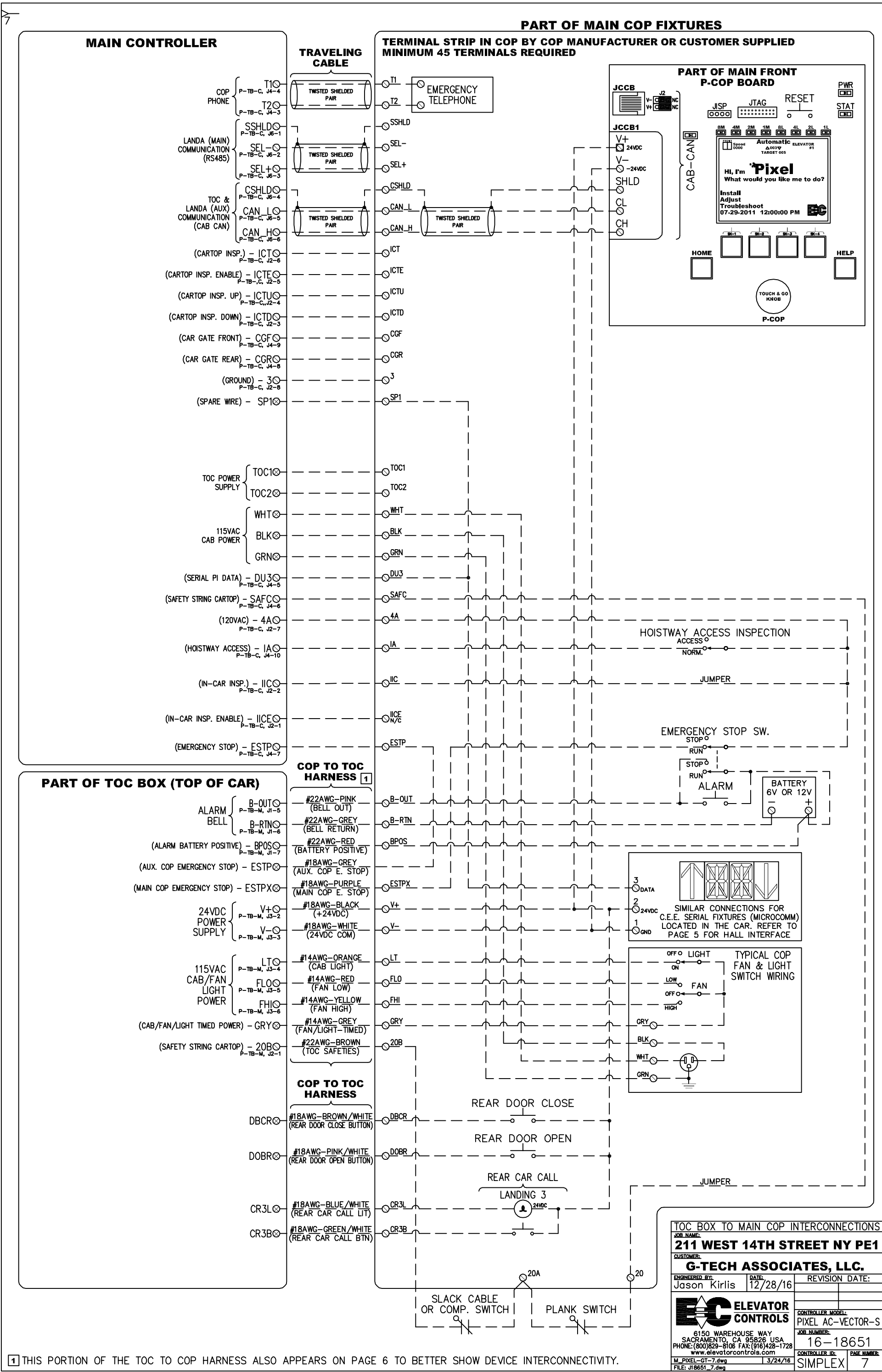


1 PANEL MOUNT TERMINAL LOCATED IN THE TOC (CARTOP CABINET)
2 FOR REAR DOOR APPLICATIONS THE SEF INPUT IS RELABELED TO PHR

P-TOC BOARD - REAR DOOR OPERATOR INTERFACE			
JOB NAME: 211 WEST 14TH STREET NY PE1			
CUSTOMER: G-TECH ASSOCIATES, LLC.			
ENGINEERED BY: Jason Kirlis		DATE: 12/28/16	
		REVISION DATE:	
 ELEVATOR CONTROLS 6150 WAREHOUSE WAY SACRAMENTO, CA 95824 USA PHONE: (800)829-8108 FAX: (916)428-1728 www.elevatorcontrols.com		CONTROLLER MODEL: PIXEL AC-VECTOR-S	
		JOB NUMBER: 16-18651	
		CONTROLLER ID: SIMPLEX	
		PAGE NUMBER: 6R	
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FILE: J18651_6R.dwg			



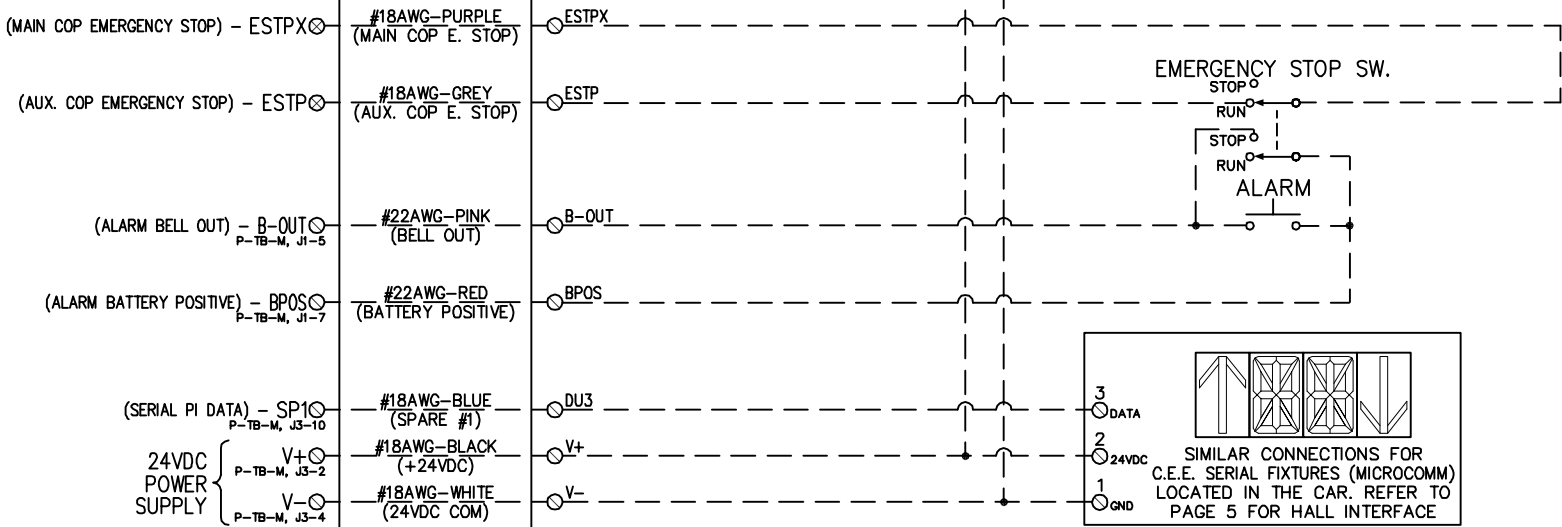
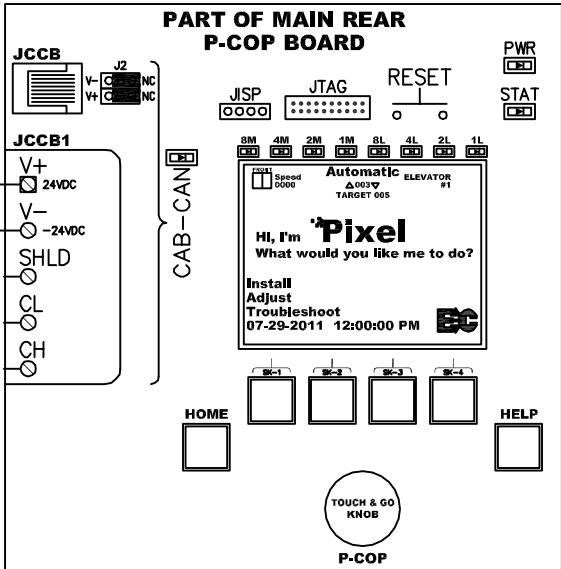
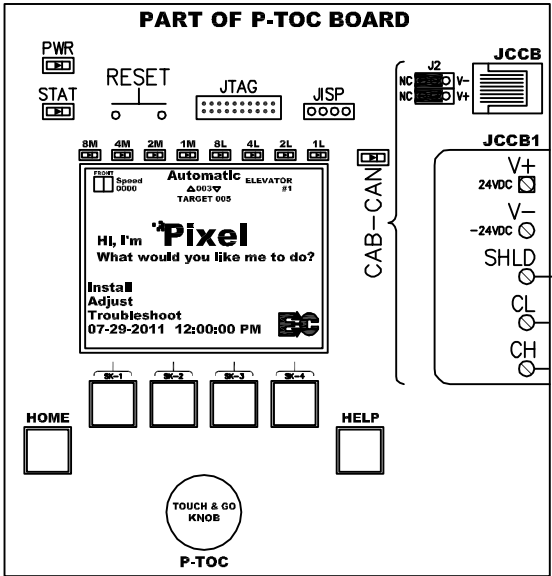
T0C P-CNEX BOARD - EXPANSION I/O	
JOB NAME:	
211 WEST 14TH STREET NY PE1	
CUSTOMER:	
G-TECH ASSOCIATES, LLC.	
ENGINEERED BY:	DATE:
Jason Kirlis	12/28/16
REVISION DATE:	
CONTROLLER MODEL:	
PIXEL AC-VECTOR-S	
JOB NUMBER:	
16-18651	
MODEL:	DATE:
PX1EL-5b.dwg	08/23/16
M. FILE: J18651_c.dwg	
SIMPLEX	
PAGE NUMBER:	
6c	



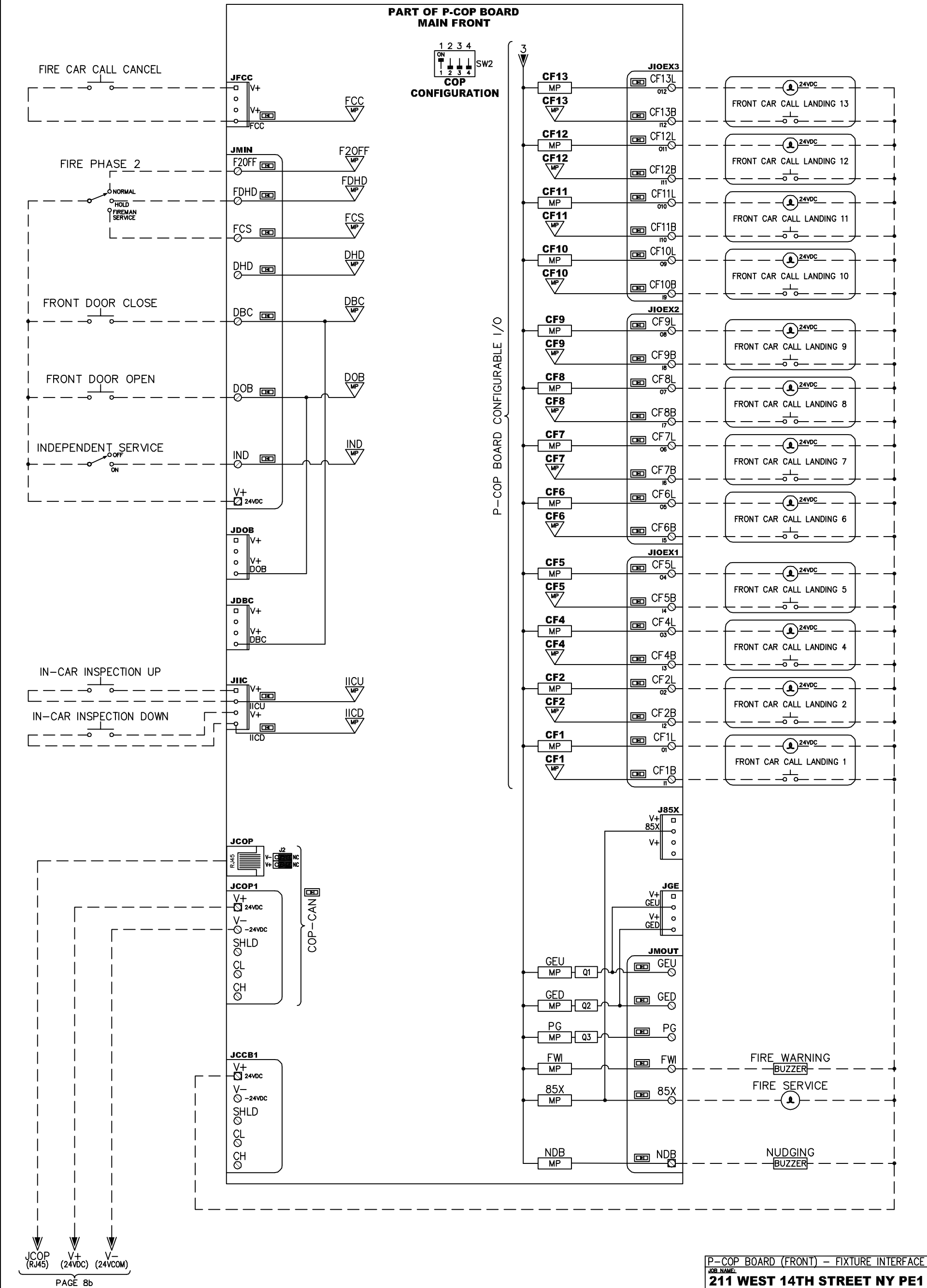
PART OF REAR COP FIXTURES

PART OF TOC BOX (TOP OF CAR)


TERMINAL STRIP IN AUXILIARY COP BY COP MANUFACTURER OR CUSTOMER SUPPLIED
MINIMUM 7 TERMINALS REQUIRED

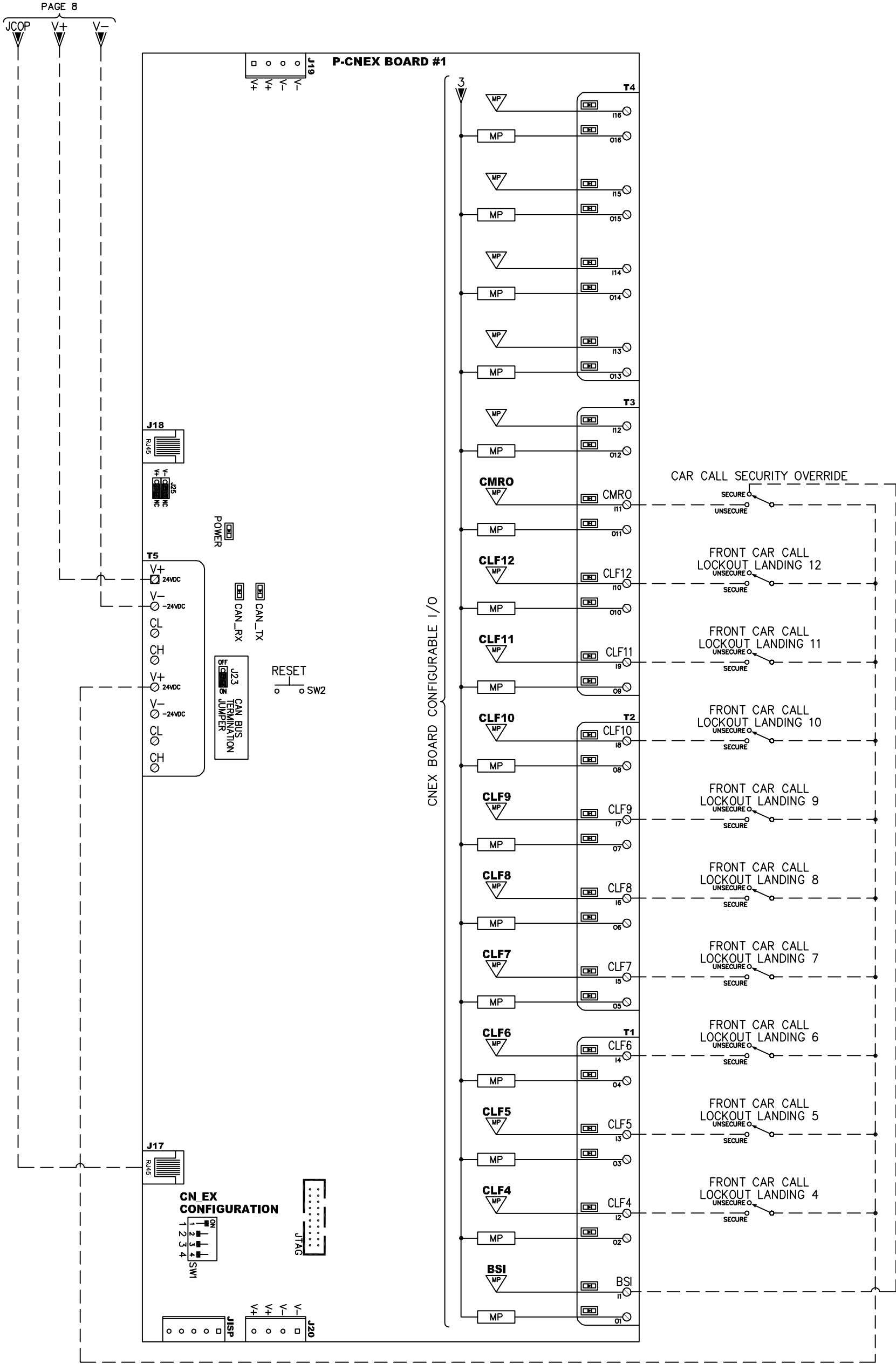


TOC BOX TO REAR COP INTERCONNECTIONS			
JOB NAME:			
211 WEST 14TH STREET NY PE1			
CUSTOMER:			
G-TECH ASSOCIATES, LLC.			
ENGINEERED BY:	DATE:	REVISION DATE:	
Jason Kirlis	12/28/16		
		CONTROLLER MODEL:	
ELEVATOR CONTROLS		PIXEL AC-VECTOR-S	
6150 WAREHOUSE WAY SACRAMENTO, CA 95826 USA PHONE: (800) 829-8108 FAX: (916) 428-1728 www.elevatorcontrols.com		JOB NUMBER:	
M_PIXEL-GT-7X.dwg		16-18651	
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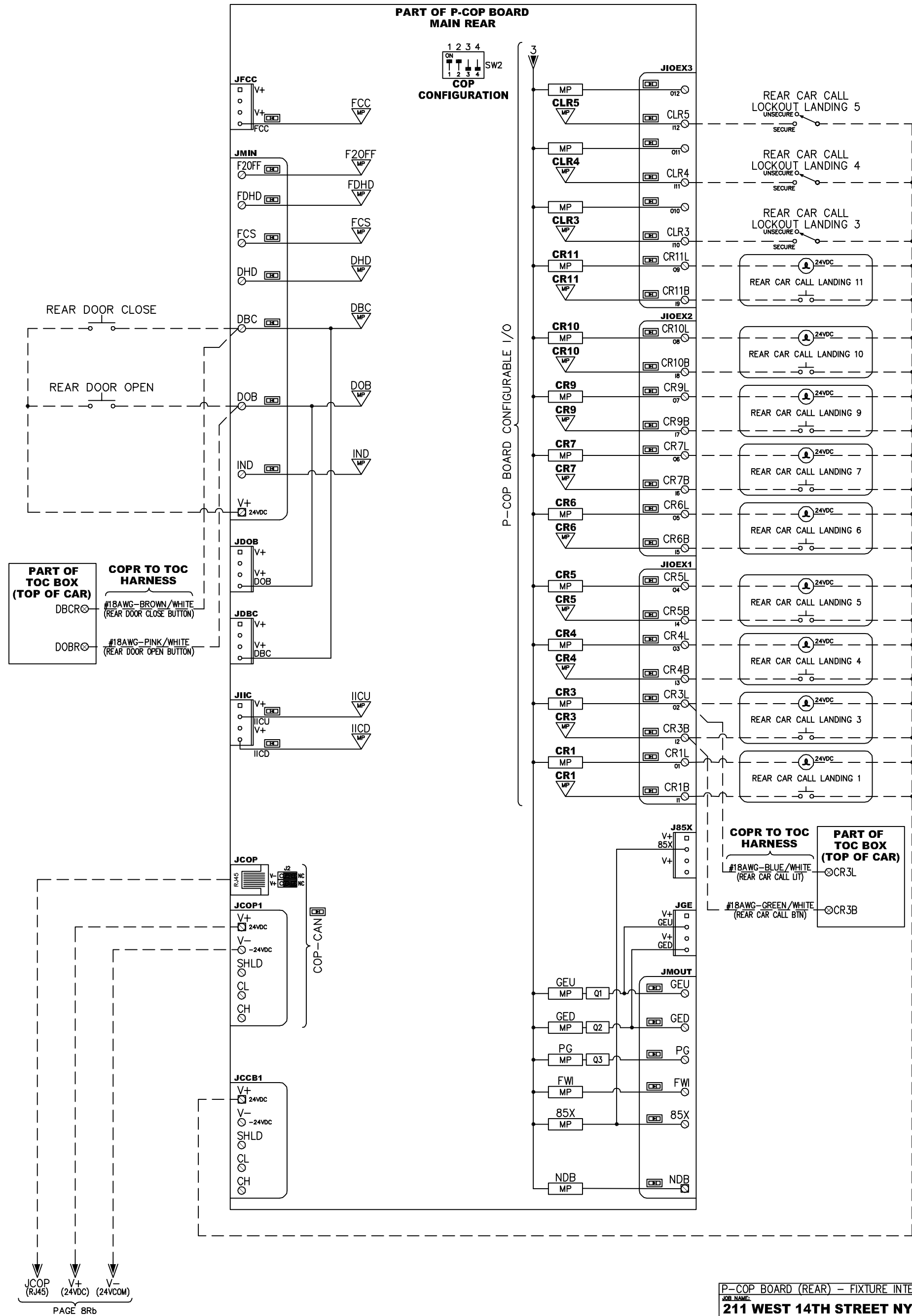


1 ETHERNET CABLE CAT5e TYPE 568-B STANDARD (15 INCHES) EC P/N 19-001-023-15in


P-COP BOARD (FRONT) – FIXTURE INTERFACE			
JOB NAME:			
211 WEST 14TH STREET NY PE1			
CUSTOMER:			
G-TECH ASSOCIATES, LLC.			
ENGINEERED BY:	DATE:	REVISION DATE:	
Jason Kirlis	12/28/16		
 ELEVATOR CONTROLS		CONTROLLER MODEL:	
		PIXEL AC-VECTOR-S	
6150 WAREHOUSE WAY SACRAMENTO, CA 95826 USA PHONE: (800)829-8106 FAX: (916)428-1728 www.elevatorcontrols.com		JOB NUMBER:	
M_PIXEL-8.dwg		16-18651	
FILE: J18651_8.dwg		08/23/16	CONTROL ID:
		SIMPLEX	PAGE NUMBER:
		8	

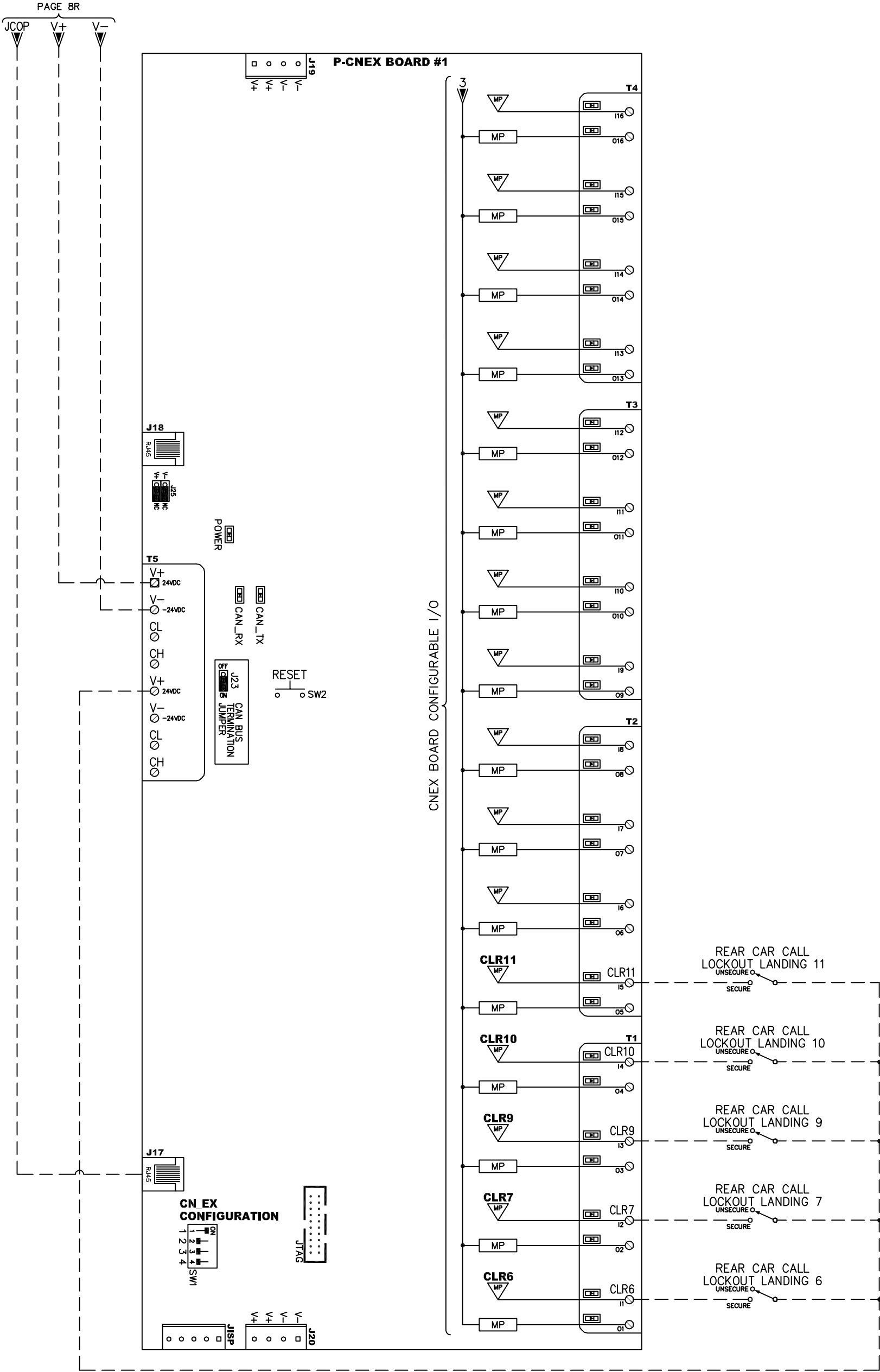


COP P-CNEX BOARD - EXPANSION I/O			
JOB NAME:			
211 WEST 14TH STREET NY PE1			
CUSTOMER:			
G-TECH ASSOCIATES, LLC.			
ENGINEERED BY:	DATE:	REVISION DATE:	
Jason Kirlis	12/28/16		
 ELEVATOR CONTROLS 6150 WAREHOUSE WAY SACRAMENTO, CA 95826 USA PHONE: (800)829-8108 FAX: (916)428-1728 www.elevatorcontrols.com		CONTROLLER MODEL:	
		PIXEL AC-VECTOR-S	
		JOB NUMBER:	
		16-18651	
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FILE: J18651_8b.dwg			SIMPLEX
			PAGE NUMBER:
			8b

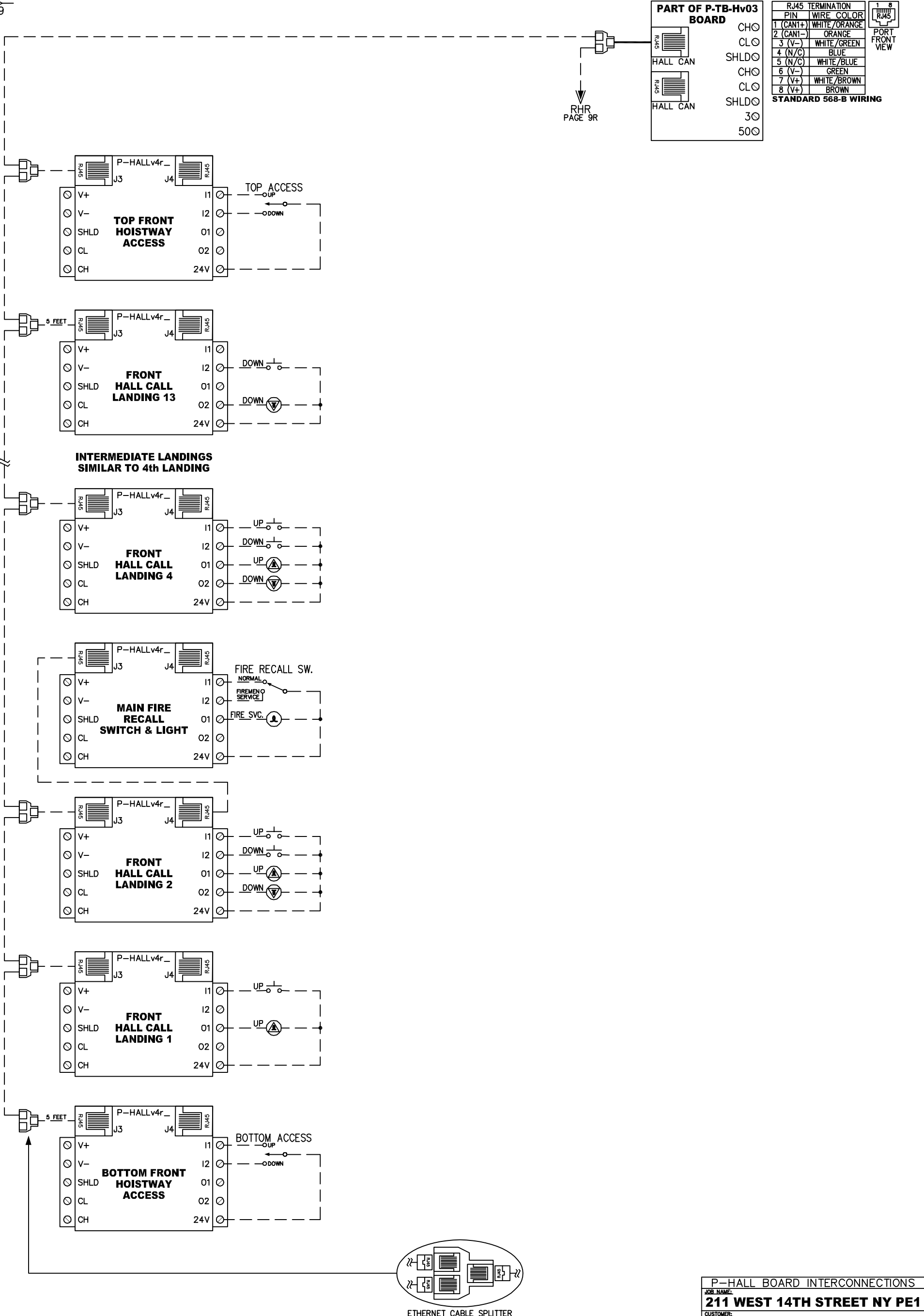


1 ETHERNET CABLE CAT5e TYPE 568-B STANDARD (15 INCHES) EC P/N 19-001-023-15in

P-COP BOARD (REAR) - FIXTURE INTERFACE			
JOB NAME:			
211 WEST 14TH STREET NY PE1			
CUSTOMER:			
G-TECH ASSOCIATES, LLC.			
ENGINEERED BY:	DATE:	REVISION DATE:	
Jason Kirlis	12/28/16		
		CONTROLLER MODEL:	
6150 WAREHOUSE WAY SACRAMENTO, CA 95826 USA PHONE: (800)829-8106 FAX: (916)428-1728 www.elevatorcontrols.com		PIXEL AC-VECTOR-S	
M_PIXEL-8R.dwg		JOB NUMBER:	
FILE: J18651_8R.dwg		16-18651	
		CONTROLLER ID:	PAGE NUMBER:
		SIMPLEX	8R



COP P-CNEX BOARD - EXPANSION I/O			
JOB NAME:			
211 WEST 14TH STREET NY PE1			
CUSTOMER:			
G-TECH ASSOCIATES, LLC.			
ENGINEERED BY:	DATE:	REVISION DATE:	
Jason Kirlis	12/28/16		
 ELEVATOR CONTROLS 6150 WAREHOUSE WAY SACRAMENTO, CA 95826 USA PHONE: (800)829-8108 FAX: (916)428-1728 www.elevatorcontrols.com		CONTROLLER MODEL:	
		PIXEL AC-VECTOR-S	
		JOB NUMBER:	
		16-18651	
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FILE: J18651_8Rb.dwg			PAGE NUMBER:
			SIMPLEX 8Rb




RJ45 TERMINATION			1 8 RJ45 PORT FRONT VIEW
PIN	WIRE	COLOR	
1 (CAN1+)	WHITE	ORANGE	
2 (CAN1-)	ORANGE		
3 (V-)	WHITE	GREEN	
4 (N/C)	BLUE		
5 (N/C)	WHITE	BLUE	
6 (V-)	GREEN		
7 (V+)	WHITE	BROWN	
8 (V+)	BROWN		

STANDARD 568-B WIRING

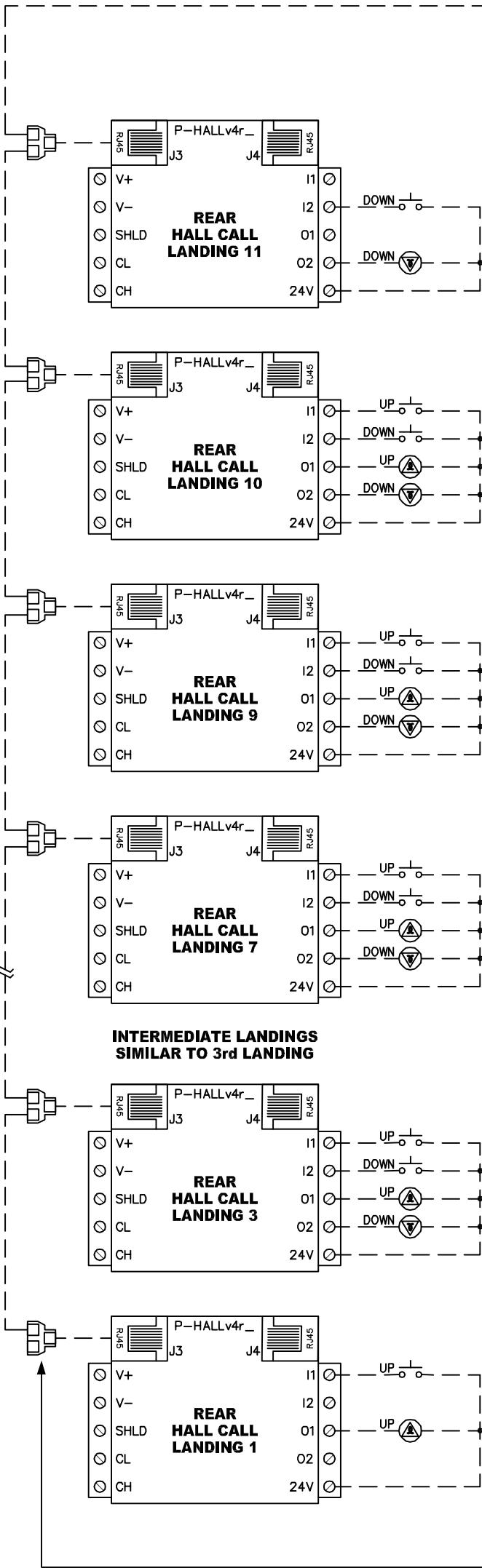
HALL NODE BOARD INSTALLATION INSTRUCTIONS:

- ALL SERIAL HALL FIXTURES MUST BE RATED 24VDC/0.5A MAX. PEAK/0.2A MAX. CONTINUOUS.
- ALL HALL CAN COMMUNICATION CABLES ARE CAT5e TERMINATED WITH RJ45 CONNECTOR AND WIRED TO 568-B STANDARDS
1. CONNECT THE HALL CALL FIXTURE TO THE P-HALL BOARD I/O AS SHOWN IN THE EXAMPLE ABOVE.
 2. CONFIGURE THE P-HALL BOARD DIP SWITCH SETTINGS FOR THE CORRESPONDING HALL CALL FIXTURE (P-HALL BOARD CONFIGURATION REFERENCE TABLE IS LOCATED ON PAGE QR4b).
 3. USE HALL CAN CABLES AND SPLITTERS TO INTERCONNECT THE P-HALL BOARDS AS SHOWN IN THE EXAMPLE ABOVE, THESE CABLES PROVIDE HALL CAN COMMUNICATION & POWER (24VDC/GND) TO EACH P-HALL BOARD.

P-HALL BOARD INTERCONNECTIONS			
JOB NAME: 211 WEST 14TH STREET NY PE1			
CUSTOMER: G-TECH ASSOCIATES, LLC.			
ENGINEERED BY: Jason Kirlis	DATE: 12/28/16	REVISION DATE:	
 ELEVATOR CONTROLS 6150 WAREHOUSE WAY SACRAMENTO, CA 95826 USA PHONE: (800) 829-8108 FAX: (916) 428-1728 www.elevatorcontrols.com		CONTROLLER MODEL: PIXEL AC-VECTOR-S	
		JOB NUMBER: 16-18651	
		CONTROLLER ID:	PAGE NUMBER:
		M_PIXEL-9.dwg FILE: J18651_9.dwg	03/26/16 SIMPLEX 9

RJ45 TERMINATION			PORT FRONT VIEW
PIN	WIRE COLOR		
1 (CAN1+)	WHITE/ORANGE		
2 (CAN1-)	ORANGE		
3 (V-)	WHITE/GREEN		
4 (N/C)	BLUE		
5 (N/C)	WHITE/BLUE		
6 (V-)	GREEN		
7 (V+)	WHITE/BROWN		
8 (V+)	BROWN		


STANDARD 568-B WIRING



ETHERNET CABLE SPLITTER

HALL NODE BOARD INSTALLATION INSTRUCTIONS:

- ALL SERIAL HALL FIXTURES MUST BE RATED 24VDC/0.5A MAX. PEAK/0.2A MAX. CONTINUOUS.
- ALL HALL CAN COMMUNICATION CABLES ARE CAT5e TERMINATED WITH RJ45 CONNECTOR AND WIRED TO 568-B STANDARDS
1. CONNECT THE HALL CALL FIXTURE TO THE P-HALL BOARD I/O AS SHOWN IN THE EXAMPLE ABOVE.
 2. CONFIGURE THE P-HALL BOARD DIP SWITCH SETTINGS FOR THE CORRESPONDING HALL CALL FIXTURE (P-HALL BOARD CONFIGURATION REFERENCE TABLE IS LOCATED ON PAGE QR4Rb).
 3. USE HALL CAN CABLES AND SPLITTERS TO INTERCONNECT THE P-HALL BOARDS AS SHOWN IN THE EXAMPLE ABOVE, THESE CABLES PROVIDE HALL CAN COMMUNICATION & POWER (24VDC/GND) TO EACH P-HALL BOARD.

P-HALL BOARD INTERCONNECTIONS			
JOB NAME: 211 WEST 14TH STREET NY PE1			
CUSTOMER: G-TECH ASSOCIATES, LLC.			
ENGINEERED BY: Jason Kirlis		DATE: 12/28/16	
 ELEVATOR CONTROLS 6150 WAREHOUSE WAY SACRAMENTO, CA 95826 USA PHONE: (800)829-8108 FAX: (916)428-1728 www.elevatorcontrols.com		REVISION DATE:	
		CONTROLLER MODEL: PIXEL AC-VECTOR-S	
		JOB NUMBER: 16-18651	
		CONTROLLER ID:	
		PAGE NUMBER:	
M_PIXEL-9.dwg		03/24/16	
FILE: J18651_9R.dwg		SIMPLEX 9R	

RELAY CONTACT COUNT

RELAY NAME:	RELAY DESCRIPTION:	RELAY TYPE:	COIL AREA:	RELAY POLE NUMBER.						
				1 NO NC	2 NO NC	3 NO NC	4 NO NC	5 NO NC	6 NO NC	
AA	MOTOR CONTACTOR	3	4	1	1	1	1	1	4	4
BH	BRAKE HOLD	32	4	2	2					
BK	BRAKE ENABLE	31	4	2	2			4		
BK2	BRAKE ENABLE #2	16	4	2	2					
DCR	DOOR CLOSE REAR	TOC 18	6R 6R							
DOR	DOOR OPEN REAR	TOC 18	6R 6R							
EB1	EMERGENCY BRAKE 1	32	3	2	2					
EB2	EMERGENCY BRAKE 2	32	3	2	2					
EBX1	EMERGENCY BRAKE AUX. 1	32	3	2	2					
EBX2	EMERGENCY BRAKE AUX. 2	32	3	2	2					
LTO	CAB LIGHT & FAN CONTROL	TOC 14	6c 6	6	6					
NDR	NUDDING REAR	TOC 18	6R 6R							
P	RUN ENABLE	31	4	2	2	4	4	4		
RUN	DRIVE ON SIGNAL	32	4	2	2					

PIXEL BOARD NAMES

NAME:	BOARD DESCRIPTION:	EC PART #
P-PDB	PIXEL POWER DISTRIBUTION BOARD	17-002-129
P-MP	PIXEL MAIN MICROPROCESSOR BOARD	17-002-123
P-MP-10	PIXEL MAIN MICROPROCESSOR I/O BOARD	17-002-124
P-TOC	PIXEL TOP OF CAR MICROPROCESSOR BOARD	17-002-121
P-COP	PIXEL CAR OPERATING PANEL MICROPROCESSOR BOARD	17-002-119
P-HALL	PIXEL HALL NODE BOARD	17-002-114
P-TB-M	PIXEL TERMINAL BOARD MACHINE ROOM CONNECTIONS	17-002-137
P-TB-C	PIXEL TERMINAL BOARD CARTOP CONNECTIONS	17-002-138
P-TB-H	PIXEL TERMINAL BOARD HOISTWAY CONNECTIONS	17-002-139
P-CNEX	PIXEL EXPANSION I/O BOARD CAN BUS	17-002-116
P-MP-RDOOR	PIXEL P-MP REAR DOOR I/O EXTENDER BOARD	17-002-128
P-HNA	PIXEL HALL NETWORK ADAPTER BOARD	17-002-135



NOTE: AA #4-#6 CONTACTS ARE AUXILIARY CONTACTS
P #5 CONTACT IS A AUXILIARY CONTACT



RELAY TYPES



#:	MANUFACTURER PART #:	EC PART #:
1	RUS4S-CD-110 4PDT 110VDC	04-001-001
2	TRN/D-0 311 2PDT 110VAC/DC	-
3	C-H XTCE095F00A	12-020-050A
4	RU4S-CA-110 4PDT 120VAC	04-001-005
5	PM17DY-110 4PDT 110VDC	04-002-001
6	PRD-11DHO-1102PDT 110VDC	04-002-002
7	KUP-14D35-1103PDT 110VDC	04-001-002
8	KUP-14A35-1203PDT 120VAC	04-001-006
9	PM17AY120 4PDT 120VAC	-
10	DS2-M-DC48 2PDT 48VDC	-
11	DS2-ML-DC48 2PDT 48VDC(L)	-
12	DS2-M-DC12 2PDT 12VDC	-
13	DS2-ML-DC12 2PDT 12VDC(L)	04-001-009
14	KUP-14D15-24 3PDT 24VDC	04-001-016
15	PT-570-512 4PDT 12VAC	04-001-014
16	PRD-11AHO-120 2PDT 120VAC	04-002-003
17	PT-570-048 4PDT 48VDC	04-001-015
18	PT-570-024 4PDT 24VDC	04-001-003
19	RU4S-A24 4PDT 24VAC	04-001-017
20	REVERSE PHASE RELAY	-
21	EHD8220C-1L 600V 220A 120VAC COIL	12-008-006A
22	KUP-14A35-240 3PDT 240VAC	04-001-008
23	CNS-35-92 TIMER 2PDT	04-005-002
24	EC-100-C TIMER	-
25	V23049-B1012-A122 4P 110VDC	-
26	V23050-A1110-A533 6P 110VDC	04-006-002
27	G5V2 DC48 2PDT	04-001-011
28	CA7-16C-01-110D CONTACTOR	-
29	PT-570-512 4PDT 12VAC	04-001-014
30	CA7-16-01 120VDC COIL	12-020-023
31	CA8-09-01-120 120VAC COIL	12-020-031
32	K10P-11A15-120 120VAC COIL 10A@277VAC	04-001-020
33	PRD-11AHO-240 2PDT 240VAC	04-002-005
34	G5V2 DC12 2PDT	04-001-010
35	-	-
36	-	-

SCHEMATIC SYMBOLS

STANDARD **FG (FORCE GUIDED)**

 - RELAY COIL - 

 - NORMALLY OPEN CONTACT - 

 - NORMALLY CLOSED CONTACT - 

(NUMBER INDICATES POLE AND FIXED CONTACT)

**TYPE KUP
POLE ASSIGNMENT
(EXT. SOCKET)**

Diagram of a 24-pin D-sub connector showing pin functions:

- OPEN:** Pins 1, 2, 3, 4 (all with circular symbols).
- CLOSED:** Pins 5, 6, 7, 8, 9, 10, 11, 12 (all with rectangular symbols).
- COIL COMMON:** Pins 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24 (all with circular symbols).

POLE ASSIGNMENT

A schematic diagram of a 3-position selector switch. The switch is shown in a cross-sectional view. It has three positions: 'CLOSED', 'OPEN', and 'COMMON'. The 'CLOSED' position is at the top, the 'OPEN' position is in the middle, and the 'COMMON' position is at the bottom. The switch is shown in the 'CLOSED' position. The diagram includes labels for the positions and the switch itself.

STANDARD

- RELAY COIL -
- NORMALLY OPEN CONTACT -
- NORMALLY CLOSED CONTACT -

(NUMBER INDICATES POLE AND FIXED CONTACT)

- _____ - EC INTERNAL CONTROLLER WIRING
- _____ - PC BOARD TRACE
- - FIELD WIRING (BY CUSTOMER)
- - HARNESS (IDC) TERMINAL
- - SCREW TERMINAL PCB MOUNTED
- ⊗----- - PANEL MOUNT SCREW TERMINAL
- HIGH POWER TERMINAL BLOCKS
- MP----- - MICROPROCESSOR OUTPUT
- SP1----- - SAFETY MICROPROCESSOR OUTPUT
- SP2----- - SAFETY F.P.G.A. OUTPUT
- - OUTPUT W/ REPLACEABLE TRANSISTOR
- MP----- - MICROPROCESSOR INPUT
- SP----- - SAFETY MICROPROCESSOR INPUT
- SPZ----- - SAFETY F.P.G.A. INPUT

- FUSE (DOT INDICATES TOP OF FUSE)

- RESISTOR

- RESISTOR WITH ADJUSTABLE TAP
(DOT INDICATES TOP OR LEFT AS INSTALLED)

- DIODE

- ZENER DIODE

- LED

- AC RATED CAPACITOR

- NON POLAR CAPACITOR

- POLAR CAPACITOR

- MOV (VOLTAGE TRANSIENT SUPPRESSOR)

- DIODE BRIDGE

- PC BOARD SLIDE JUMPER ON/OFF

OFF OR ON

----- JUMPED POSITION

- PC BOARD DIP SWITCH
(9 POSITION)
ON POSITION


- GROUND (EARTH GROUND)

- MECHANICAL OPERATED CAM SWITCH

- VANE SWITCH

- DRIVING MACHINE OPERATED SWITCH

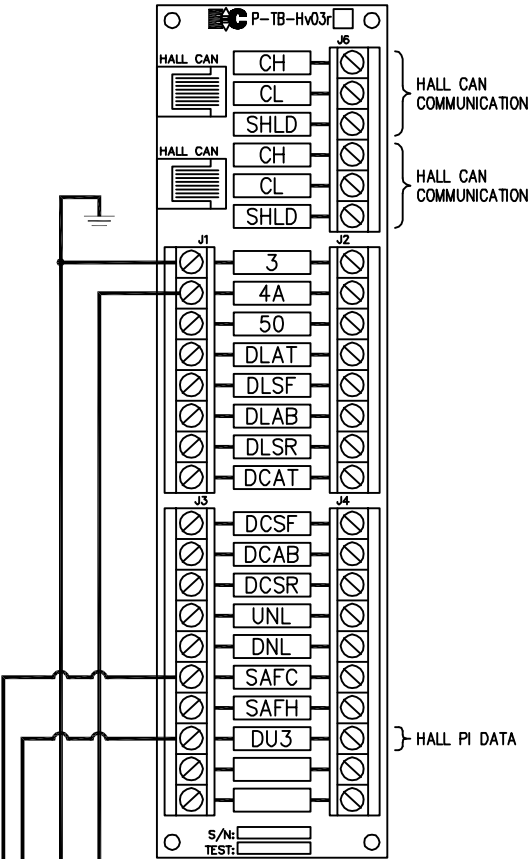
CONTACT COUNT & NOMENCLATURE	
JOB NAME:	211 WEST 14TH STREET NY PE1
CUSTOMER:	G-TECH ASSOCIATES, LLC.
ENGINEERED BY:	JASON KIRILIS
DATE:	12/28/16
REVISION DATE:	

 ELEVATOR CONTROLS		6150 WAREHOUSE WAY SACRAMENTO, CA 95826 USA PHONE: (900) 829-8106 FAX: (916) 226-1728 www.elevatorcontrols.com	
M. PIXEL: 10-dmg L. PIXEL: 10-dmg		10/06/76	

CONTROLER MODEL: PIXEL AC-VECTOR-S	
JOB NUMBER: 16-18651	PAGE NUMBER: 10
CONTROLER ID: SIMPLEX	10

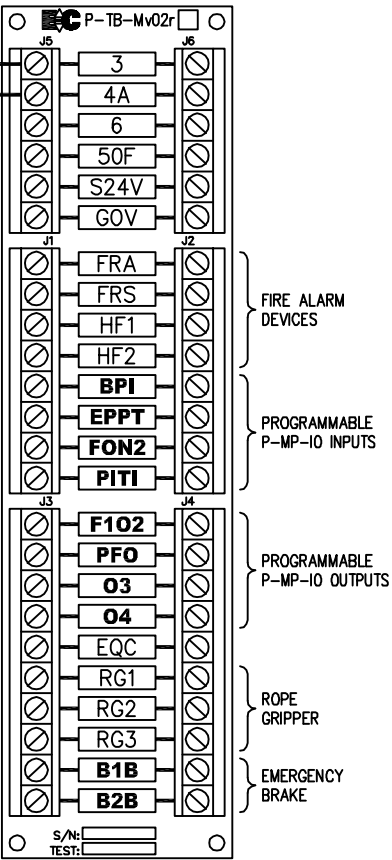
HOISTWAY TERMINALS

(1) 17-002-139v03 PIXEL TERMINAL BLOCK BOARD - HOISTWAY (P-TB-H)



MACHINE ROOM TERMINALS

(1) 17-002-137v02 PIXEL TERMINAL BLOCK BOARD - MACHINE ROOM (P-TB-M)
(3) 10-203-005 BEIGE PANEL MOUNT TERMINAL BLOCKS



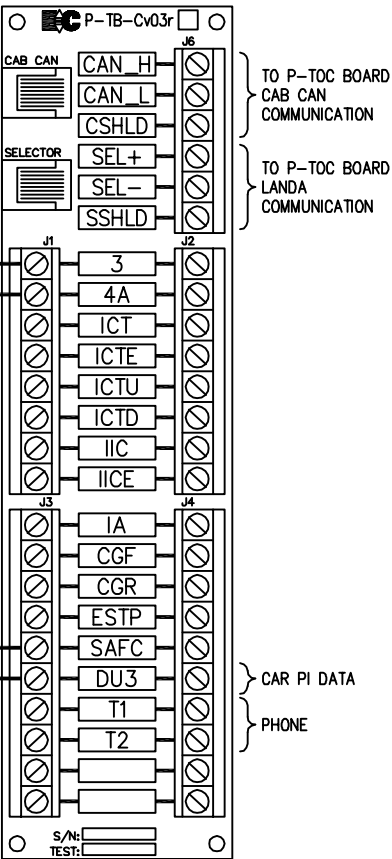
PANEL MOUNT TERMINALS
BELOW P-TB-M BOARD

B1			B1	
B2			B2	
GVT			GVT	

MAIN BRAKE
GOVERNOR SHEAVE TENSION

CARTOP TERMINALS FOR TRAVELER CABLE

(1) 17-002-138v03 PIXEL TERMINAL BLOCK BOARD - CARTOP (P-TB-C)
(11) 10-203-005 BEIGE PANEL MOUNT TERMINAL BLOCKS



PANEL MOUNT TERMINALS
BELOW P-TB-C BOARD

TOC1			TOC1	
TOC2			TOC2	
WHT			WHT	
BLK			BLK	
GRN			GRN	
21A			21A	
21B			21B	
21C			21C	
21D			21D	
22			22	

TOC POWER
CAB POWER (115VAC)

RESISTOR BOX TERMINALS IN MAIN CONTROLLER

(4) 10-203-005 BEIGE PANEL MOUNT TERMINAL BLOCKS
(2) 10-201-012 POWER TERMINAL BLOCK 600V 175A 2 POLE

RBP1			RBP1	
RBP2			RBP2	
FN1			FN1	
FN2			FN2	

DB1
DB2
DB3
DB4

TERMINALS IN MAIN CONTROLLER

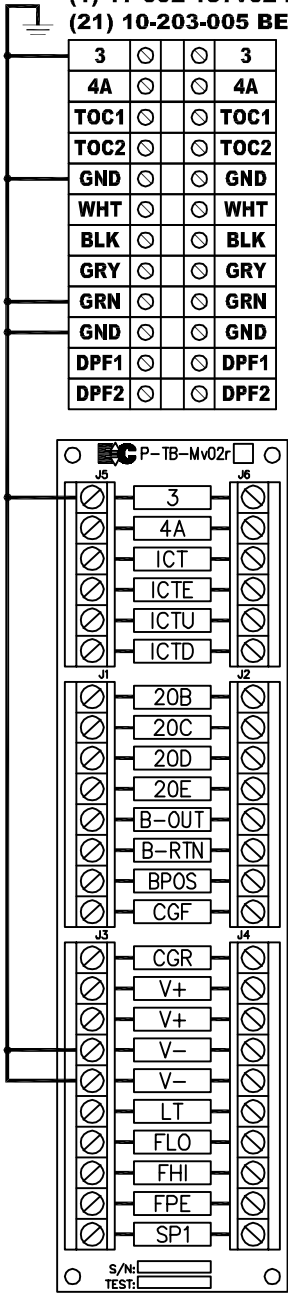
(0) 10-203-005 BEIGE PANEL MOUNT TERMINAL BLOCKS

TOC (TOP OF CAR) BOX TERMINALS

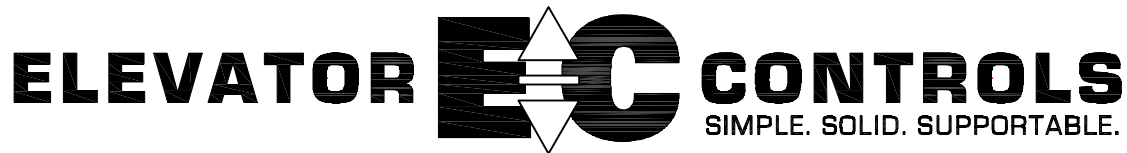
(1) 17-002-137v02 PIXEL TERMINAL BLOCK BOARD (P-TB-M)
(21) 10-203-005 BEIGE PANEL MOUNT TERMINAL BLOCKS

3			3	
4A			4A	
TOC1			TOC1	
TOC2			TOC2	
GND			GND	
WHT			WHT	
BLK			BLK	
GRY			GRY	
GRN			GRN	
GND			GND	
DPF1			DPF1	
DPF2			DPF2	

DPR1
DPR2
DCR
DOR
NDR
DBCR
DOBR
CR3L
CR3B



PIXEL CONTROLLER TERMINAL LABELS & ORDER			
JOB NAME: 211 WEST 14TH STREET NY PE1			
CUSTOMER: G-TECH ASSOCIATES, LLC.			
ENGINEERED BY: Jason Kirlis	DATE: 12/28/16	REVISION DATE:	
		CONTROLLER MODEL: PIXEL AC-VECTOR-S	
6150 WAREHOUSE WAY SACRAMENTO, CA 95826 USA PHONE: (800) 829-8106 FAX: (916) 428-1728 www.elevatorcontrols.com		JOB NUMBER: 16-18651	
M_PIXEL-TS.dwg FILE: J18651_TS.dwg		03/24/16	CONTROLLER ID: SIMPLEX
			PAGE NUMBER: TS



LIMITED PRODUCT WARRANTY

Before attempting to install Elevator Controls products, please read and familiarize yourself with the respective manuals.

Elevator Controls warrants its products to be free from defects in materials and workmanship for a period of **15 months** from the date of shipment by **Elevator Controls**. Any defect appearing more than **15 months** from the date of shipment by **Elevator Controls** shall be deemed to be due to ordinary wear and tear. **Elevator Controls** assumes no risk or liability for results of the use of products purchased from it, including but without limiting the generality of foregoing: (1) the use in combination with any electrical or electronic components, circuits, systems assemblies or any other materials or substances; (2) unsuitability of any product for use in any circuit or assembly or environment.

Satisfaction of this warranty, consistent with other provision herein, shall be limited to, at the sole discretion of **Elevator Controls**, repair, replacement, or modification of the product, free of charge, F.O.B. factory. This warranty applies to any product which is received at the factory within said **15 months** and which, upon examination by **Elevator Controls**, is determined to have a defect which has not been caused by misuse, neglect, improper installation, improper application, improper operation, improper maintenance, repair or alteration, accident, or unusual deterioration or degradation of the equipment or parts thereof due to physical environment or due to electrical or electromagnetic environment.

Should purchaser experience trouble or difficulty with any product of **Elevator Controls** and request engineering assistance either by telephone or a field visit or visits by a representative of **Elevator Controls**, **Elevator Controls** may, at its sole discretion, provide said assistance.

Should, in the opinion of **Elevator Controls**, the trouble or difficulty be a warranty problem as herein described, **Elevator Controls** will absorb all travel, labor, and expense costs involved.

Should in the opinion of **Elevator Controls**, the trouble or difficulty be a result of any other reason than the warranty described herein, the purchaser will be charged for the travel, labor, and expense costs by **Elevator Controls**, for providing engineering assistance, whether it be by telephone, correspondence, or field visit or visits by a representative of **Elevator Controls**. A schedule of fees is available on request for engineering services by **Elevator Controls**.

The giving of or failure to give any advice or recommendation by **Elevator Controls** shall not constitute any warranty by or impose any liability upon **Elevator Controls**. This warranty constitutes the sole and exclusive remedy of the purchaser and the exclusive liability of the manufacturer, AND IS IN LIEU OF ANY AND ALL OTHER WARRANTIES, EXPRESS, IMPLIED, OR STATUTORY AS TO MERCHANTABILITY, FITNESS FOR PURPOSE SOLD, DESCRIPTION, QUALITY, PRODUCTIVITY, OR ANY OTHER MATTERS. In no event shall **Elevator Controls** be liable for special or consequential damages or for delay in performance of this warranty.