

SIMPLE. SOLID. SUPPORTABLE.

E-MAIL: technical.support@elevatorcontrols.com

M_PIXEL-CVR.DWG 03/24/16

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):

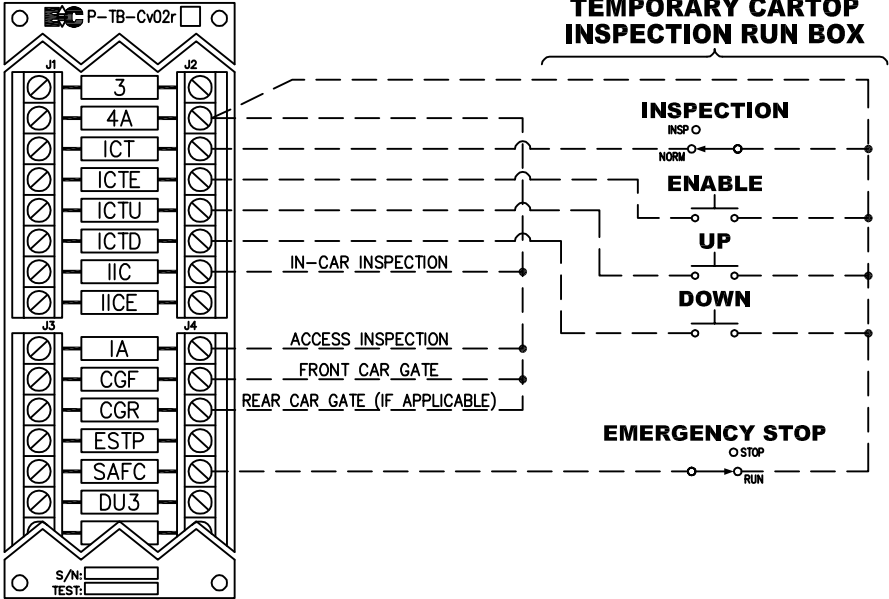
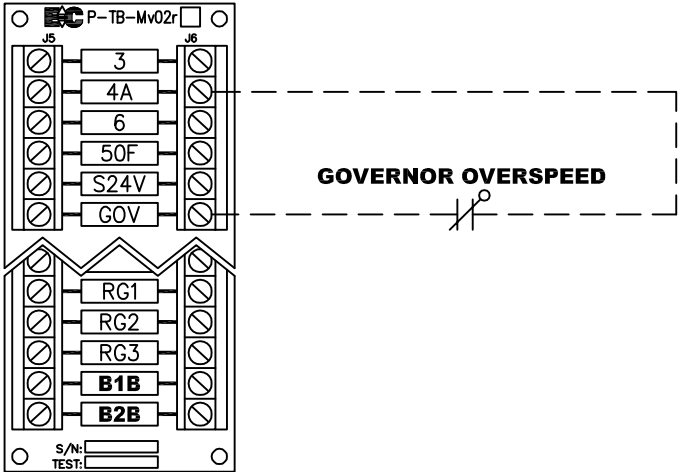
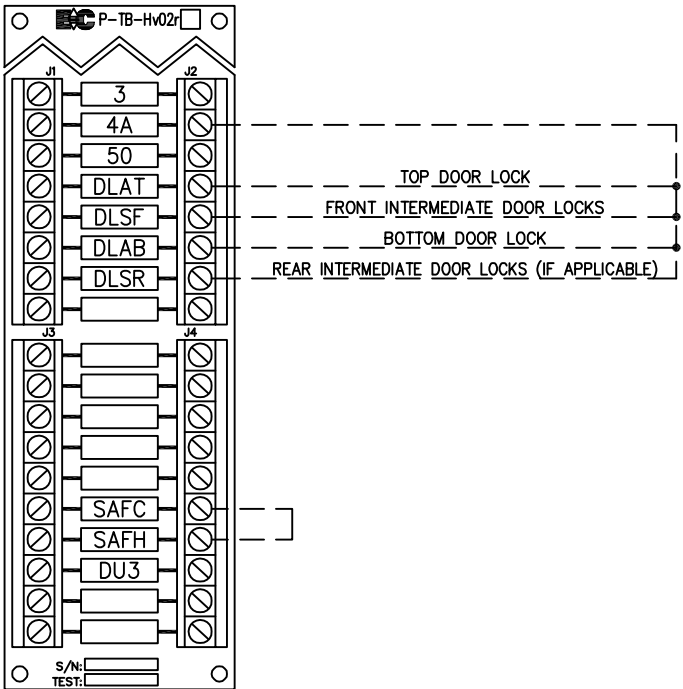
- A. TAPE READER OFFSET: INSTALL>LEARN FUNCTIONS>VIRTUAL LIMITS>TAPE READER OFFSET, THEN LEARN>SAVE
- B. FLOOR LANDING DOOR ZONES: INSTALL>LEARN FUNCTIONS>FLOOR SETUP>LANDING NUMBER, THEN DOOR ZONE POSTION>LEARN>SAVE
NOTE: ALWAYS LEARN THE BOTTOM LANDING DOOR ZONE FIRST. THIS NORMALIZES THE HOISTWAY 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"

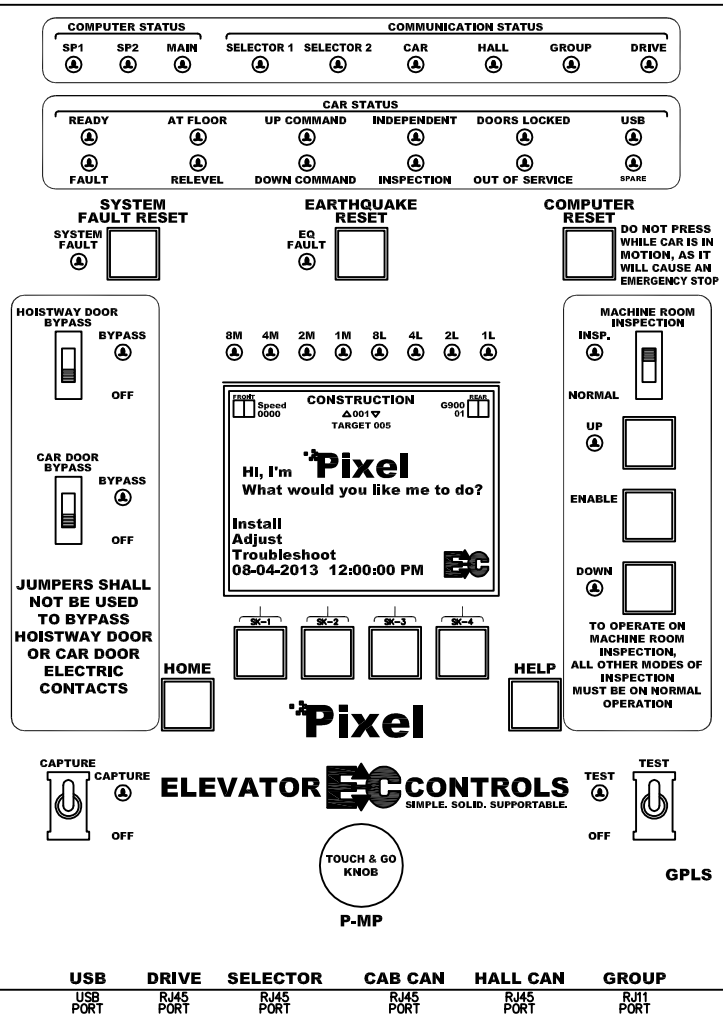
9 PIXEL HOISTWAY TERMINAL SLOWDOWN SETUP (REFER TO PIXEL MANUAL FOR DETAILS):

- 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

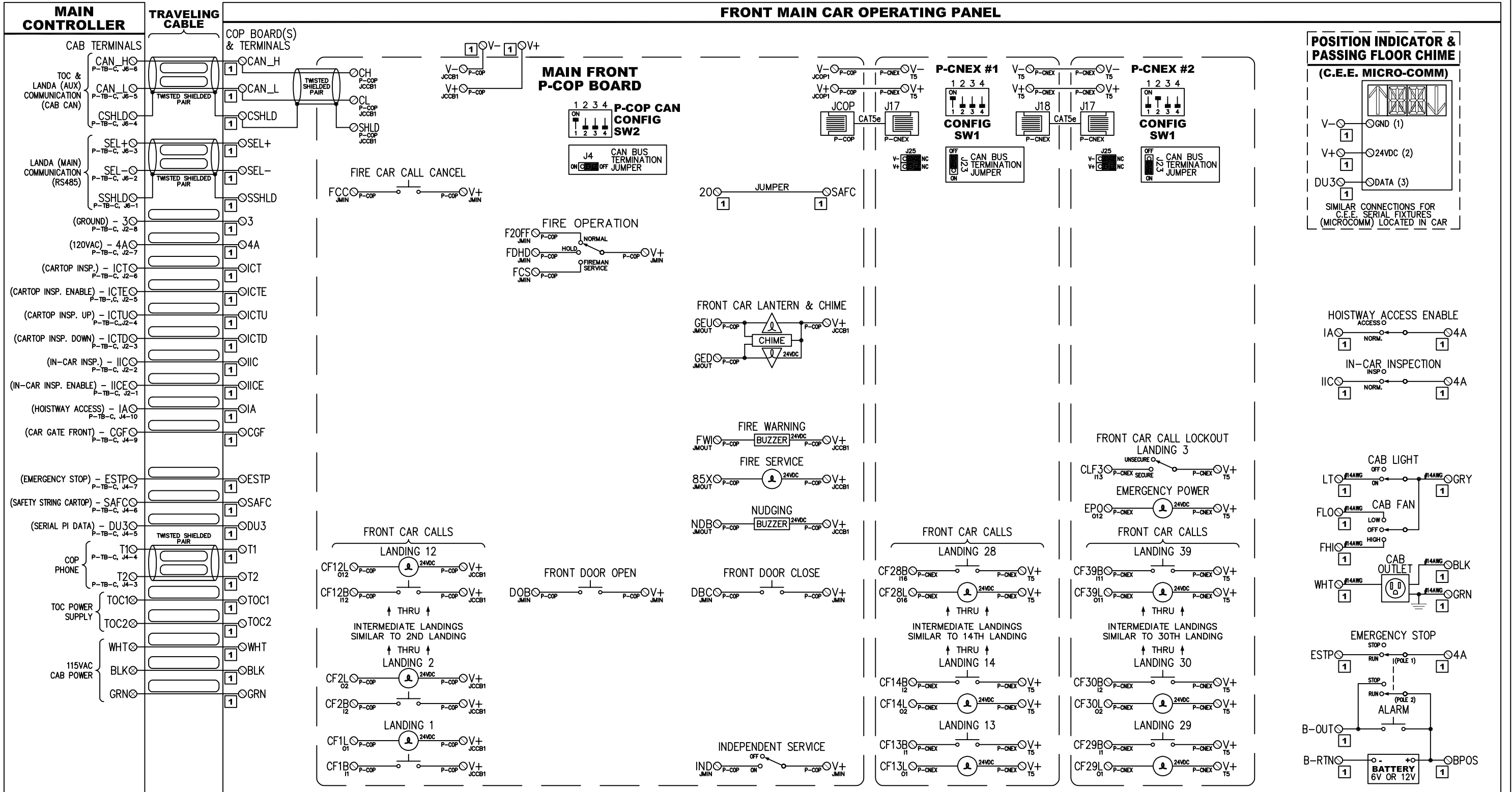


P-MP BOARD SWITCH GEAR NOTES:

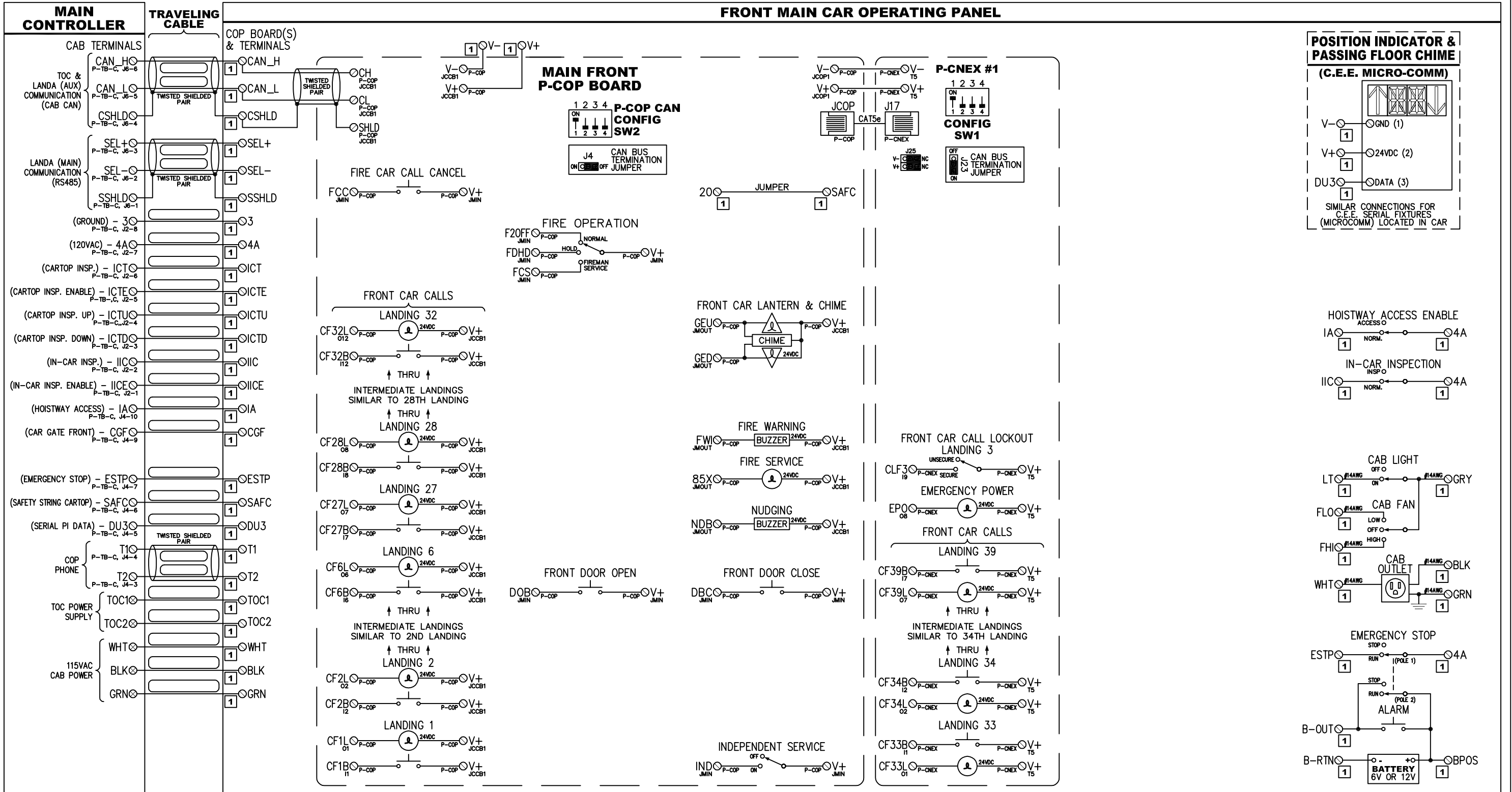
- MACHINE ROOM INSPECTION DIRECTIONAL CONTROL REQUIRES UP OR DOWN AND THE ENABLE BUTTON TO BE PUSHED SIMULTANEOUSLY
- CAPTURE SWITCH: DISABLES HALL CALL OPERATION TO COMMANDEER FOR FOR TEST MODE
- TEST SWITCH: DISABLES DOOR & HALL CALL OPERATION FOR TESTING
- HOISTWAY DOOR BYPASS SWITCH: BYPASSES HOISTWAY 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:			
215 PEARL STREET (R1 & R2)			
CUSTOMER:			
G-TECH ASSOCIATES, LLC.			
ENGINEERED BY:	DATE:	REVISION DATE:	
Jason Kirlis	07/14/17		
		CONTROLLER MODEL:	
		PIXEL AC VECTOR-GL-L2	
6150 WAREHOUSE WAY SACRAMENTO, CA 95826 USA PHONE: (800)829-8106 FAX: (916)428-1728 www.elevatorcontrols.com		JOB NUMBER:	
M_PIXEL-QR1.dwg FILE: J19017_QR1.dwg		17-19017	
		CONTROLLER ID:	
		A & B	
		PAGE NUMBER:	
		QR1	



1 TERMINAL PROVIDED BY COP MANUFACTURER OR CUSTOMER



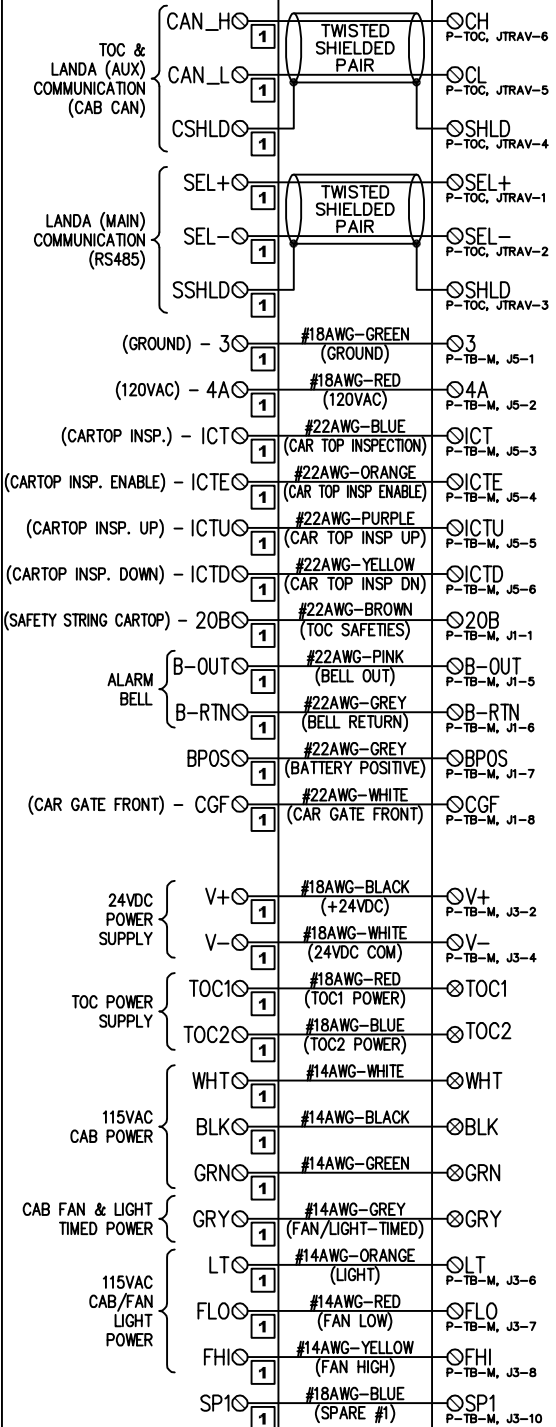
1 TERMINAL PROVIDED BY COP MANUFACTURER OR CUSTOMER

TOC BOX WIRING (TOP OF CAR)

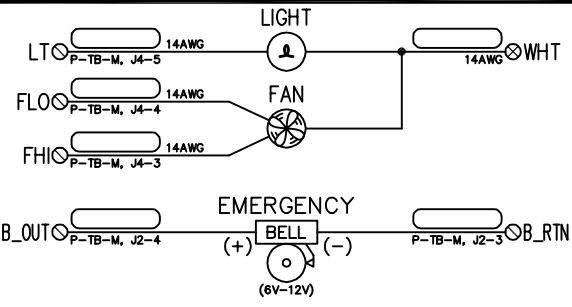
FRONT COP PANEL

FRONT COP TO TOC HARNESS

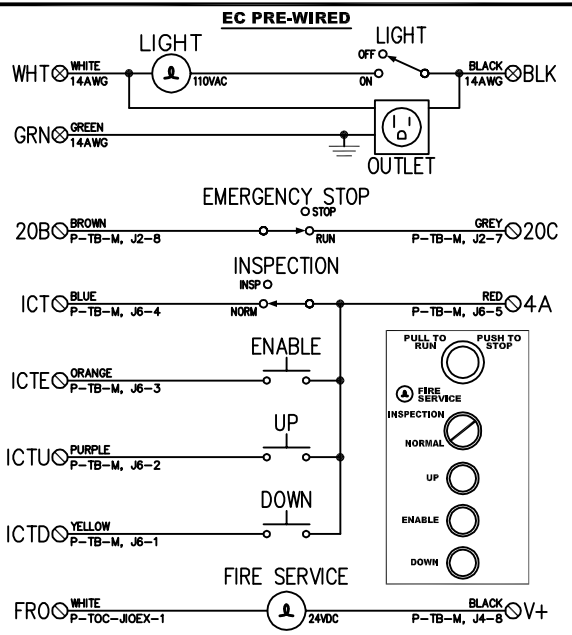
P-TOC BOARD & TERMINALS



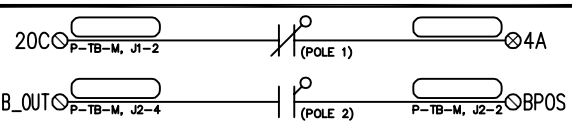
CAB FAN & LIGHT AND EMERGENCY BELL



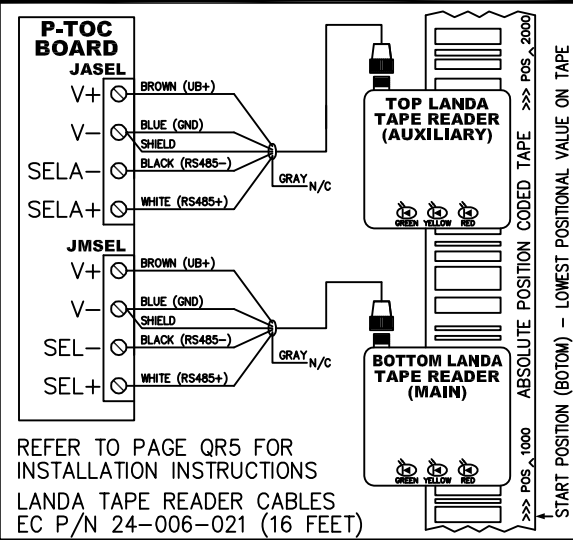
TOC CARTOP INSPECTION STATION



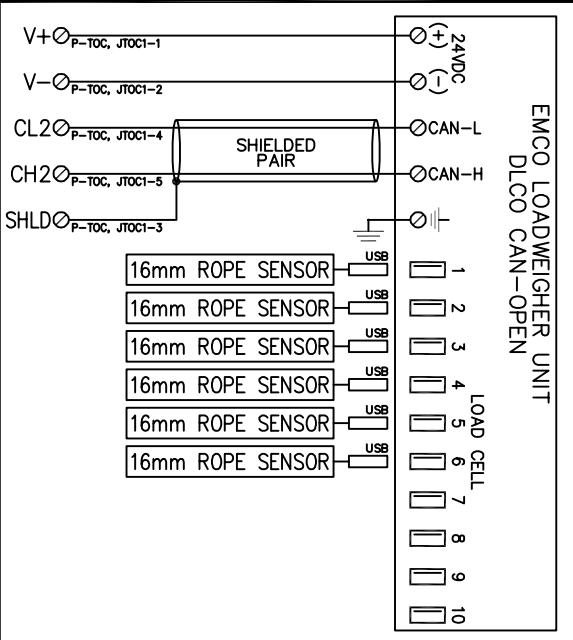
EMERGENCY EXIT



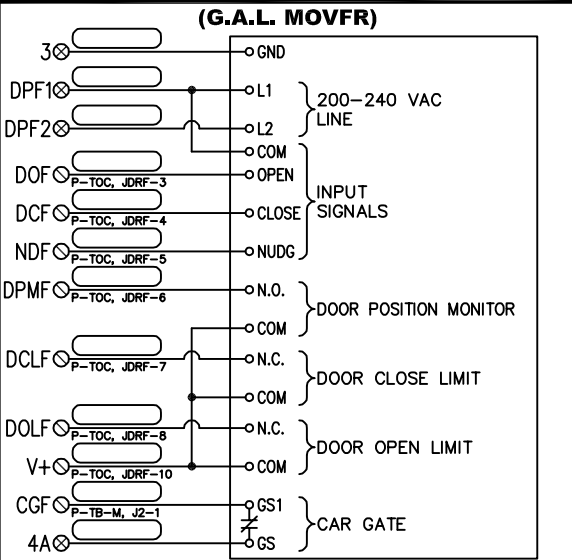
LANDA POSITION SYSTEM



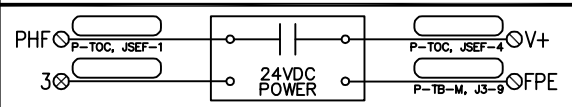
LOAD WEIGHER INTERFACE



FRONT DOOR OPERATOR



FRONT INFRARED DETECTOR



NOTE: REFER TO PAGE QR6 FOR TOC BOX MOUNTING INSTRUCTIONS

1 TERMINAL PROVIDED BY COP MANUFACTURER OR CUSTOMER

PIXEL INSTALLATION: TOC WIRING DIAGRAMS

JOB NAME: 215 PEARL STREET (R1 & R2)

CUSTOMER: G-TECH ASSOCIATES, LLC.

ENGINEERED BY: Jason Kirlis DATE: 07/14/17 REVISION DATE:

CONTROLLER MODEL: PIXEL AC VECTOR-GL-L2

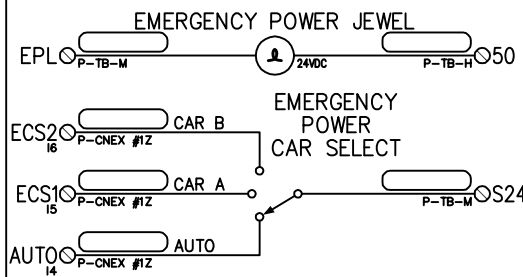
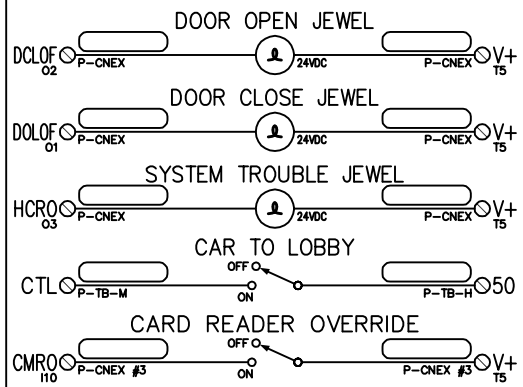
JOB NUMBER: 17-19017

CONTROLLER ID: A & B PAGE NUMBER: QR3

6150 WAREHOUSE WAY
SACRAMENTO, CA 95826 USA
PHONE: (800)829-8106 FAX: (916)428-1728
www.elevatorcontrols.com

M_PIXEL-QR3.dwg 05/14/15
FILE: J19017_QR3.dwg

3Ω P-TB-H — 01 (COM)
 50Ω P-TB-H — 02 (V+)
 DU3 P-TB-H — 03 (DATA)



EMERGENCY POWER PHASE 2

EP2_{O3} P-CNEX #1Z 24VDC P-TB-M S24

EMERGENCY POWER PHASE 1

EP1_{O2} P-CNEX #1Z 24VDC P-TB-M S24

EMERGENCY POWER

EP1_{I1} P-CNEX #1Z P-TB-M S24

(OPEN FOR NORMAL POWER &
CLOSED FOR EMERGENCY POWER)

PRE-TRANSFER

EPTC P-TB-M S24

(CLOSE 5-10 SECONDS PRIOR TO TRANSFERRING
FROM EMERGENCY TO NORMAL POWER)

RECALL COMPLETE

E1C_O P-TB-M 24VDC P-TB-H S50

FRONT TOP

DLATO 4A

FRONT INTERMEDIATE

DLSF 4A

FRONT BOTTOM

DLABO 4A

GOV 4A

GVT | P-TB-M S2
(CONTACT CLOSURES WHEN TENSION SHEAVE MALFUNCTIONS)

22 ⊗ ⊗ SAH
(OPEN 6" ABOVE FLOOR) P-TB-H

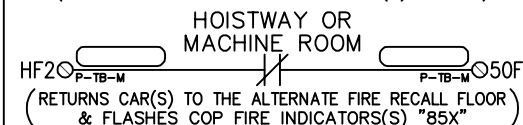
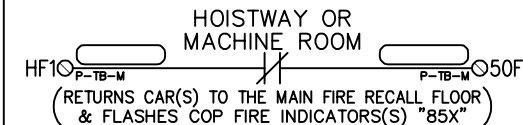
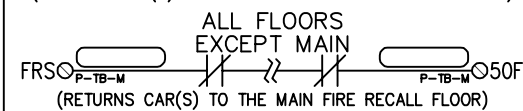
21D ⊗ 22
(OPEN 6" BELOW FLOOR)

21C ⊗ ⊗ 21D

21B ⊗ _____ / ○ _____ ⊗ 21C

21A ⊗ | ⊗ 21E

SAFH0 P-TB-H
○
○ STOP
 RUN ⊗ 21A



3 —o1 (COM)
 50 —o2 (V+)
 DU3 —o3 (DATA)

SIMILAR CONNECTIONS FOR C.E.E. SERIAL FIXTURES
(MICROCOMM) LOCATED IN THE HALL

BLDG. LDG.	FLOOR LABEL	(ELEV. #R1)	
		F	R
39	39	X	
38	38	X	
37	37	X	
36	36	X	
35	35	X	
34	34	X	
33	33	X	
32	32	X	
31	31	X	
30	30	X	
29	29	X	
28	28	X	
27	27	X	
26	26	X	

↑		THRU		↑
14	14	X		
13	12	X		
↑		THRU		↑
7	6	X		
6	5	X		
5	4	X		
4	3	X		
3	2	X		
*2	L	X		
1	C	X		
SPEED:		500fpm		
CAPACITY:		2,000lbs		

[illegible]

39 #18 AWG

0 #14 AWG

SHIELED PAIR

**10% SPARE WIRES
IS RECOMMENDED**

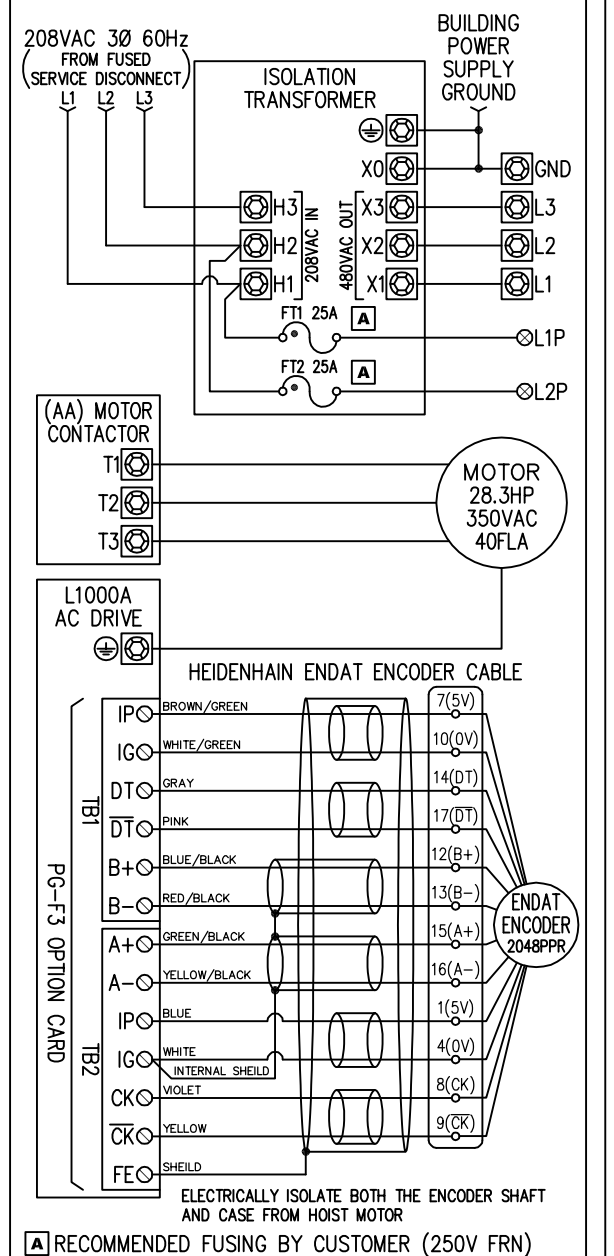
1 TERMINAL IS NOT PROVIDED IN CONTROLLER. REFERENCE POINT ONLY.

Diagram illustrating the wiring for the brake system:

- The top circuit includes a **COIL** (B2) and a **CONTACT** (B1).
- The bottom circuit includes a **COIL** (BPI) and a **CONTACT** (BPI).
- A note indicates: **(CONTACT CLOSING WHEN BRAKE IS PICKED)**.

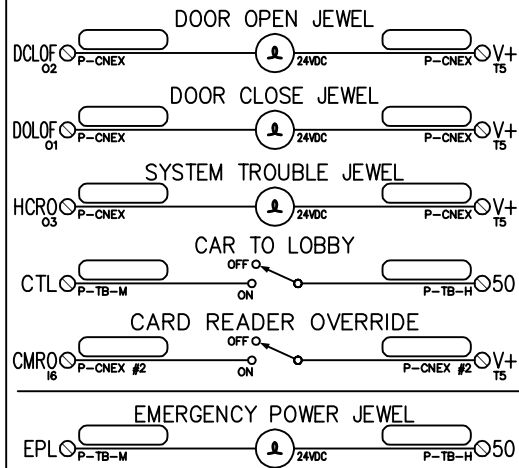
[illegible]

NOTES:
CONDUCTORS MUST HAVE AN AMPACITY RATING
IN ACCORDANCE WITH TABLE 310.16 (COPPER/75°C)
OF THE NATIONAL ELECTRICAL CODE
DO NOT ROUTE INCOMING CONTROLLER POWER
OR MOTOR WIRES NEAR PRINTED CIRCUIT BOARDS
REFER TO HOIST MOTOR DATA PLATE &
MANUAL FOR PROPER MOTOR LEAD WIRING.



PIXEL INSTALLATION: HOISTWAY & MACHINE ROOM WIRING DIAGRAMS			
JOB NAME:			
215 PEARL STREET (R1 & R2)			
CUSTOMER:			
G-TECH ASSOCIATES, LLC.			
ENGINEERED BY:		DATE:	
Jason Kirlis		07/14/17	
		REVISION DATE:	
		11/06/2017 JPK	
6150 WAREHOUSE WAY SACRAMENTO CA 95836 USA PHONE (916)822-8106 FAX (916)828-1728 www.elevatorcontrols.com		CONTROLLER MODEL:	
		PIXEL AC VECTOR-GL-L2	
		JOB NUMBER: 17-19017	
M. PIXEL-OR4.dwg		10/25/16	
FILE: J19017-A.ORA-M1.dwg			
CONTROLLER ID:		PAGE NUMBER:	
A		QR4	

3Ω P-TB-H ○1 (COM)
 50Ω P-TB-H ○2 (V+)
 DU3 P-TB-H ○3 (DATA)



E1C 24VDC 50

CAR B	RJ45 CABLE	CAR A
GPLS □		□ J2
P-TB-M		P-TB-M
30		30
P-TB-M		P-TB-M
50F ○		○ 50F
P-TB-M		P-TB-M
S24V ○		○ S24V
P-TB-M		P-TB-M
FRA ○		○ FRA
P-TB-M		P-TB-M
FRS ○		○ FRS
P-TB-M		P-TB-M
HF1 ○		○ HF1
P-TB-M		P-TB-M
HF2 ○		○ HF2
P-TB-M		P-TB-M
EPTC ⊗		⊗ EPTC

GROUPLESS COMMUNICATION CABLES		
CAR(S)	EC P/N:	PART DESCRIPTION:
B	19-001-023-X	COM CABLE: 25 FEET

FRONT TOP

DLAT P-TB-H P-TB-H 4A

FRONT INTERMEDIATE

DLSF P-TB-H P-TB-H 4A

FRONT BOTTOM

DLAB P-TB-H P-TB-H 4A

GOV P-TB-M 4A

GVT P-TB-M S2
(CONTACT CLOSING WHEN TENSION SHEAVE MALFUNCTIONS)

22 ⊗ ⊗ SA _{P-TB-H}
(OPEN 6 " ABOVE FLOOR)

21D ⊗ ⊗ 22
(OPEN 6 " BELOW FLOOR)

21C 21D

21B 21C

21A ⊗ ⊗ 21B

SAFHO P-TB-H STOP RUN 21A

30 P-TB-H — 01 (COM)
50 P-TB-H — 02 (V+)
DU30 P-TB-H — 03 (DATA)

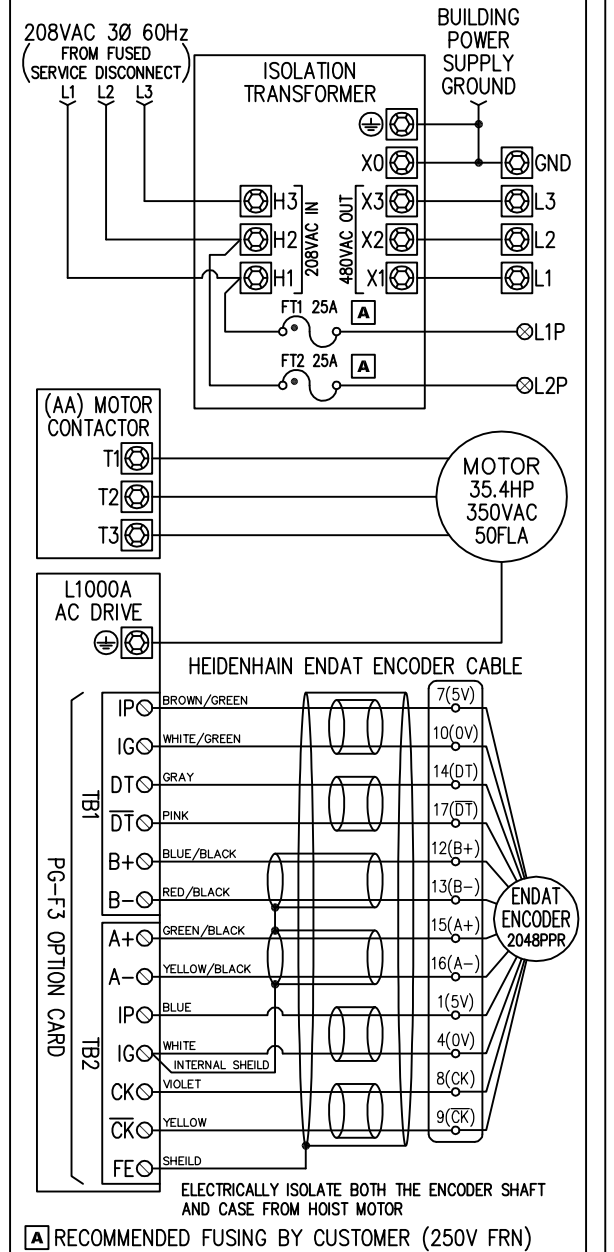
SIMILAR CONNECTIONS FOR C.E.E. SERIAL FIXTURES
(MICROCOMM) LOCATED IN THE HALL

Diagram illustrating the wiring for the BRAKE COIL and BRAKE CONTACT:

- BRAKE COIL:** Connected between terminals B2B (P-TB-M) and B1B (P-TB-M).
- BRAKE CONTACT:** Connected between terminals BPIX (P-TB-H) and 50 (P-TB-H).
- Label:** (CONTACT CLOSING WHEN BRAKE IS PICKED)

[illegible]

NOTES:
CONDUCTORS MUST HAVE AN AMPACITY RATING
IN ACCORDANCE WITH TABLE 310.16 (COPPER/75°C)
OF THE NATIONAL ELECTRICAL CODE
DO NOT ROUTE INCOMING CONTROLLER POWER
OR MOTOR WIRES NEAR PRINTED CIRCUIT BOARDS
REFER TO HOIST MOTOR DATA PLATE &
MANUAL FOR PROPER MOTOR LEAD WIRING.



FLOOR OPENINGS			
BLDG. LDG.	FLOOR LABEL	(ELEV. #R2)	
		F	R
39	39	X	
38	38	X	
37	37	X	
36	36	X	
35	35	X	
34	34	X	
33	33	X	
32	32	X	
31	31	X	
30	30	X	
29	29	X	
28	28	X	
27	27	X	
26	26		
↑		THRU	
7	6		
6	5	X	
5	4	X	
4	3	X	
3	2	X	
*2	L	X	
1	C	X	
SPEED:		700fpm	
CAPACITY:		2,500lbs	

3	4A						50	
SAFH	21A	21B	21C	21D	22		SAFC	GVT
							E1C	V+
						DOLOF	DCLOF	HCR0
DLAT	DLSF	DLAB				EPL	CMRO	

23 #18 AWG

0 #14 AWG

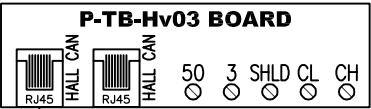
SHIELED PAIR

1 CAT5e CABLE
10% SPARE WIRES
IS RECOMMENDED

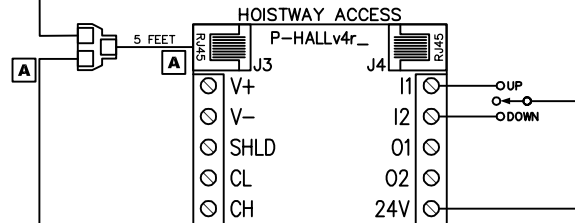
1 TERMINAL IS NOT PROVIDED IN CONTROLLER. REFERENCE POINT ONLY.

PIXEL INSTALLATION: HOISTWAY & MACHINE ROOM WIRING DIAGRAMS			
JOB NAME:			
215 PEARL STREET (R1 & R2)			
CUSTOMER:			
G-TECH ASSOCIATES, LLC.			
ENGINEERED BY:		DATE:	
Jason Kirlis		07/14/17	
 ELEVATOR CONTROLS		REVISION DATE:	
		11/06/2017 JPK	
6150 WAREHOUSE WAY SACRAMENTO CA 95816 USA PHONE (916)822-8106 FAX (916)828-1728 www.elevatorcontrols.com		CONTROLLER MODEL:	
		PIXEL AC VECTOR-GL-L2	
		JOB NUMBER:	
		17-19017	
M. PIXEL-OR4.dwg		10/25/16	
FILE: J19017-B, OR4-M.dwg			
		CONTROLLER ID:	
		PAGE NUMBER:	
		B	
		QR4	

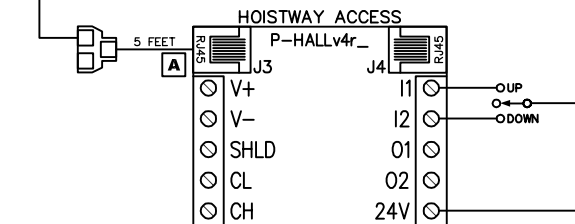
TYPICAL P-HALL BOARD INTERCONNECTIONS



- 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.



440 FEET

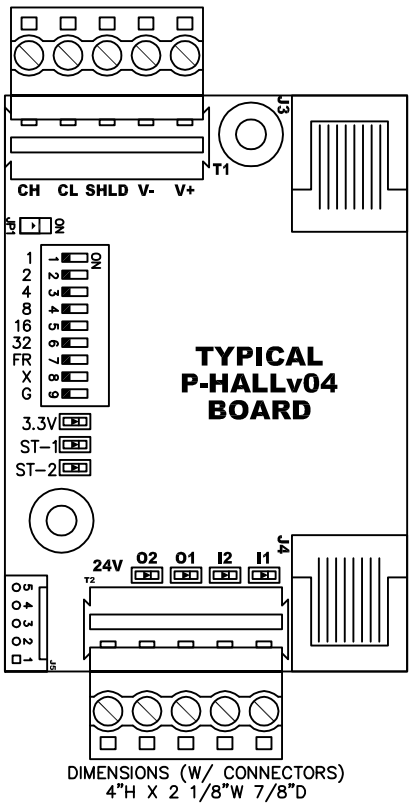


QTY:	EC P/N:	PART DESCRIPTION:
2	17-002-114v04	P-HALLv04 BOARD
2	10-008-009	RJ45 SPLITTER
0	19-001-023-06in	CAN CABLE: 6 INCH
2	19-001-023-05ft	CAN CABLE: 5 FEET
0	19-001-023-07ft	CAN CABLE: 7 FEET
0	19-001-023-14ft	CAN CABLE: 14 FEET
0	19-001-023-25ft	CAN CABLE: 25 FEET
1	19-001-023-X	CAN CABLE: 50 FEET
1	19-001-023-X	CAN CABLE: 440 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.

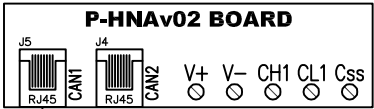
DIP SWITCHES (1) THRU (32) LANDING ADDRESS SELECTION										DIP SWITCHES (FR), (X) & (G) FUNCTION SELECTION						DIP SWITCHES (1) thru (G) FUNCTION SELECTION											
LANDING NUMBER		JP1 IS OFF		FLOOR DESIGNATION						FRONT HALL CALL		FRONT HOSPITAL CALL		FRONT HALL LANTERN		LANDING NUMBER		MISCELLANEOUS FUNCTIONS		JP1 IS ON		FUNCTION SETTINGS					
																24		HOISTWAY ACCESS TOP									
																1		HOISTWAY ACCESS BOTTOM									



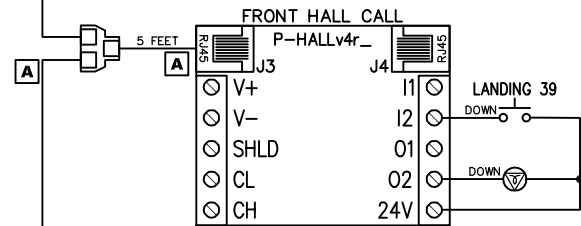
FRONT P-HALL HOISTWAY WIRING DIAGRAMS

JOB NAME: 215 PEARL STREET (R1 & R2)			
CUSTOMER: G-TECH ASSOCIATES, LLC.			
ENGINEERED BY: Jason Kirlis	DATE: 07/14/17	REVISION DATE:	
 6150 WAREHOUSE WAY SACRAMENTO, CA 95826 USA PHONE: (800)829-8106 FAX: (916)428-1728 www.elevatorcontrols.com		CONTROLLER MODEL: PIXEL AC VECTOR-GL-L2	
		JOB NUMBER: 17-19017	
		CONTROLLER ID: A & B	
		PAGE NUMBER: QR4b	
FILE: J19017_QR4b.dwg 11/14/16			

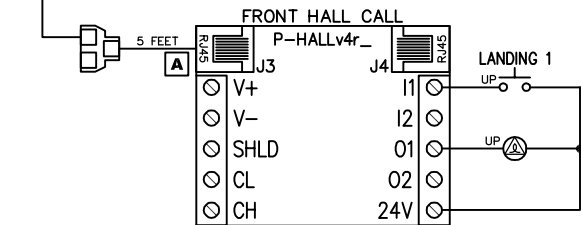
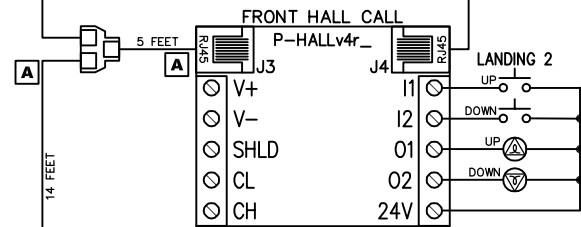
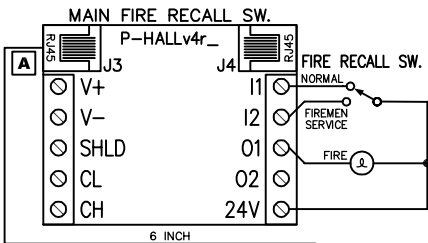
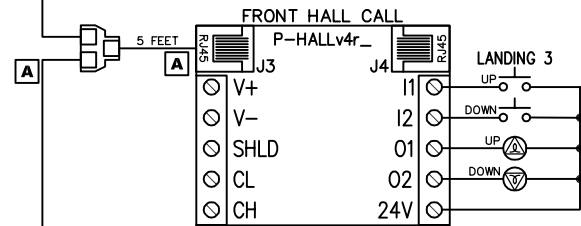
TYPICAL P-HALL BOARD INTERCONNECTIONS



- 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 3rd LANDING



QTY:	EC P/N:	PART DESCRIPTION:
40	17-002-114v04	P-HALLv04 BOARD
39	10-008-009	RJ45 SPLITTER
1	19-001-023-06in	CAN CABLE: 6 INCH
39	19-001-023-05ft	CAN CABLE: 5 FEET
0	19-001-023-07ft	CAN CABLE: 7 FEET
30	19-001-023-14ft	CAN CABLE: 14 FEET
8	19-001-023-25ft	CAN CABLE: 25 FEET
1	19-001-023-X	CAN CABLE: 50 FEET

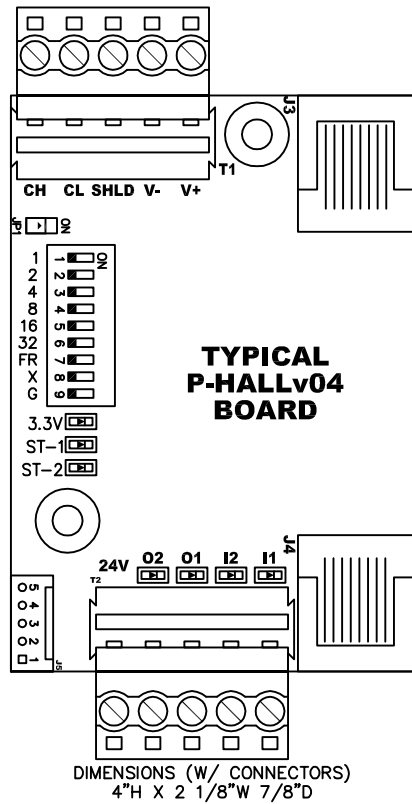
P-HALL BOARD CONFIGURATION TABLE

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			HALL CALL		HOSPITAL CALL		LANDING NUMBER	MISCELLANEOUS FUNCTIONS
	JP1	1	2	4	8	16	32	FR X G	2	MAIN FIRE RECALL

19	JP1	1	2	4	8	16	32	FR X G
18	JP1	1	2	4	8	16	32	FR X G
17	JP1	1	2	4	8	16	32	FR X G
16	JP1	1	2	4	8	16	32	FR X G
15	JP1	1	2	4	8	16	32	FR X G
14	JP1	1	2	4	8	16	32	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
3	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

38	JP1	1	2	4	8	16	32	FR X G
37	JP1	1	2	4	8	16	32	FR X G
36	JP1	1	2	4	8	16	32	FR X G
35	JP1	1	2	4	8	16	32	FR X G
34	JP1	1	2	4	8	16	32	FR X G
33	JP1	1	2	4	8	16	32	FR X G
32	JP1	1	2	4	8	16	32	FR X G
31	JP1	1	2	4	8	16	32	FR X G
30	JP1	1	2	4	8	16	32	FR X G
29	JP1	1	2	4	8	16	32	FR X G
28	JP1	1	2	4	8	16	32	FR X G
27	JP1	1	2	4	8	16	32	FR X G
26	JP1	1	2	4	8	16	32	FR X G
25	JP1	1	2	4	8	16	32	FR X G
24	JP1	1	2	4	8	16	32	FR X G
23	JP1	1	2	4	8	16	32	FR X G
22	JP1	1	2	4	8	16	32	FR X G
21	JP1	1	2	4	8	16	32	FR X G
20	JP1	1	2	4	8	16	32	FR X G



FRONT P-HALL HOISTWAY WIRING DIAGRAMS

JOB NAME:
215 PEARL STREET (R1 & R2)

CUSTOMER:
G-TECH ASSOCIATES, LLC.

ENGINEERED BY:
Jason Kirlis

DATE:
07/14/17

REVISION DATE:
03/24/2017 JPK

CONTROLLER MODEL:
PIXEL AC VECTOR-GL-L2

JOB NUMBER:
17-19017

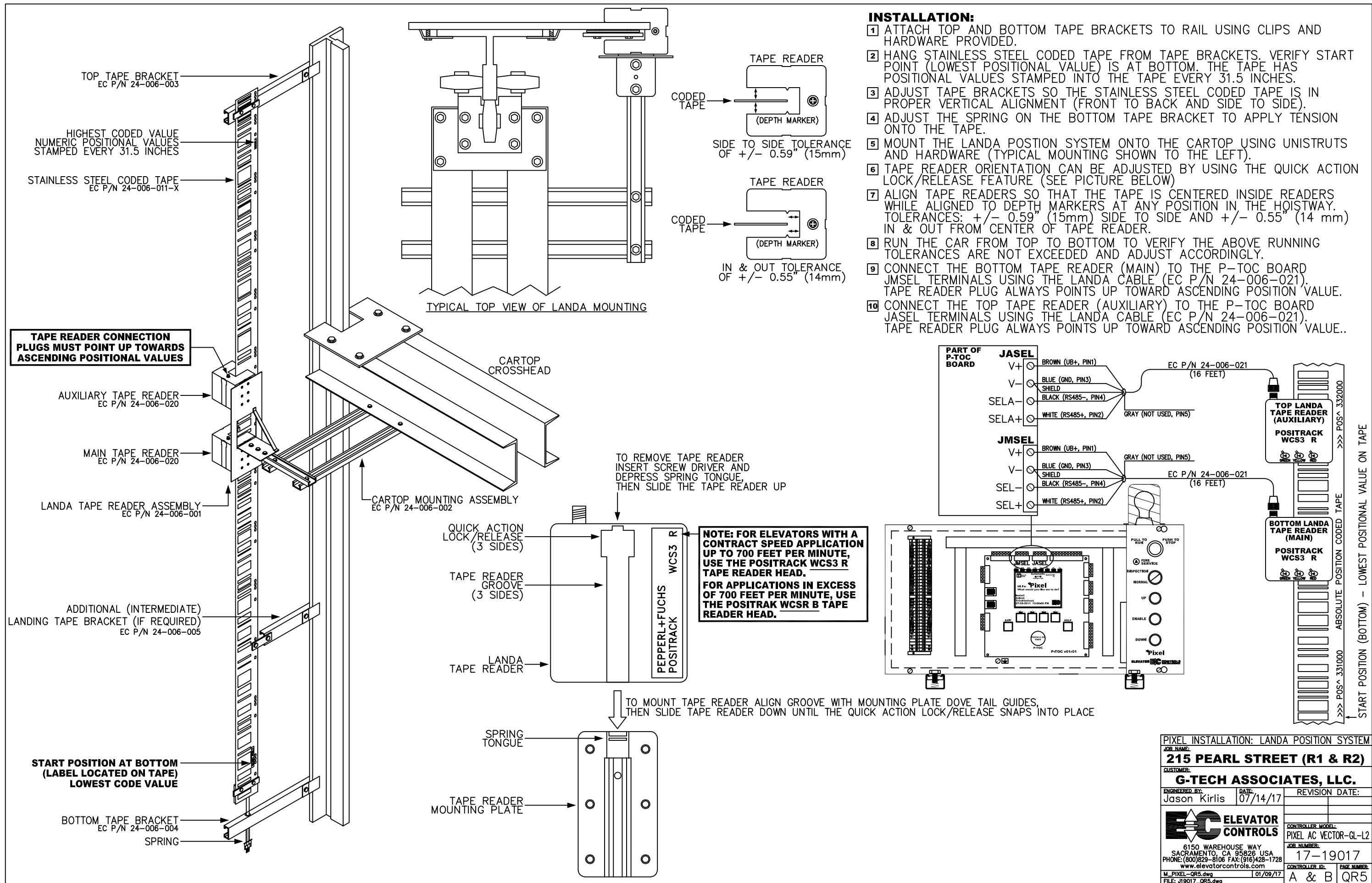
CONTROLLER ID:
A

PAGE NUMBER:
QR4Z

6150 WAREHOUSE WAY
SACRAMENTO, CA 95826 USA
PHONE: (800)829-8106 FAX: (916)428-1728
www.elevatorcontrols.com

M_PIXEL-QR4b.dwg
FILE: J19017-A_QR4Z.dwg

03/24/16



PIXEL INSTALLATION: TOC (TOP OF CAR) BOX MOUNTING			
JOB NAME: 215 PEARL STREET (R1 & R2)			
CUSTOMER: G-TECH ASSOCIATES, LLC.			
ENGINEERED BY: Jason Kirlis		DATE: 07/14/17	
		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-GL-L2	
		JOB NUMBER: 17-19017	
M_PIXEL-QR6-dwg		CONTROLLER ID:	
FILE: J19017_QR6.dwg		PAGE NUMBER:	
03/24/16		A & B QR6	

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 a permanent magnet (PM) motor- is a 3 step process, stationary auto tuning, initial magnet pole search and PG encoder offset.
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 to enable drive hardware
b. (Regenerative drive applications only) Set H1-08=F, to disable base block
c. Set C5-01=3 and C5-19=3, to reduce drive response gains
d. If the landa positioning system is not installed, place the controller on construction mode (install menu)
e. Set T2-01 = 1 and enter the required auto-tuning data (refer to E5-02, E1-05, E5-03, E5-04 and F1-01 for data) press the up key until "tuning ready?" is displayed
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"
h. Auto-tuning for initial magnet pole search with T2-01 = 3 repeat steps f & g (above)
i. Rotational or stationary encoder offset auto-tuning: rotational (preferred method & most accurate)
1) Rotational encoder offset (ropes must be removed) Set H2-01 = 6 (Drive Ready), allows brake to lift Set T2-01 = 10 and repeat steps f & g (above) Set T2-01 = 11 and repeat steps e & f (above) Restore H2-01 = 50 (Brake Control)
2) Stationary encoder offset Set T2-01 = 4 and repeat steps f & g (above)
j. Remove jumper from terminal HC and restore C5-01=15, C5-19=15 & (Regenerative drive applications only) Restore H1-08=9.
k. Record encoder offset (E5-11) in field setting column
Rotational auto-tuning notes: 1) If the motor rotates in the opposite direction, change B1-14 from 0 to 1. this switches the phase order to U-W-V. 2) Encoder setup: Rotate the motor and check parameter U1-05 (Speed Feedback). verify the value is positive in the up and negative in the down direction. change F1-05 from 1 to 0 if the values are reversed.
3) Repeat Auto-Tuning process if either B1-14 or F1-05 or if encoder unit has been changed.
Basic Adjustment Procedure
1. For contract speed calibration refer to section A2.5 of the Pixel traction controller installation and adjustment manual.
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 & S3-39 then shorten C5-20. if vibration occurs, decrease C5-19 & S3-39 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 02-03 = 1 and pressing the enter key. The display will return to 0. To restore values saved in user-set defaults (02-03), set A1-03 = 1110 (uploads only the parameters saved in 02-03)

L1000A CLOSED LOOP FLUX VECTOR, PIXEL VECTOR AC FOR PM 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	7		7=C.L. PM Motor						
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	3.00	15.00								
C5-02	Spd Cntrl Lp Integral Time 1	SEC	0.000-10.000	0.30	0.50								
C5-03	Spd Cntrl Lp Proportional Gain 2	-	0.00-300.00	3.00	15.00		On if C5-07 > 0						
C5-04	Spd Cntrl Lp Integral Time 2	SEC	0.000-10.000	0.30	0.50		On if C5-07 > 0						
C5-06	Spd Cntrl Lp Primary Delay Constant	SEC	0.000-0.500	0.004	0.100								
C5-07	Spd Cntrl Settings Switching Speed	%	0.0-100.0	2	20.0		0=Disable C5-03/04						
C5-13	Spd Cntrl Lp Proportional Gain 3	-	0.00-300.00	3.00	15.00		On if C5-07 > 0						
C5-14	Spd Cntrl Lp Integral Time 3	SEC	0.000-10.000	0.30	0.50		On if C5-07 > 0						
C5-17	Motor Inertia	kgm²	0.0001-600.00	B	A								
C5-19	Spd Cntrl Lp Proportional Gain During Position Lock	-	0.00-300.00	10.00	15.00								
C5-20	Spd Cntrl Lp Integral Time During Position Lock	SEC	0.000-10.000	0.10	0.50								
C6-03	Carrier Frequency	kHz	1.0-15.0	B	B								
C6-06	PWM Method	-	0-2	0	0		0=2/3-PH Conversion						
E1-01	Input Voltage Setting	V	310-510	460	480								
E1-04	Maximum Output Frequency	Hz	4.0-120.0	60	28.5								
E1-05	Maximum Voltage (Motor)	V	256-510	400	422		Acceleration voltage						
E1-06	Base Frequency (Motor)	Hz	0.0-120.0	60	28.5		Equal To E1-04						
E5-02	Motor Rated Power	kW	0.10-650.00	B	21.11		kW = HP x 0.746						
E5-03	Motor Rated Current	A	10-200% Rating	B	40		Rating= B						
E5-04	Number Of Motor Poles	#POLES	2-48	12	32								
E5-05	Motor Stator Resistance (Single Phase)	Ω	0.000-65.000	B	A								
E5-06	Motor D-axis Inductance	mH	0.00-600.00	B	A								
E5-07	Motor Q-axis Inductance	mH	0.00-600.00	B	A								
E5-09	Motor Induction Voltage Constant 1	mV/(rad/SEC)	0.0-6500.0	B	A								
E5-11	Encoder Offset	DEG	-180-180	0.0	A								
E5-24	Motor Induction Voltage Constant 2	mV/(r/MIN)	0.0-6500.0	0.0	A								
F1-01	Encoder 1 Resolution	PPR	1-60000	2048	2048								
F1-02	Operation Sel. At PG Open Circuit (PGO)	-	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	1	1								
F1-10	Excessive Speed Deviation Detection Level	%	0-50	10	25								
F1-19	DV4 Detection Selection	-	0-5000	128	0		0=Disabled						
H1-03	Terminal S3 Function Selection	-		24	20		20=Ext Flt Ramp To Stop						
H1-04	Terminal S4 Function Selection	-	Multi-function	14	F		F=Not Used						
H1-05	Terminal S5 Function Selection	-		3	F		F=Not Used						
H1-06	Terminal S6 Function Selection	-	Digital Inputs	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)	-	& Digital Outputs	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	14		14=Pre-torque						

Number	Parameter Name	Unit	Range	Default	EC Setting	Field Setting	Notes
H5-02	Communication Speed Selection	-	0-8	3	8		8=115200bps
H5-11	Communications Enter Function Sel.	-	0,1	0	1		1=Enter Not Necessary
L5-01	Number Of Auto Reset Attempts	-	0-10	0	2		
L5-02	Fault Output Operation During Auto Reset	-	0,1	0	1		1=Active
L6-01	Torque Detection Selection 1	-	0-8	0	2		2=ol3 Active During Run
L6-02	Torque Detection Level 1	%	0-300	150	250		
L7-01	Forward Torque Limit	%	0-300	200	300		
L7-02	Reverse Torque Limit	%	0-300	200	300		
L7-03	Forward Regenerative Torque Limit	%	0-300	200	300		
L7-04	Reverse Regenerative Torque Limit	%	0-300	200	300		
L8-05	Input Phase Loss Protection Selection	-	0-3	1	0		0=Disabled
L8-55	Internal Braking Transistor Protection	-	0,1	B	0		0=Disabled
n8-62	Output Voltage Limit	V	240.0-460.0	400.0	460		E1-01 Minus 20v
o1-03	Digital Operator Display Unit Selection	-	0-6	1	1		1=0.01%
o1-04	V/f Pattern Setting Units	-	0,1	1	0		0=Hz, C.L. Only
o1-12	Length Units	-	0,1	0	1		1=Inches
o1-20	Traction Sheave Diameter	INCH	3.70-78.00	15.70	25.00		
o1-21	Roping Ratio	-	1-4	2	1		1=1:1
o1-22	Mechanical Gear Ratio	-	0.10-50.00	1.00	1.00		
P1-01	-	-	-	-	AC		
P1-02	-	-	-	-	26		
P1-03	-	-	-	-	45		
P1-04	-	-	-	-	20		
S1-01	Zero Speed Level At Stop	%	0.000-9.999	0.350	0.350		
S1-04	Position Lock Time At Start	SEC	0.00-10.00	0.40	0.40		
S1-05	Position Lock Time At Stop	SEC	0.00-10.00	0.60	1.0		
S1-06	Brake Release Delay Time	SEC	0.00-10.00	0.20	0.00		
S1-07	Brake Close Delay Time	SEC	0.00-(S1-05)	0.10	0.10		
S1-10	Run Command Delay Time	SEC	0.00-1.00	0.10	0.10		
S3-01	Position Lock Gain At Start 1	-	0-100	5	15		
S3-02	Position Lock Gain At Start 2 (anti-rollback)	-	0.00-100.00	0.00	15		
S3-03	Position Lock Gain At Stop	-	0-100	5	5		
S3-10	Starting Torque Compensation Increase Time	mSEC	0-5000	500	200		
S3-14	Torque Compensation Fade Out Speed	%	0.0-100%	0.0	0.0		
S3-16	Torque Limit Reduction Time	mSEC	0-10000	100	200		
S3-27	Torque Compensation Value With Load Condition 1	%	-100%-100%	-50	-100		
S3-28	Torque Compensation Value With Load Condition 2	%	-100%-100%	50	100		
S3-29	Analog Input From Load Cell With Load Condition 1	%	-100%-100%	0	-100		
S3-39	Anti-rollback Integral Gain	-	-30.00-30.00	0.00	0.00		
S3-40	Anti-rollback Movement Detection	PULSE	0-100	1	1		
S3-41	Position Lock Gain At Start 2 Reduction	-	0.00-1.00	0.50	0.50		
S6-11	Overacceleration Detection Time	mSEC	0-5000	50	500		

*** Pixel Parameters ***

Speed Profile

Pattern Delay (ms)250ms

Ramp To StopYES

Releveling Offset (set to 40% Dead Zone)0.0

Speed Pattern Scaling % (Jobs below 10Hz)OFF

Motor/Brake Timers

Brake Pick Delay (s)0.0s

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

VVVF YASKAWA L1000A DRIVE PARAMETER LIST

JOB NAME:

215 PEARL STREET (R1 & R2)

CUSTOMER:

G-TECH ASSOCIATES, LLC.

ENGINEERED BY: Jason Kirlis

DATE: 07/14/17

REVISION DATE:

ELEVATOR CONTROLS

6150 WAREHOUSE WAY
SACRAMENTO, CA 95826 USA
PHONE: (800)829-8106 FAX: (916)428-1728
www.elevatorcontrols.com

M_PIXEL-QR7_L1000A.dwg

06/15/17

CONTROLLER MODEL: PIXEL AC VECTOR-GL-L2

JOB NUMBER:

17-19017

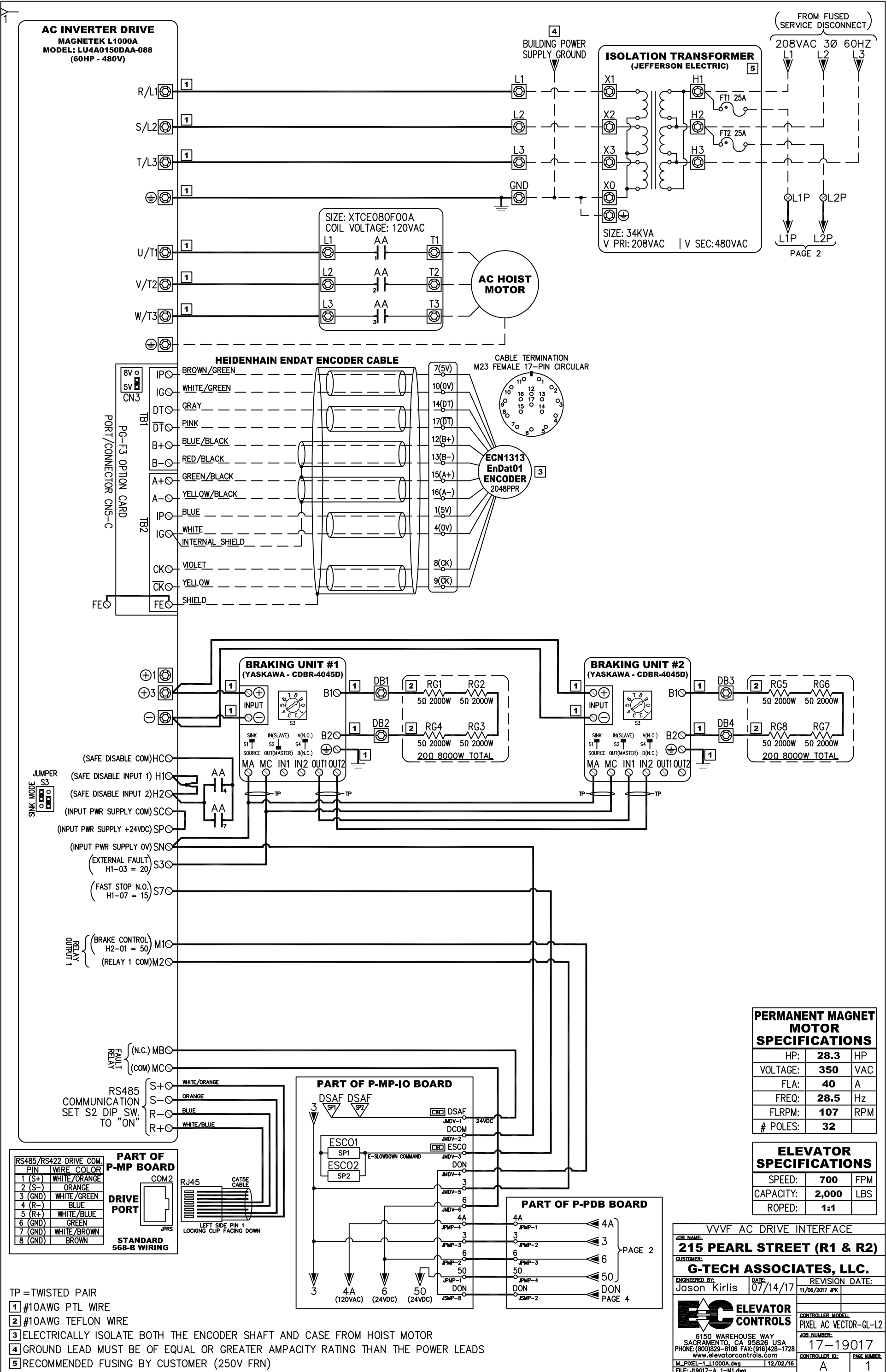
CONTROLLER ID: A

PAGE NUMBER: QR7

AParameter Is Modified During Auto-tuning Process
B o2-04 (Drive Model Selection) Dependent Parameters

A Parameter Is Modified During Auto-tuning Process

B o2-04 (Drive Model Selection) Dependent Parameters



TP = TWISTED PAIR

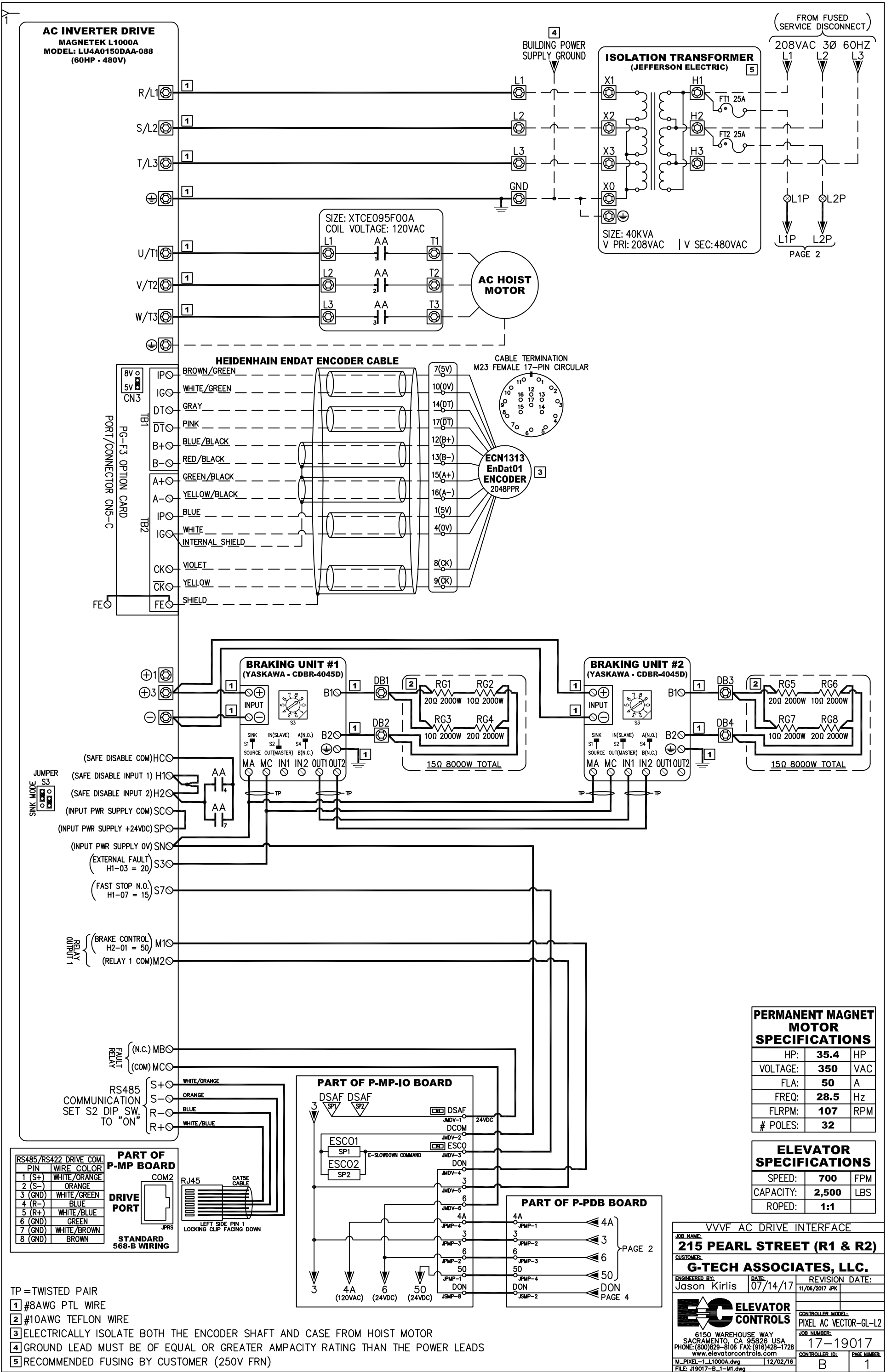
1 #10AWG PTL WIRE

2 #10AWG TEFLON WIRE

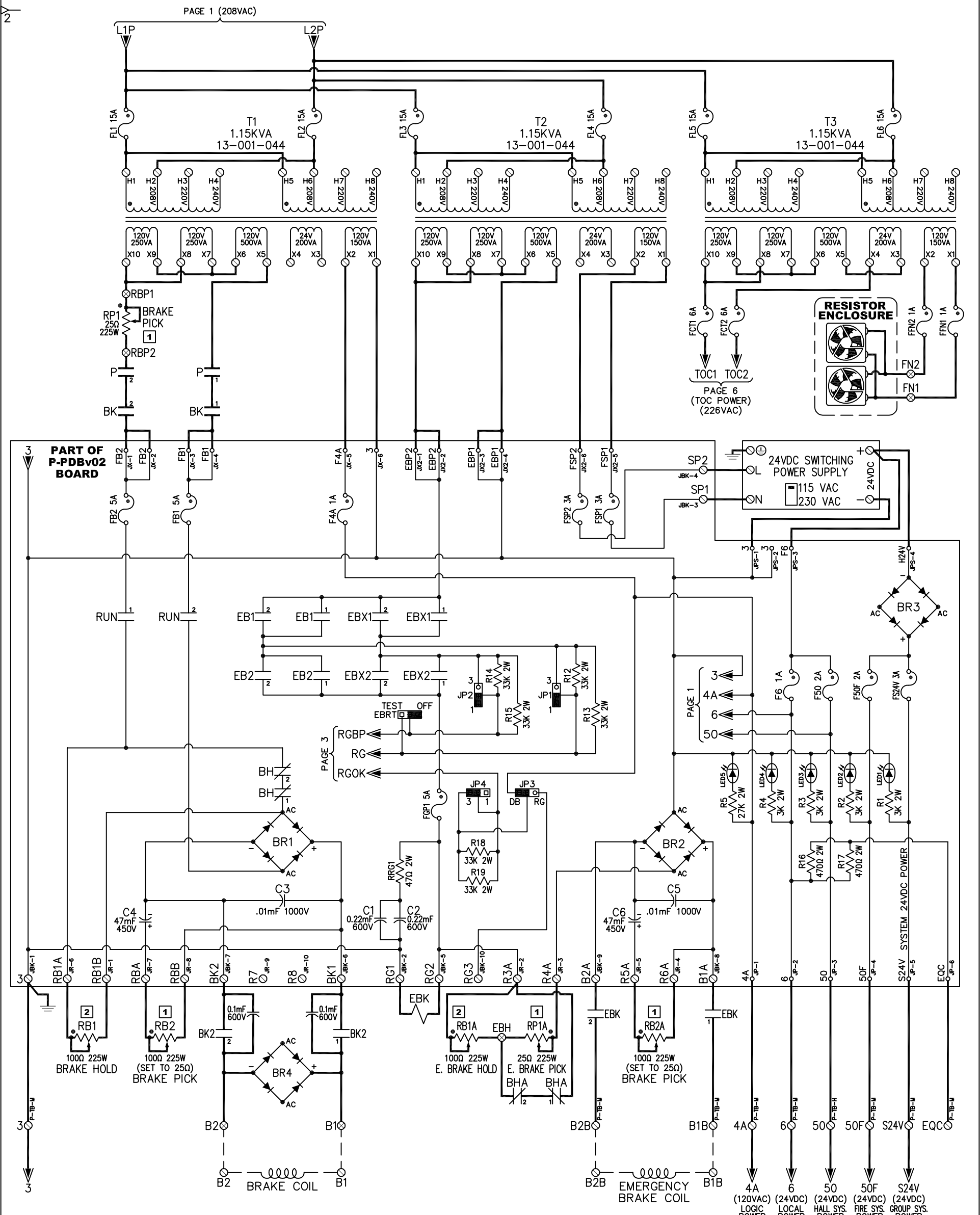
3 ELECTRICALLY ISOLATE BOTH THE ENCODER SHAFT AND CASE FROM HOIST MOTOR

4 GROUND LEAD MUST BE OF EQUAL OR GREATER AMPACITY RATING THAN THE POWER LEADS

5 RECOMMENDED FUSING BY CUSTOMER (250V FRN)



- TP = TWISTED PAIR
- #8AWG PTL WIRE
 - #10AWG TEFLON WIRE
 - ELECTRICALLY ISOLATE BOTH THE ENCODER SHAFT AND CASE FROM HOIST MOTOR
 - GROUND LEAD MUST BE OF EQUAL OR GREATER AMPACITY RATING THAN THE POWER LEADS
 - RECOMMENDED FUSING BY CUSTOMER (250V FRN)



BRAKE SPECIFICATIONS			
BRAKE PICK V:	230	VDC	(3.77A)
BRAKE HOLD V:	100	VDC	(1.64A)
BRAKE RESIST:	61	Ω	

EMERGENCY BRAKE SPECIFICATIONS			
BRAKE PICK V:	230	VDC	(3.77A)
BRAKE HOLD V:	100	VDC	(1.64A)
BRAKE RESIST:	61	Ω	

- 1] ADJUST RP1(A) FIRST, THEN IF NECESSARY ADJUST RB2(A)
FOR PROPER BRAKE PICKING VOLTAGE
- 2] ADJUST RB1(A) FOR PROPER BRAKE HOLDING VOLTAGE

FUSE LIST													
FUSE TYPE	FUSES												
500V FNQ	FL1	FL2	FL3	FL4	FL5	FL6							
250V MDA	FCT1	FCT2	FSP1	FSP2	FB1	FB2	FGP1	FS24V	FFN1	FFN2			
250V AGC	ALL OTHERS												

CONTROLLER POWER, BRAKE & EMERGENCY BRAKE

JOB NAME:
215 PEARL STREET (R1 & R2)

CUSTOMER:
G-TECH ASSOCIATES, LLC.

ENGINEERED BY: Jason Kirlis DATE: 07/14/17 REVISION DATE: 11/06/2017 .JPK

ELEVATOR CONTROLS

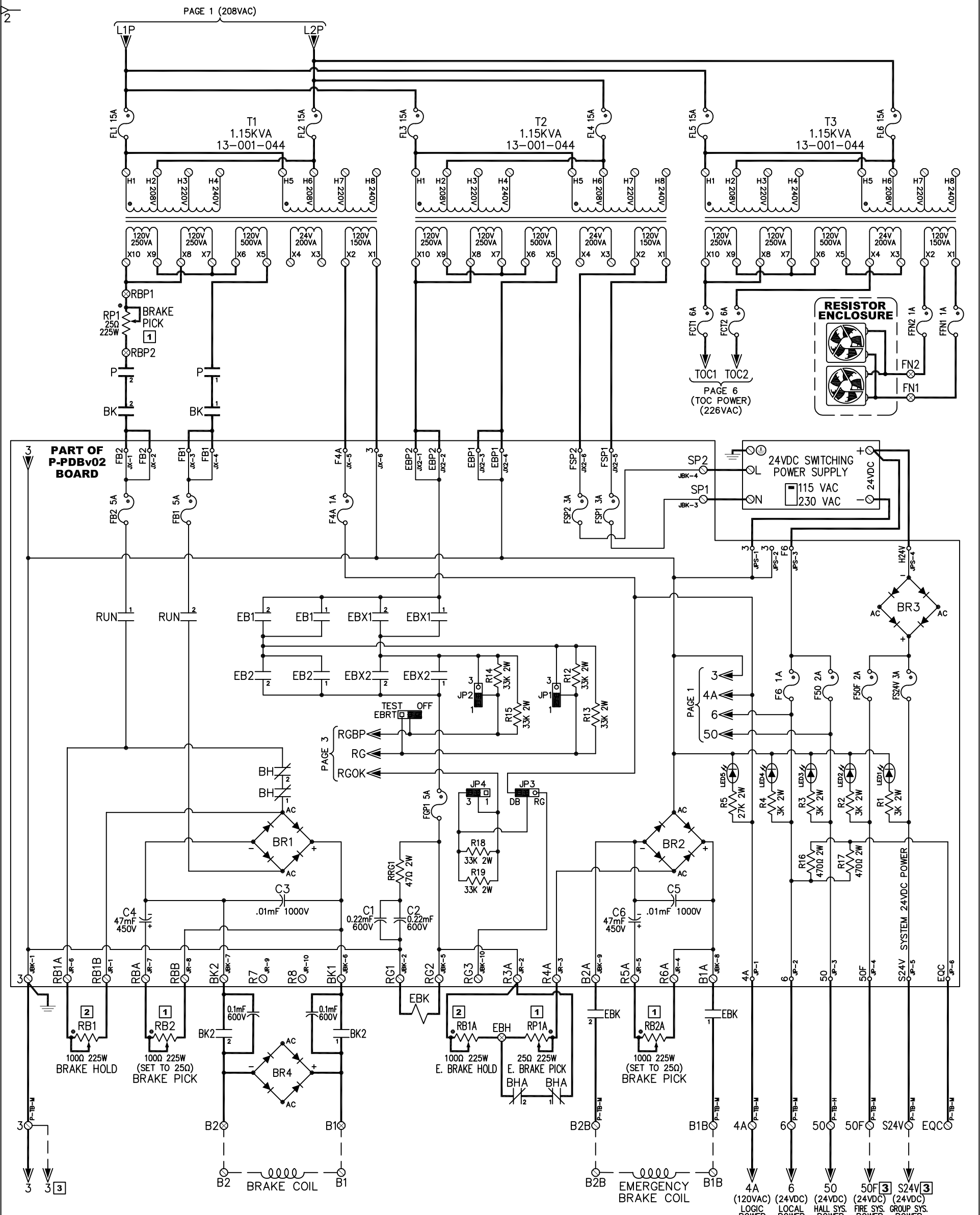
6150 WAREHOUSE WAY
SACRAMENTO, CA 95826 USA
PHONE: (800)829-8106 FAX: (916)428-1728
www.elevatorcontrols.com

CONTROLLER MODEL:
PIXEL AC VECTOR-GL-L2

JOB NUMBER:
17-19017

CONTROLLER ID: A PAGE NUMBER: 2

M_PIXEL-2.dwg 05/12/17
FILE: J19017-A_2-M1.dwg



BRAKE SPECIFICATIONS			
BRAKE PICK V:	230	VDC	(3.77A)
BRAKE HOLD V:	100	VDC	(1.64A)
BRAKE RESIST:	61	Ω	

EMERGENCY BRAKE SPECIFICATIONS			
BRAKE PICK V:	230	VDC	(3.77A)
BRAKE HOLD V:	100	VDC	(1.64A)
BRAKE RESIST:	61	Ω	

- 1] ADJUST RP1(A) FIRST, THEN IF NECESSARY ADJUST RB2(A) FOR PROPER BRAKE PICKING VOLTAGE
- 2] ADJUST RB1(A) FOR PROPER BRAKE HOLDING VOLTAGE
- 3] TERMINAL LOCATED IN CAR A CABINET

FUSE LIST													
FUSE TYPE	FUSES												
500V FNQ	FL1	FL2	FL3	FL4	FL5	FL6							
250V MDA	FCT1	FCT2	FSP1	FSP2	FB1	FB2	FGP1	FS24V	FFN1	FFN2			
250V AGC	ALL OTHERS												

CONTROLLER POWER, BRAKE & EMERGENCY BRAKE

JOB NAME: 215 PEARL STREET (R1 & R2)

CUSTOMER: G-TECH ASSOCIATES, LLC.

ENGINEERED BY: Jason Kirlis DATE: 07/14/17 REVISION DATE: 11/06/2017 .JPK

ELEVATOR CONTROLS

6150 WAREHOUSE WAY
SACRAMENTO, CA 95826 USA
PHONE: (800)829-8106 FAX: (916)428-1728
www.elevatorcontrols.com

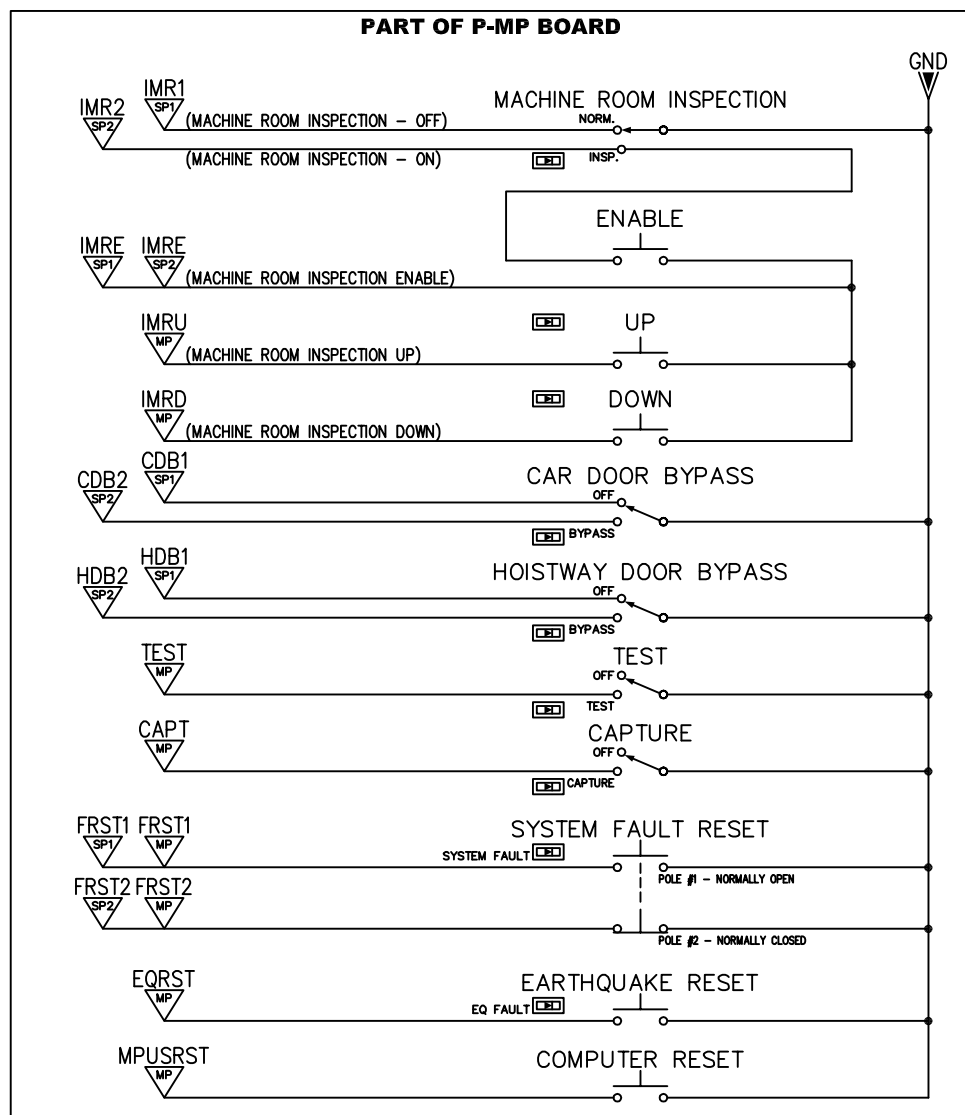
M_PIXEL-2.dwg 05/12/17

FILE: J19017-B_2-M1.dwg

CONTROLLER MODEL: PIXEL AC VECTOR-GL-L2

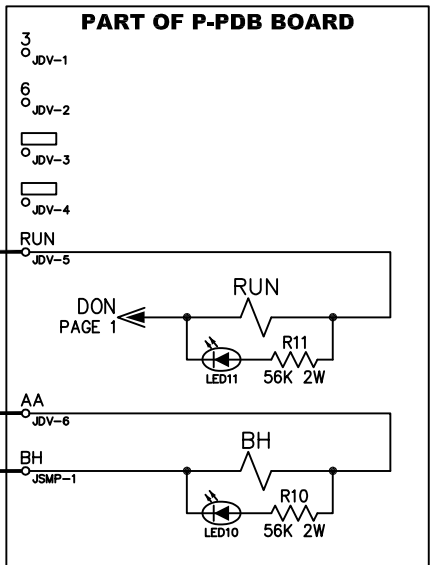
JOB NUMBER: 17-19017

CONTROLLER ID: B PAGE NUMBER: 2

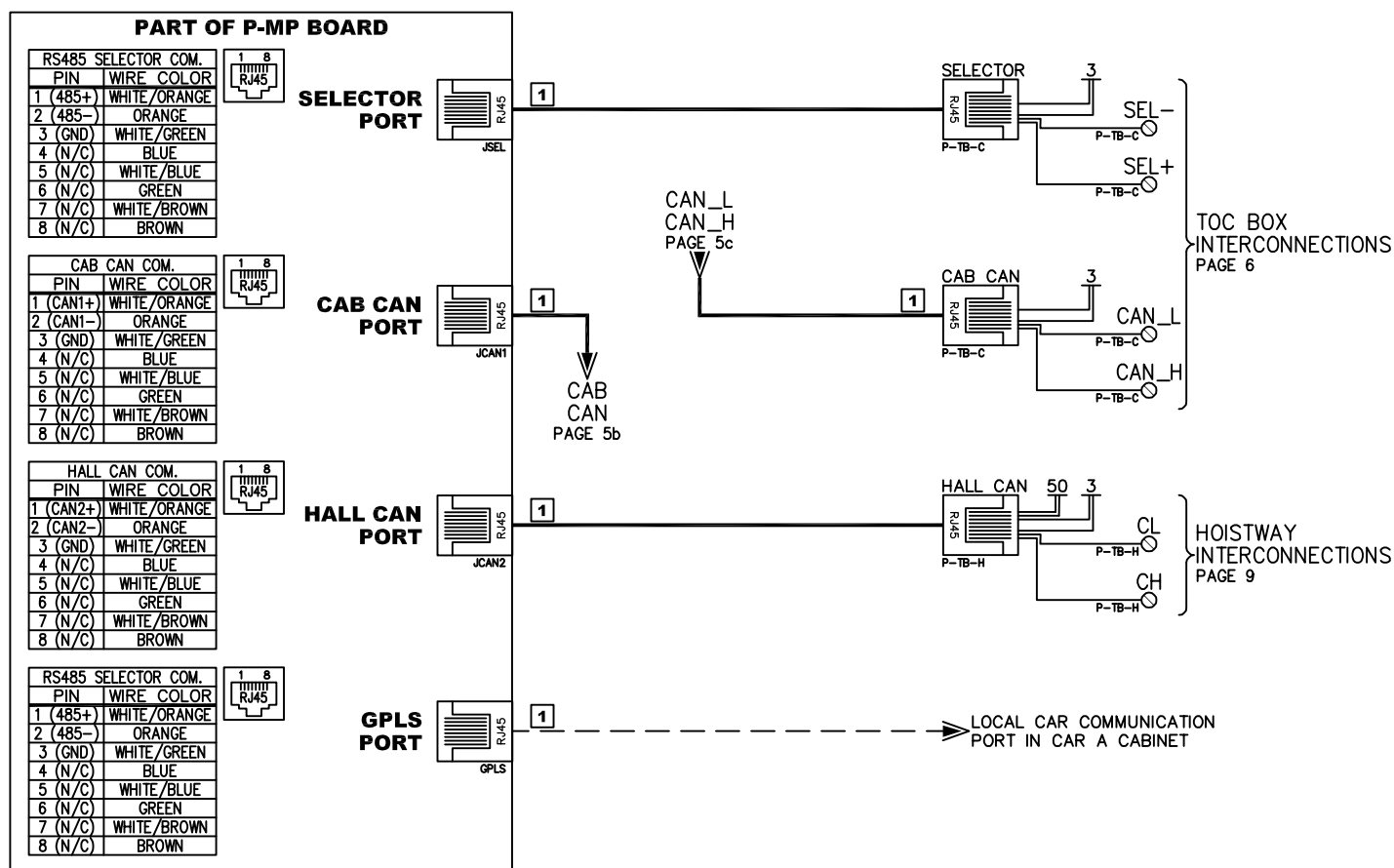
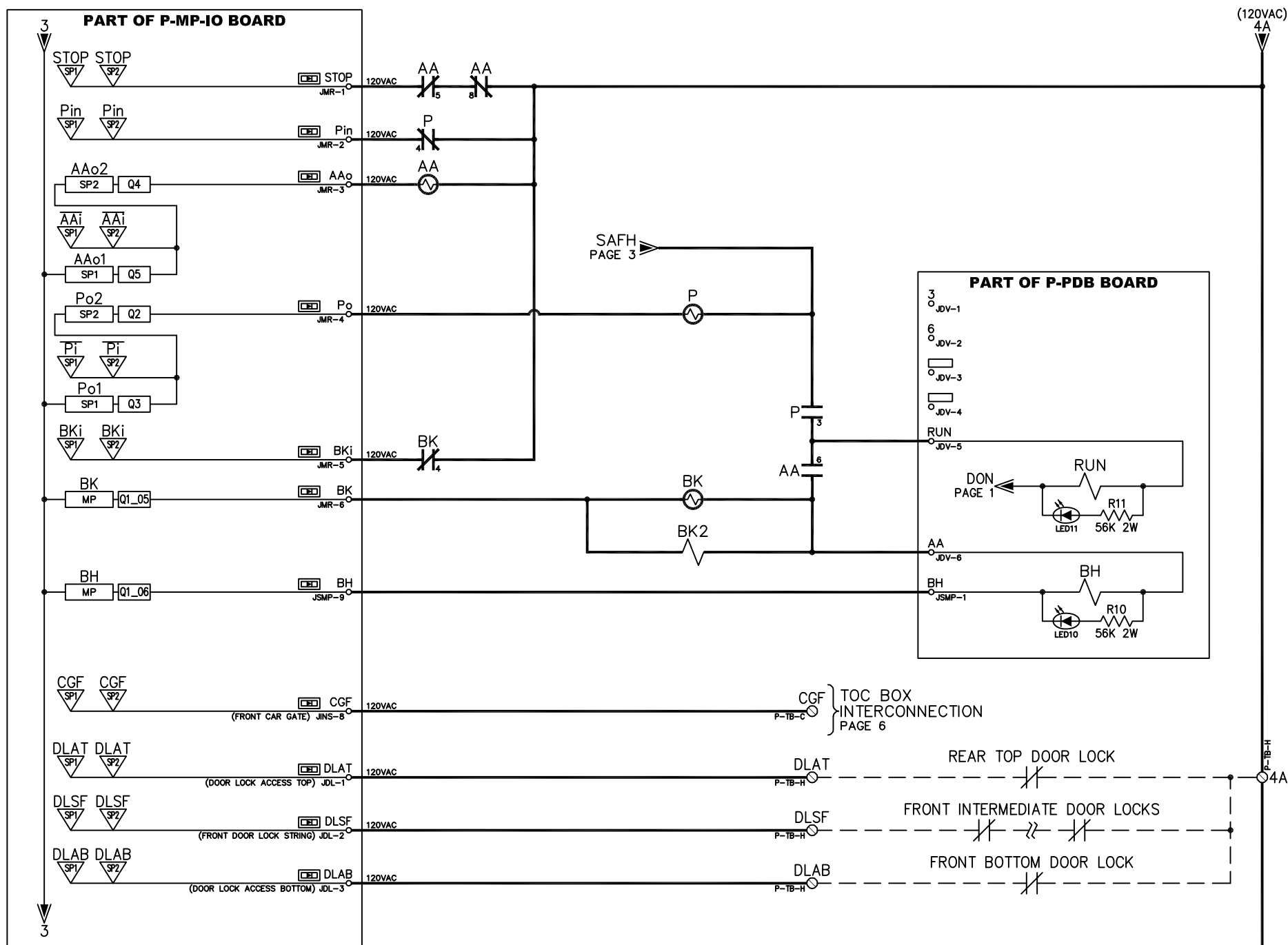


NOTE: REFER TO PAGE 9 FOR INSPECTION HOISTWAY ACCESS TOP AND BOTTOM DIRECTION SWITCHES

INSPECTION INPUTS & HOISTWAY SAFETY STRING			
JOB NAME:			
215 PEARL STREET (R1 & R2)			
CUSTOMER:			
G-TECH ASSOCIATES, LLC.			
ENGINEERED BY:	DATE:	REVISION DATE:	
Jason Kirlis	07/14/17		
		CONTROLLER MODEL:	
		PIXEL AC VECTOR-GL-L2	
		JOB NUMBER:	
		17-19017	
M. PIXEL - 3.dwg		PAGE NUMBER:	
09/14/16		A & B 3	

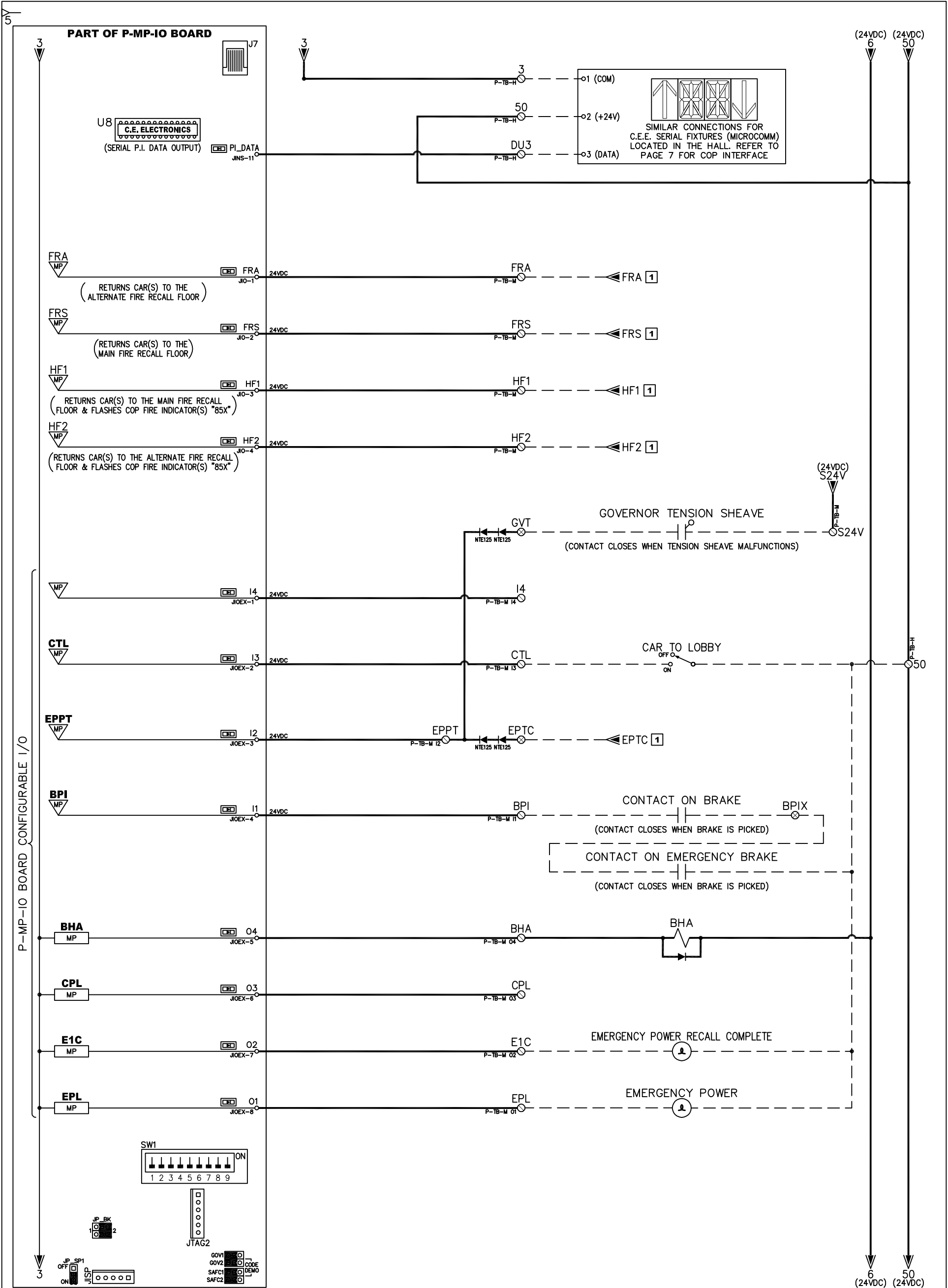


MAIN & BRAKE CONTACTORS & DOOR LOCKS			
JOB NAME:			
215 PEARL STREET (R1 & R2)			
CUSTOMER:			
G-TECH ASSOCIATES, LLC.			
ENGINEERED BY:		DATE:	
Jason Kirlis		07/14/17	
		REVISION DATE:	
		ELEVATOR CONTROLS	
6150 WAREHOUSE WAY SACRAMENTO, CA 95826 USA PHONE: (800)829-8106 FAX: (916)428-1728 www.elevatorcontrols.com			
		CONTROLLER MODEL:	
		PIXEL AC VECTOR-GL-L2	
		JOB NUMBER:	
		17-19017	
N_PIXEL -4.dwg		CONTROLLER ID:	
FILE: J19017-A.dwg		PAGE NUMBER:	
03/24/16		A	
		4	



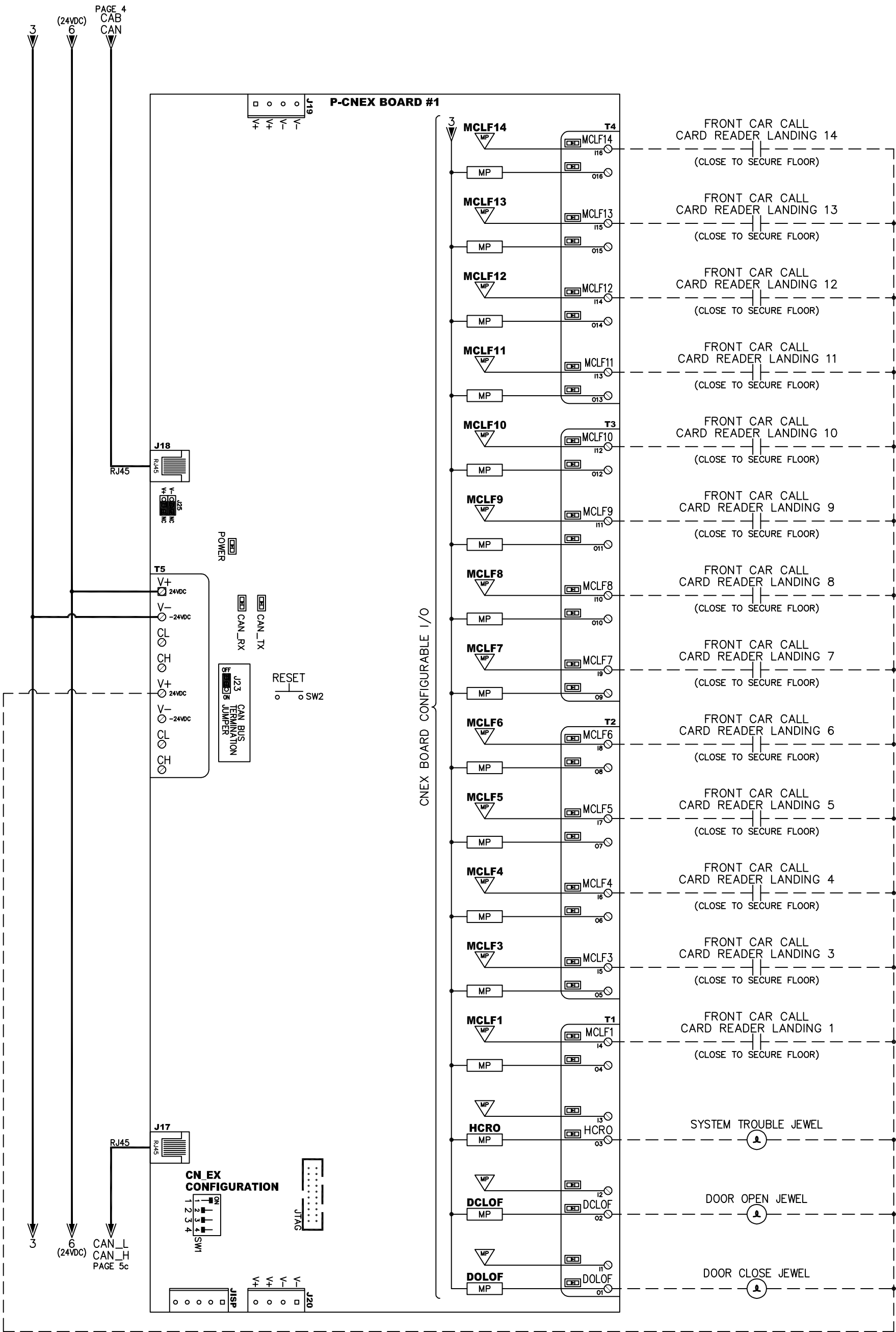
1 ETHERNET CABLE CAT5e TYPE 568-B STANDARD

MAIN & BRAKE CONTACTORS & DOOR LOCKS			
JOB NAME:			
215 PEARL STREET (R1 & R2)			
CUSTOMER:			
G-TECH ASSOCIATES, LLC.			
ENGINEERED BY:		DATE:	REVISION DATE:
Jason Kirlis		07/14/17	
			
		CONTROLLER MODEL:	
		PIXEL AC VECTOR-GL-L2	
		JOB NUMBER:	
		17-19017	
CONTROLLER ID:		PAGE NUMBER:	
B		4	

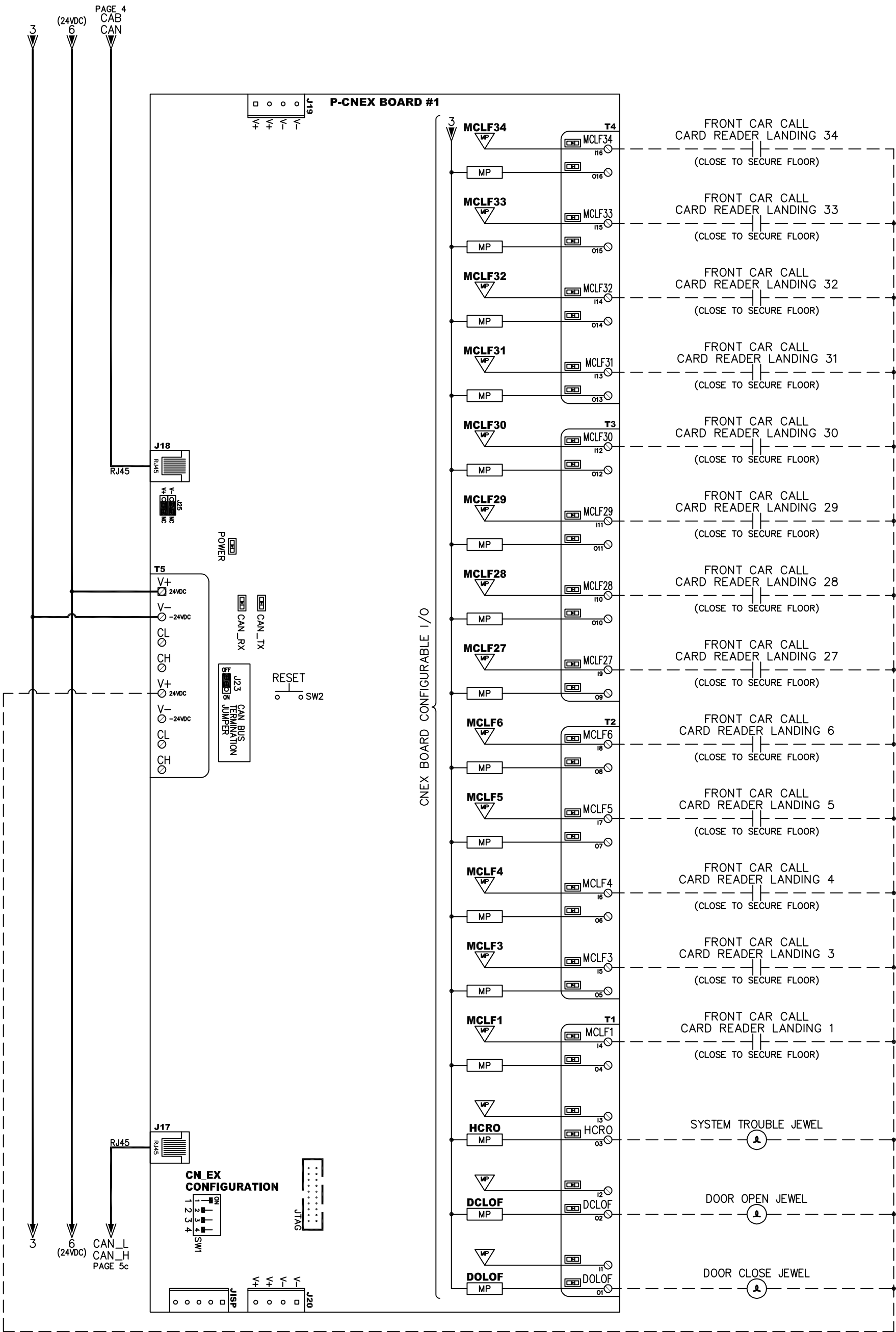


1 TERMINAL LOCATED IN CAR A CABINET

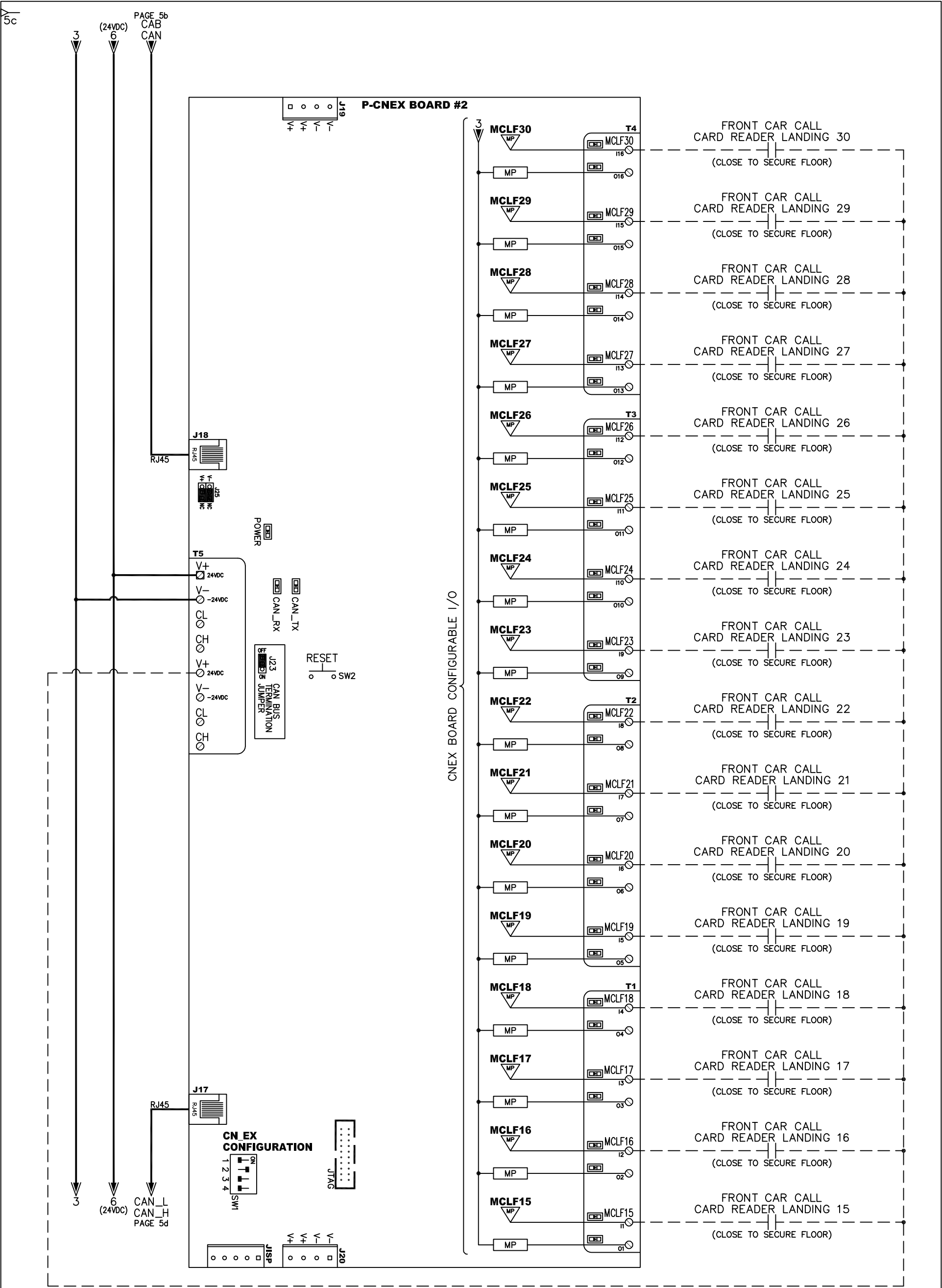
P-MP-IO BOARD – INPUTS/OUTPUTS			
JOB NAME:			
215 PEARL STREET (R1 & R2)			
CUSTOMER:			
G-TECH ASSOCIATES, LLC.			
ENGINEERED BY:		DATE:	
Jason Kirlis		07/14/17	
		REVISION DATE:	
		03/13/2017 JPK	
		CONTROLLER MODEL:	
ELEVATOR CONTROLS		PIXEL AC VECTOR-GL-L2	
6150 WAREHOUSE WAY SACRAMENTO, CA 95826 USA PHONE: (800)829-8106 FAX: (916)428-1728 www.elevatorcontrols.com		JOB NUMBER:	
		17-19017	
CONTROLLER ID:		PAGE NUMBER:	
B		5	



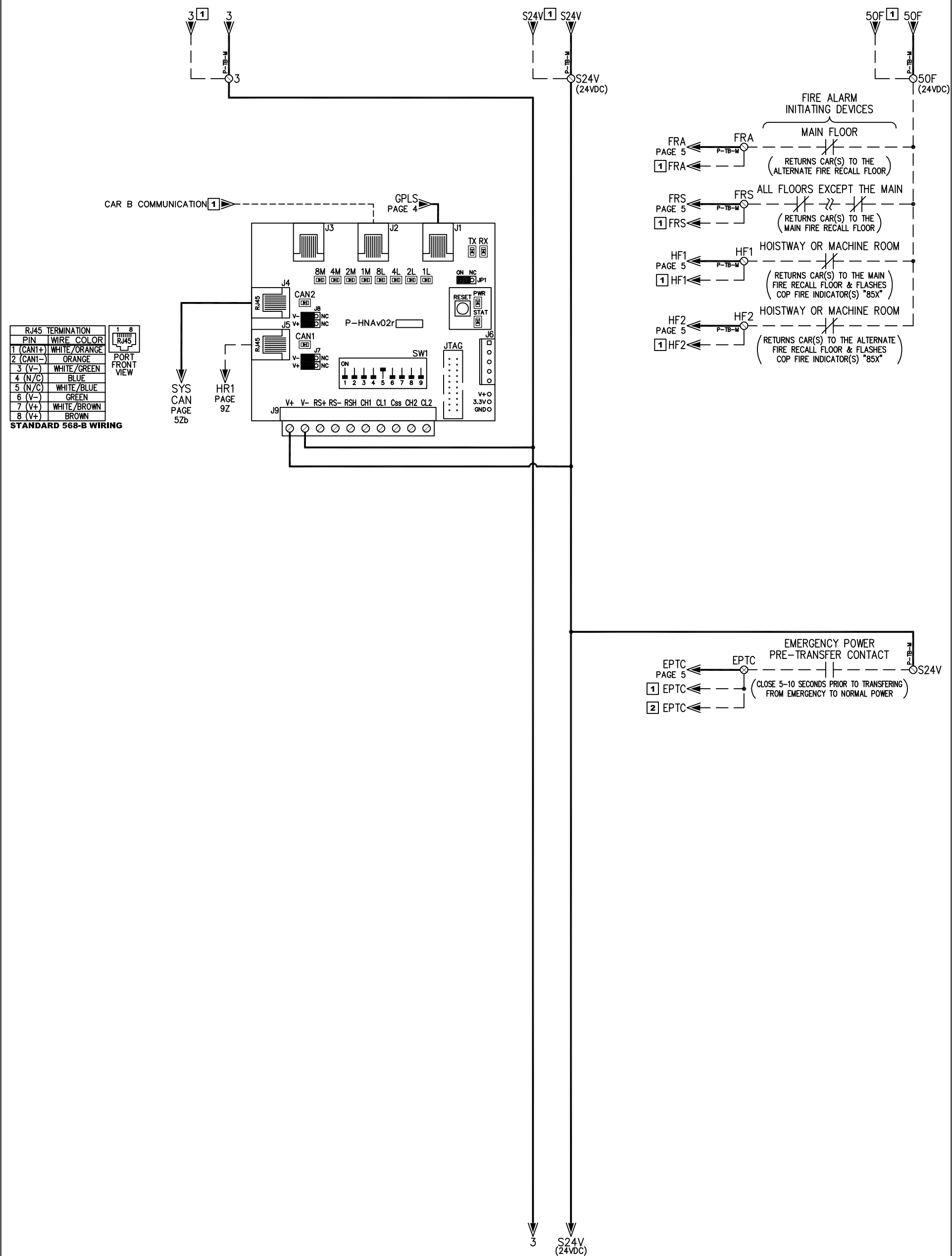
MP P-CNEX BOARD - EXPANSION I/O			
JOB NAME:			
215 PEARL STREET (R1 & R2)			
CUSTOMER:			
G-TECH ASSOCIATES, LLC.			
ENGINEERED BY:	DATE:	REVISION DATE:	
Jason Kirlis	07/14/17		
		CONTROLLER MODEL:	
6150 WAREHOUSE WAY SACRAMENTO, CA 95826 USA PHONE: (800)829-8106 FAX: (916)428-1728 www.elevatorcontrols.com		PIXEL AC VECTOR-GL-L2	
M_PIXEL-5b.dwg		JOB NUMBER:	
FILE: J19017-A_5b.dwg		17-19017	
		CONTROLLER ID:	PAGE NUMBER:
		A	5b



MP P-CNEX BOARD - EXPANSION I/O			
JOB NAME: 215 PEARL STREET (R1 & R2)			
CUSTOMER: G-TECH ASSOCIATES, LLC.			
ENGINEERED BY: Jason Kirlis	DATE: 07/14/17	REVISION DATE:	
		CONTROLLER MODEL: PIXEL AC VECTOR-GL-L2	
6150 WAREHOUSE WAY SACRAMENTO, CA 95826 USA PHONE: (800)829-8106 FAX: (916)428-1728 www.elevatorcontrols.com		JOB NUMBER: 17-19017	
M_PIXEL-5b.dwg FILE: J19017-B_5b.dwg		08/23/16	PAGE NUMBER: A
			5b



MP P-CNEX BOARD – EXPANSION I/O			
JOB NAME:			
215 PEARL STREET (R1 & R2)			
CUSTOMER:			
G-TECH ASSOCIATES, LLC.			
ENGINEERED BY:	DATE:	REVISION DATE:	
Jason Kirlis	07/14/17		
		CONTROLLER MODEL:	
		PIXEL AC VECTOR-GL-L2	
		JOB NUMBER:	
		17-19017	
M_PIXEL-5b.dwg		08/23/16	
FILE: J19017-A_5c.dwg		A	5c

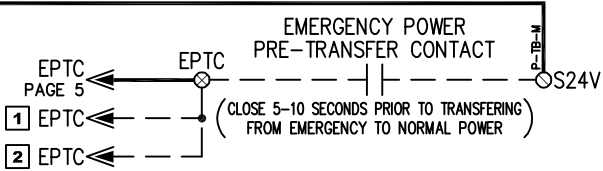
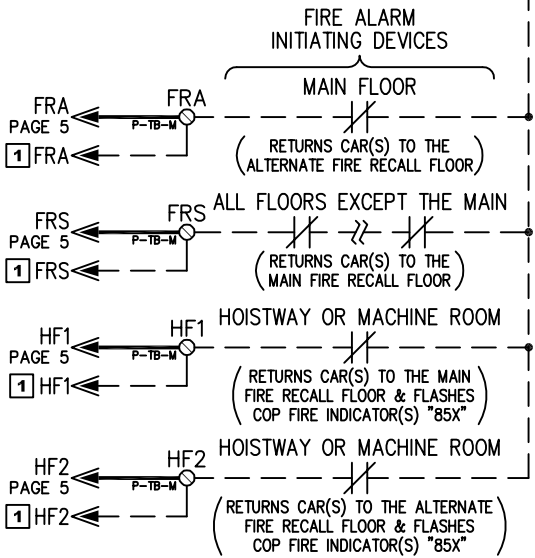


RJ45 TERMINATION		
PIN	WIRE	COLOR
1 (CAN1+)	WHITE	ORANGE
2 (CAN1-)	ORANGE	
3 (V-)	WHITE	GREEN
4 (N/C)	BLUE	
5 (N/C)	WHITE	BLUE
6 (V-)	GREEN	
7 (V+)	WHITE	BROWN
8 (V+)	BROWN	

STANDARD 568-B WIRING

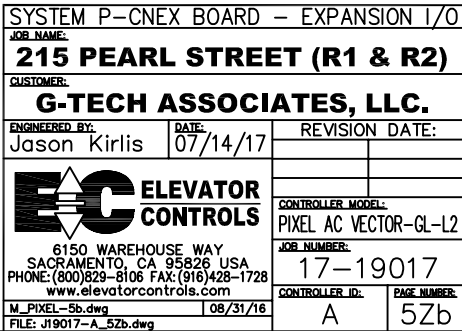
1	8
1	8
2	7
3	6
4	5
5	4
6	3
7	2
8	1

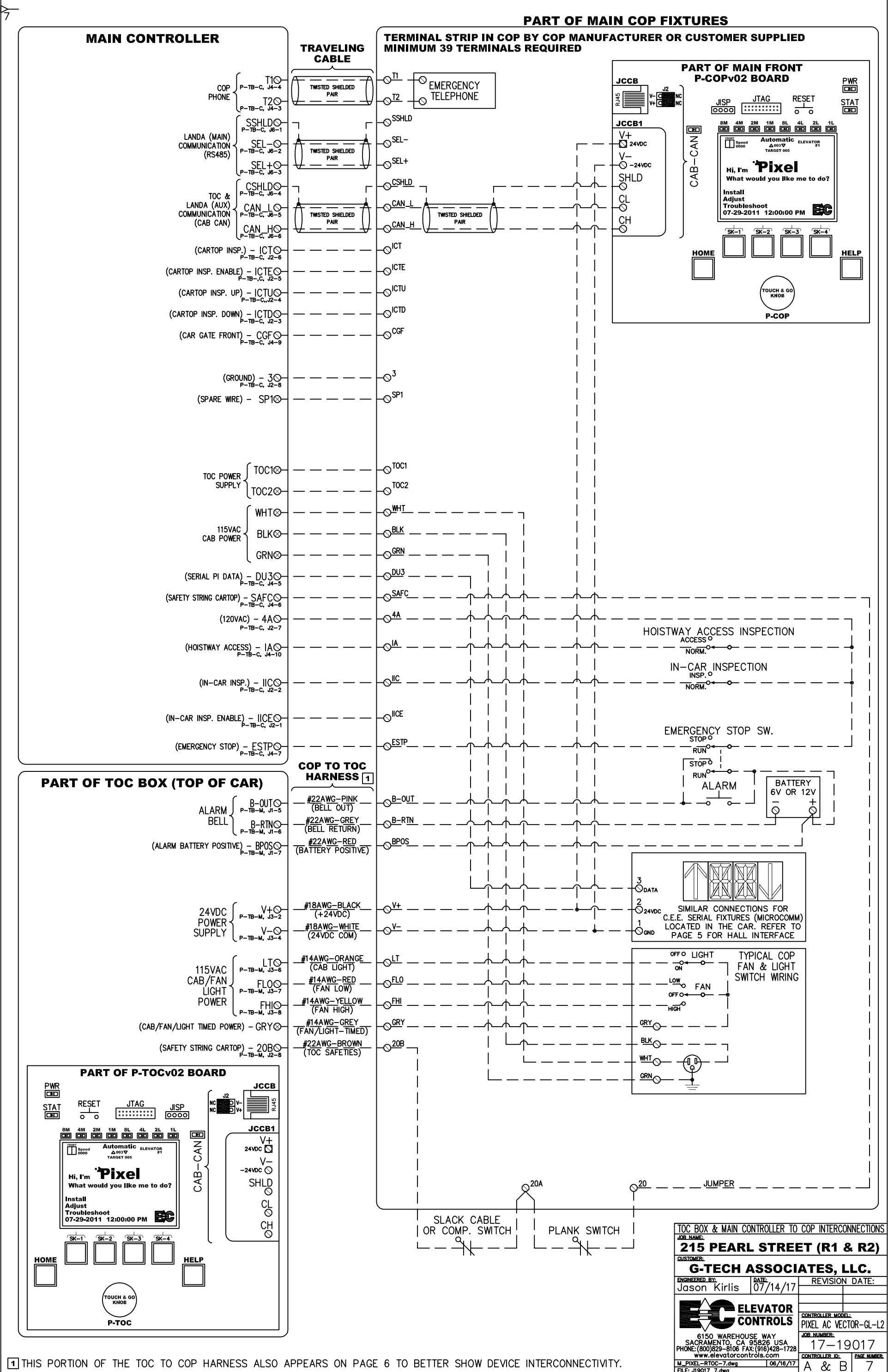
PORT FRONT VIEW



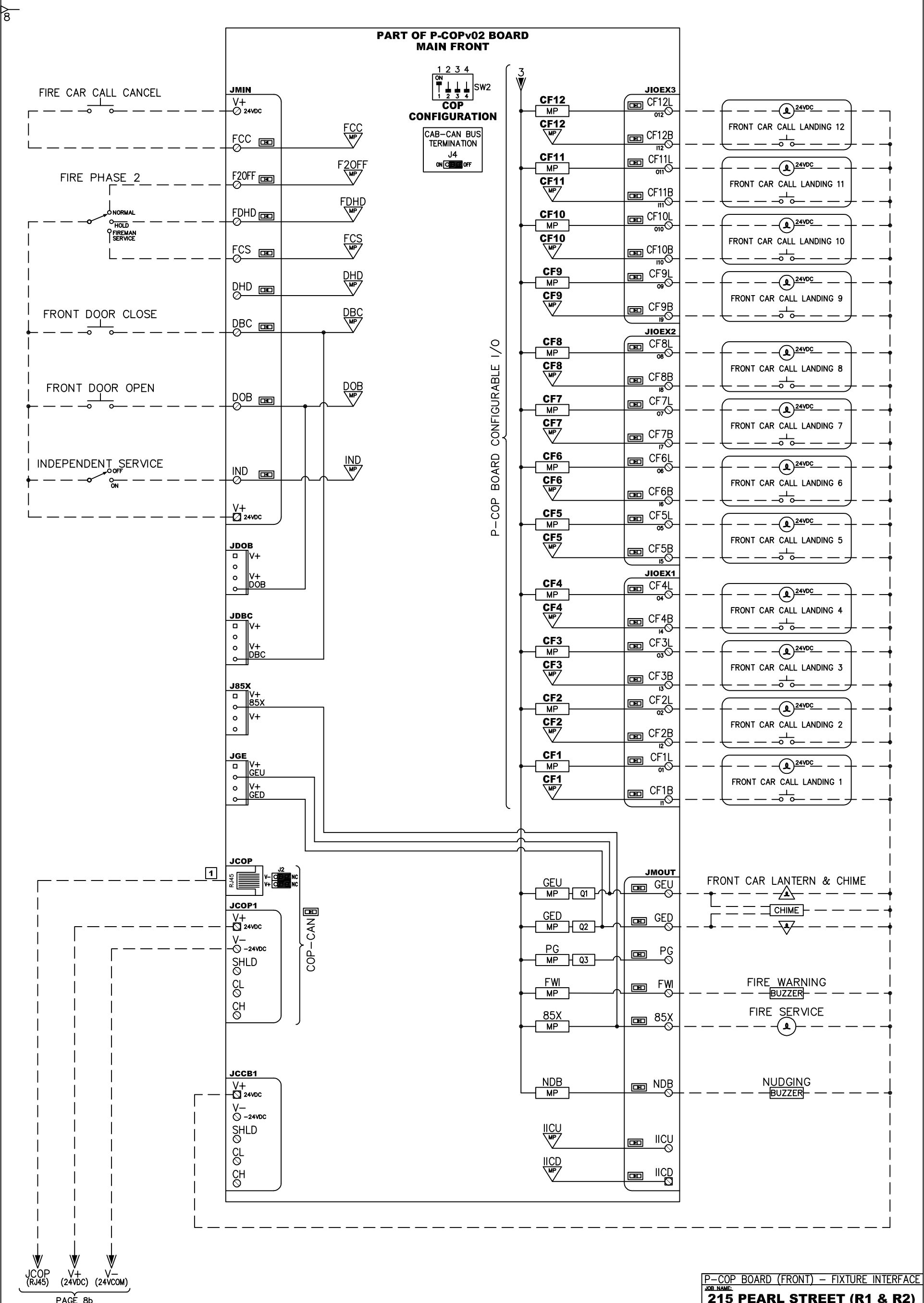
1 TERMINAL LOCATED IN CAR B CABINET

P-HNA BOARD, GROUPELESS INTERCONNECTIONS			
JOB NAME:			
215 PEARL STREET (R1 & R2)			
CUSTOMER:			
G-TECH ASSOCIATES, LLC.			
ENGINEERED BY:	DATE:	REVISION DATE:	
Jason Kirlis	07/14/17	03/24/2017 JPK	
		CONTROLLER MODEL:	
		PIXEL AC VECTOR-GL-L2	
		JOB NUMBER:	
		17-19017	
M_PIXEL-9.dwg		03/24/16	PAGE NUMBER:
FILE: J19017-A_SZ.dwg		A	5Z





1 THIS PORTION OF THE TOC TO COP HARNESS ALSO APPEARS ON PAGE 6 TO BETTER SHOW DEVICE INTERCONNECTIVITY.



[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:
215 PEARL STREET (R1 & R2)

CUSTOMER:
G-TECH ASSOCIATES, LLC.

ENGINEERED BY: Jason Kirlis DATE: 07/14/17 REVISION DATE:

EC ELEVATOR CONTROLS

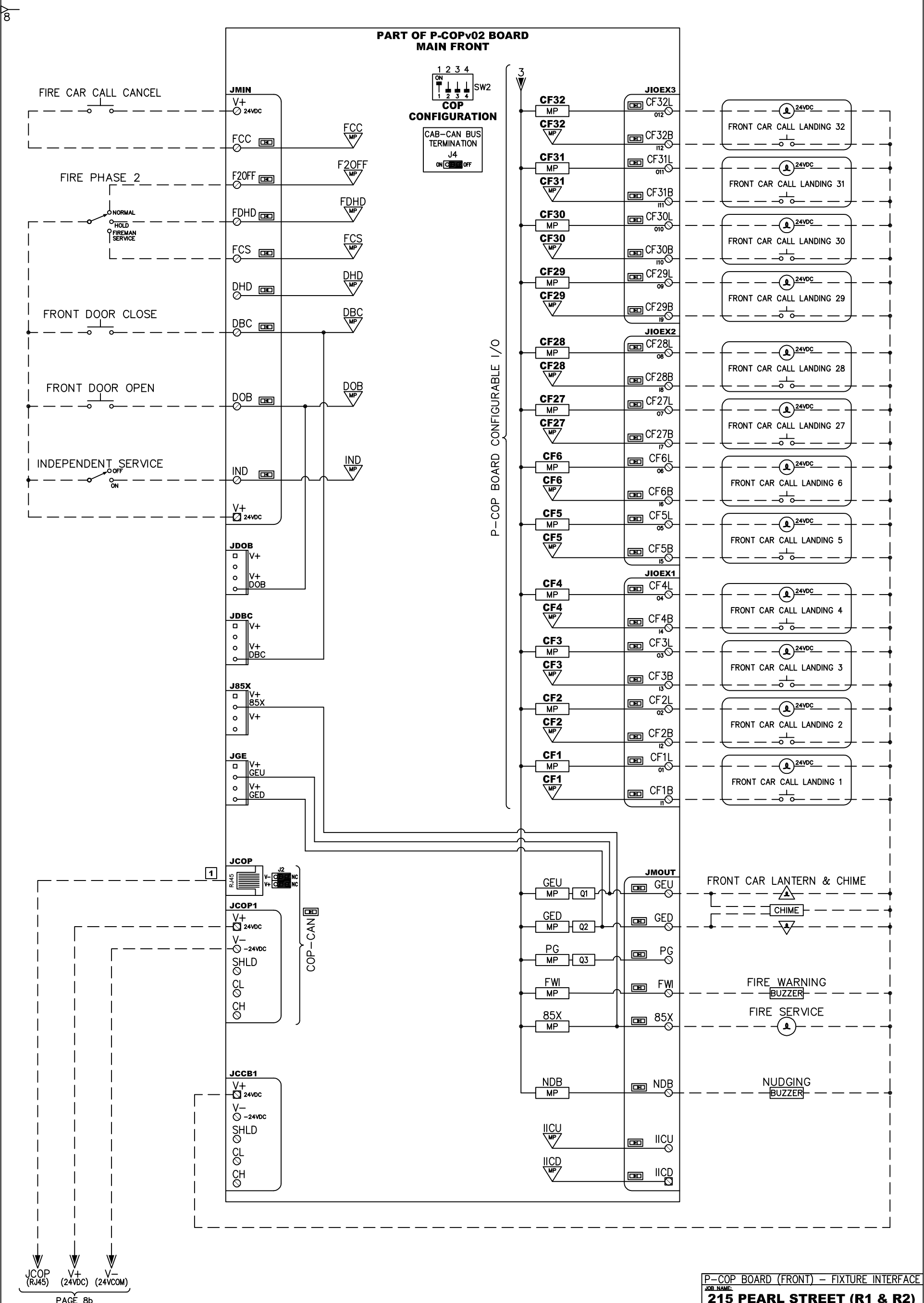
6150 WAREHOUSE WAY
SACRAMENTO, CA 95826 USA
PHONE: (800)829-8106 FAX: (916)428-1728
www.elevatorcontrols.com

CONTROLLER MODEL:
PIXEL AC VECTOR-GL-L2

JOB NUMBER:
17-19017

CONTROLLER ID: A PAGE NUMBER: 8

M_PIXEL-8.dwg 06/22/17
FILE: J19017-A_8.dwg



[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:
215 PEARL STREET (R1 & R2)

CUSTOMER:
G-TECH ASSOCIATES, LLC.

ENGINEERED BY: Jason Kirlis DATE: 07/14/17 REVISION DATE:

EC ELEVATOR CONTROLS

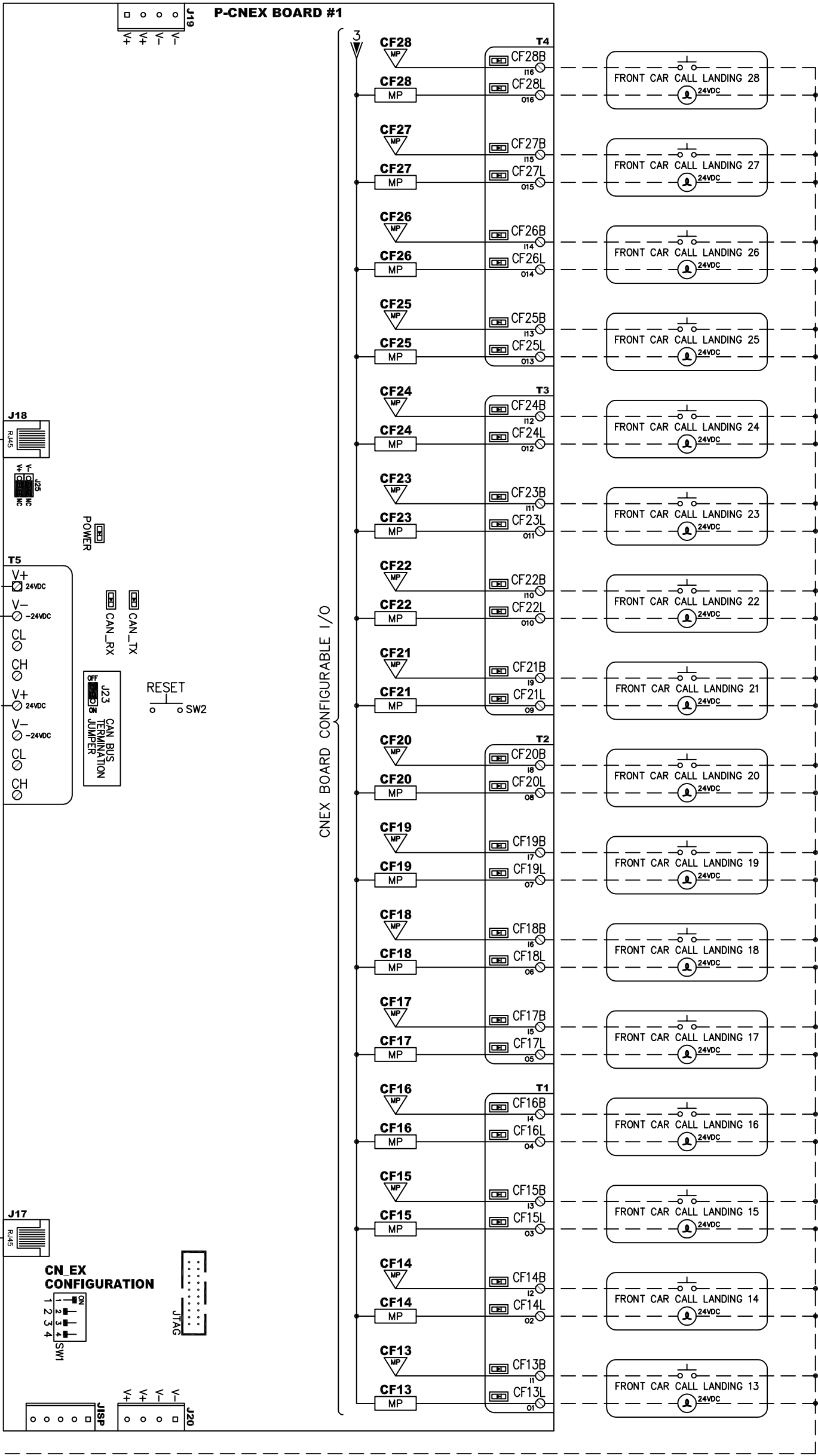
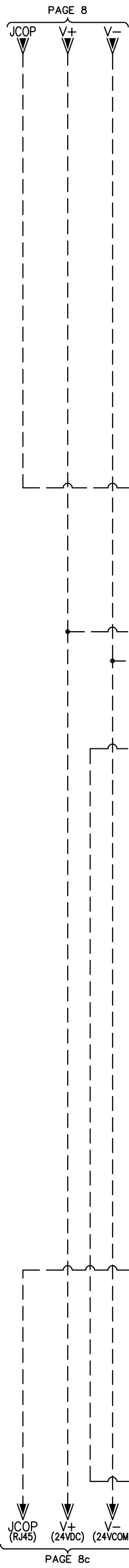
6150 WAREHOUSE WAY
SACRAMENTO, CA 95826 USA
PHONE: (800)829-8106 FAX: (916)428-1728
www.elevatorcontrols.com

CONTROLLER MODEL:
PIXEL AC VECTOR-GL-L2

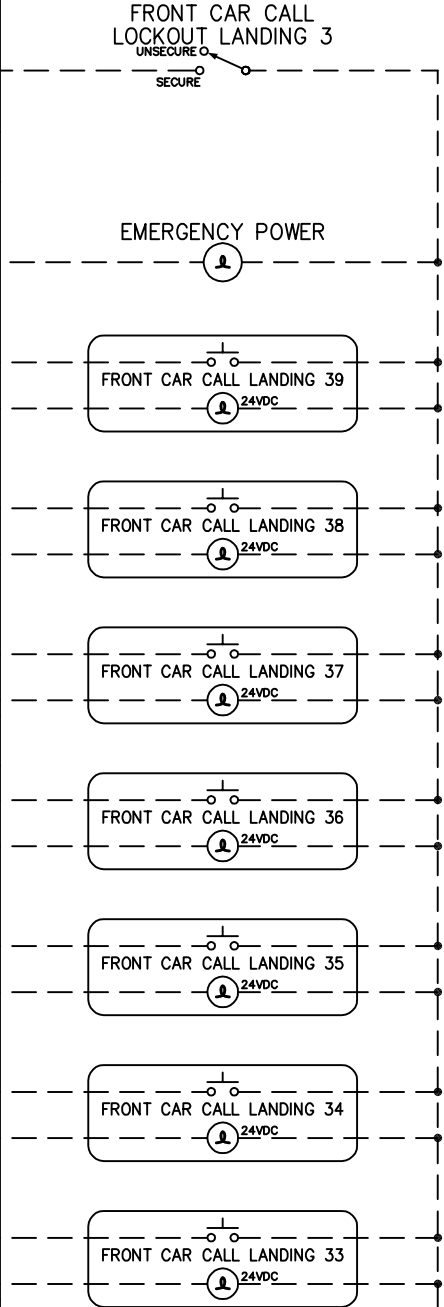
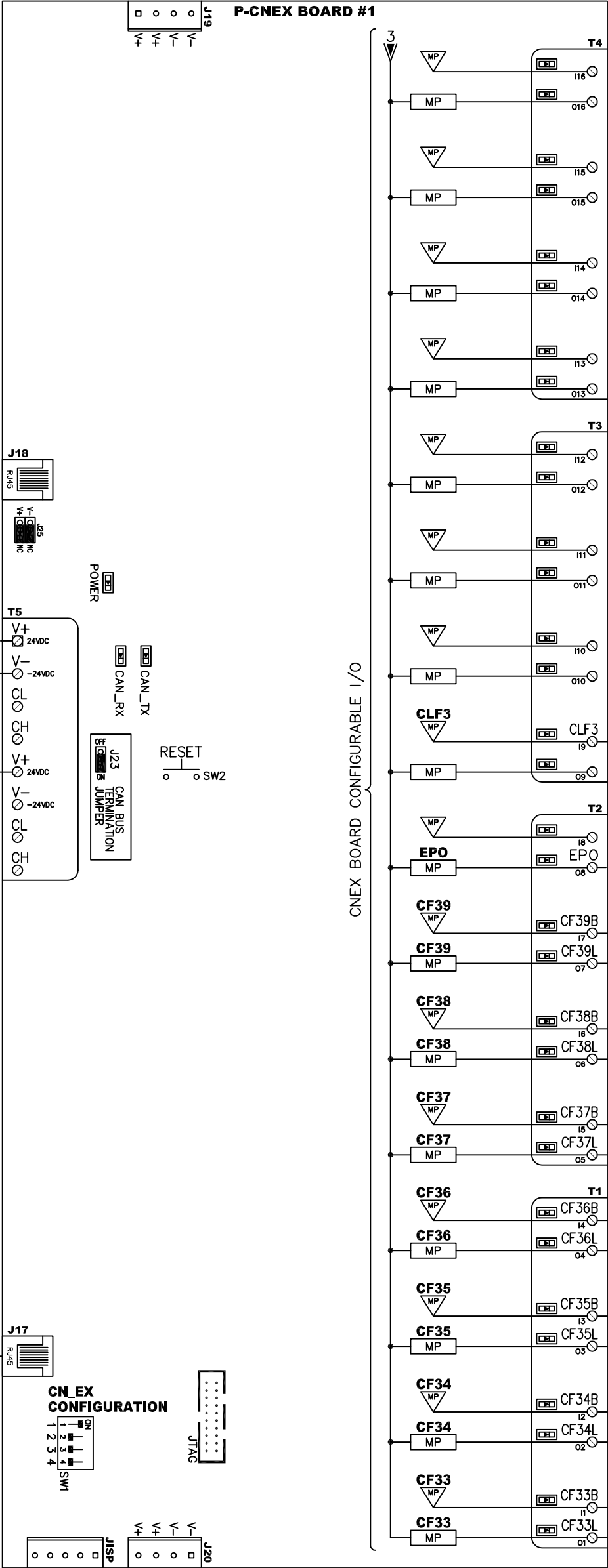
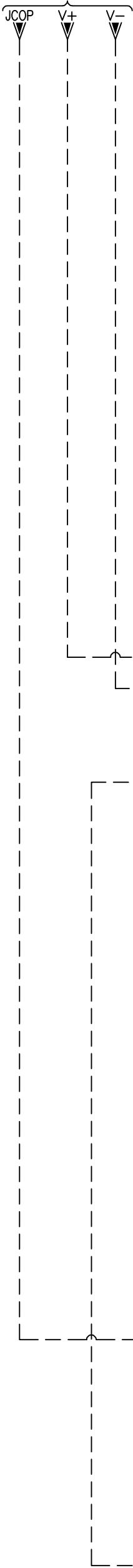
JOB NUMBER:
17-19017

CONTROLLER ID: B PAGE NUMBER: 8

M_PIXEL-8.dwg 06/22/17
FILE: J19017-B_8.dwg

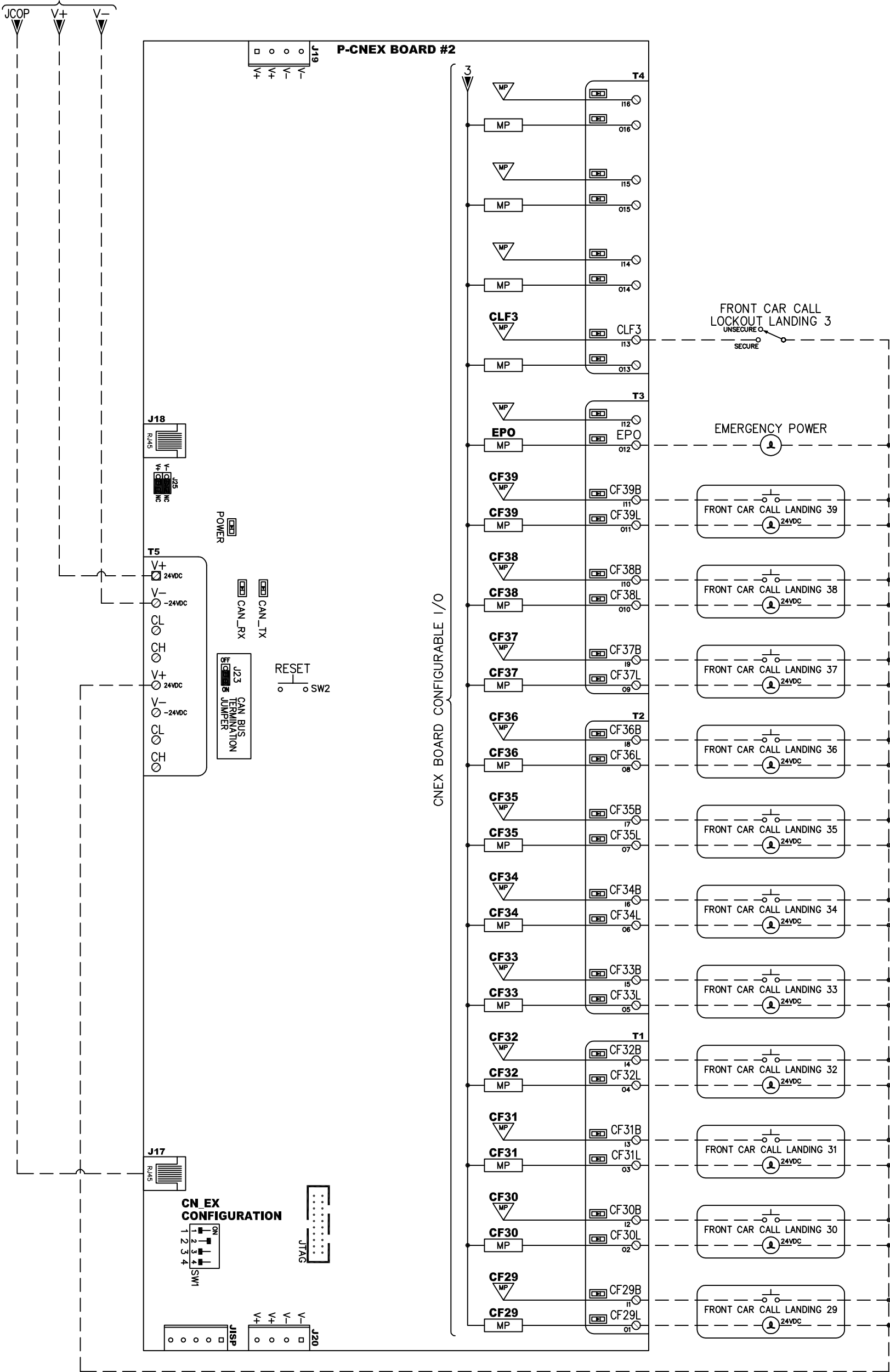


COP P-CNEX BOARD – EXPANSION I/O			
JOB NAME:			
215 PEARL STREET (R1 & R2)			
CUSTOMER:			
G-TECH ASSOCIATES, LLC.			
ENGINEERED BY:	DATE:	REVISION DATE:	
Jason Kirlis	07/14/17		
			
ELEVATOR CONTROLS		CONTROLLER MODEL:	
6150 WAREHOUSE WAY SACRAMENTO, CA 95826 USA PHONE: (800)829-8106 FAX: (916)428-1728 www.elevatorcontrols.com		PIXEL AC VECTOR-GL-L2	
M_PIXEL-8b.dwg		JOB NUMBER:	
FILE: J19017-A_8b.dwg		17-19017	
		CONTROLLER ID:	PAGE NUMBER:
		A	8b

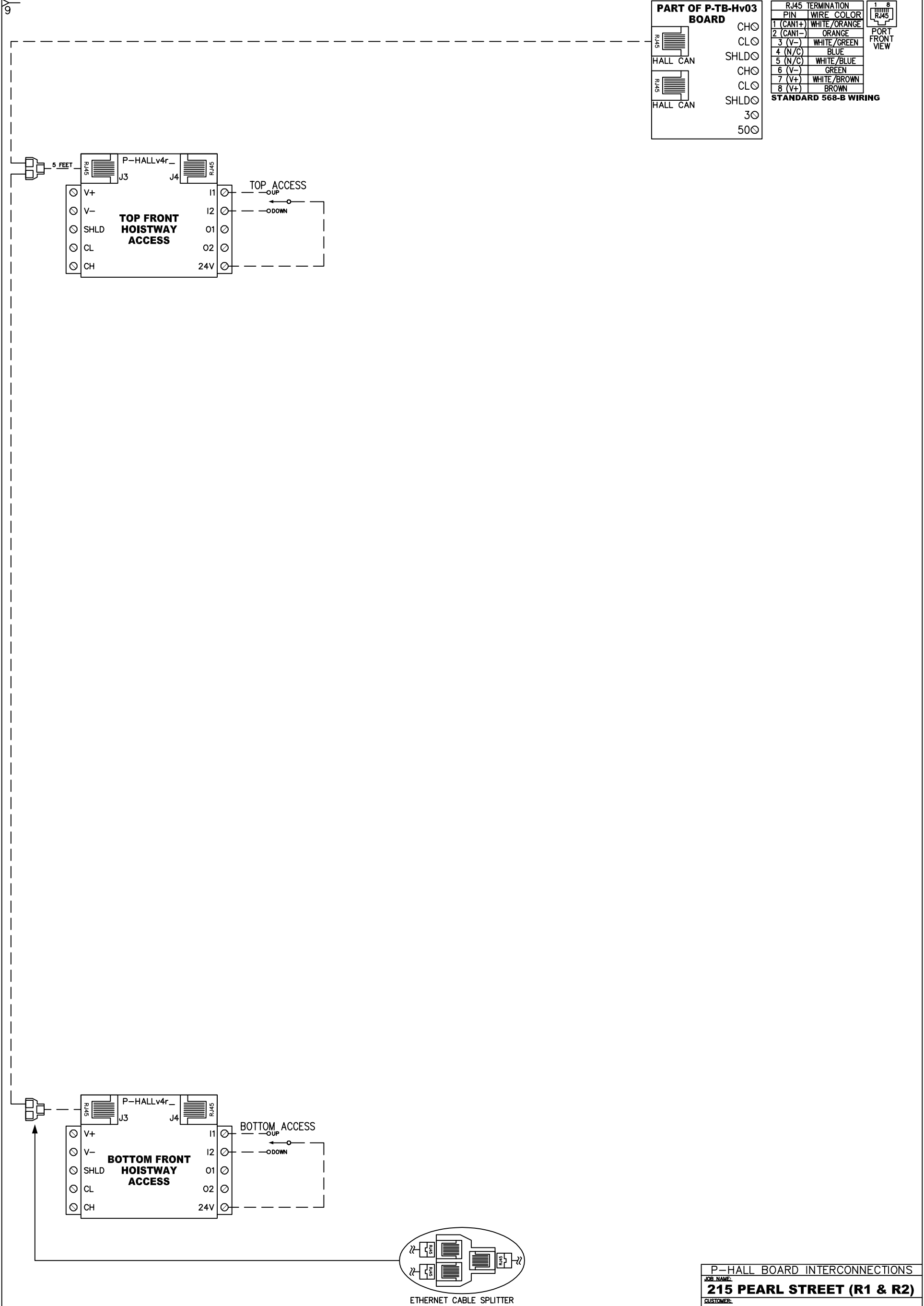


COP P-CNEX BOARD – EXPANSION I/O			
JOB NAME: 215 PEARL STREET (R1 & R2)			
CUSTOMER: G-TECH ASSOCIATES, LLC.			
ENGINEERED BY: Jason Kirlis	DATE: 07/14/17	REVISION DATE:	
		CONTROLLER MODEL: PIXEL AC VECTOR-GL-L2	
6150 WAREHOUSE WAY SACRAMENTO, CA 95826 USA PHONE: (800)829-8106 FAX: (916)428-1728 www.elevatorcontrols.com		JOB NUMBER: 17-19017	
M_PIXEL-8b.dwg FILE: J19017-B_8b.dwg	08/23/16	CONTROLLER ID: B	PAGE NUMBER: 8b

PAGE 8b



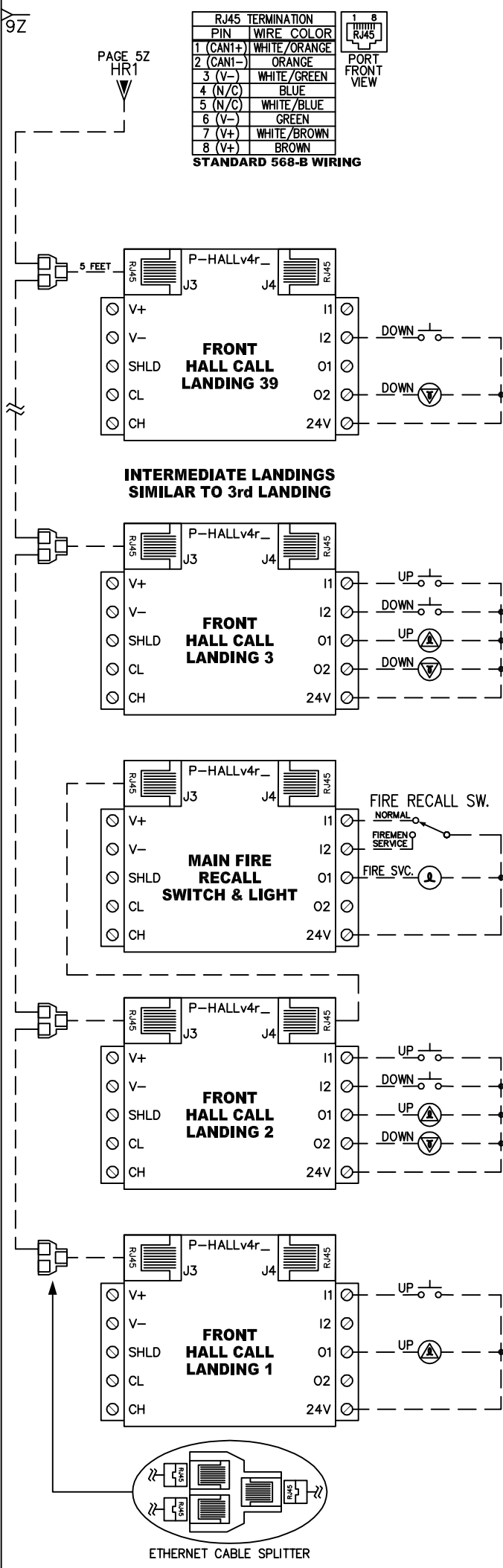
COP P-CNEX BOARD - EXPANSION I/O			
JOB NAME:			
215 PEARL STREET (R1 & R2)			
CUSTOMER:			
G-TECH ASSOCIATES, LLC.			
ENGINEERED BY:	DATE:	REVISION DATE:	
Jason Kirlis	07/14/17		
			
6150 WAREHOUSE WAY SACRAMENTO, CA 95826 USA PHONE: (800)829-8106 FAX: (916)428-1728 www.elevatorcontrols.com			
M_PIXEL-8b.dwg		08/23/16	
FILE: J19017-A_8c.dwg			
CONTROLLER MODEL:		PIXEL AC VECTOR-GL-L2	
JOB NUMBER:		17-19017	
CONTROLLER ID:		A	
PAGE NUMBER:		8c	



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: 215 PEARL STREET (R1 & R2)			
CUSTOMER: G-TECH ASSOCIATES, LLC.			
ENGINEERED BY: Jason Kirlis	DATE: 07/14/17	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-GL-L2	
		JOB NUMBER: 17-19017	
		CONTROLLER ID:	PAGE NUMBER:
		M_PIXEL-9.dwg FILE: J19017_9.dwg	03/28/16



- 2]EPI CONTACT IS OPEN FOR NORMAL POWER & CLOSED FOR EMERGENCY POWER
- 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 QR4Z).
 3. USING 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.

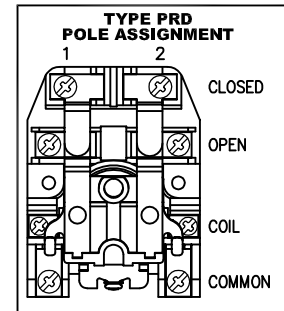
P-HALL BOARD INTERCONNECTIONS			
JOB NAME:			
215 PEARL STREET (R1 & R2)			
CUSTOMER:			
G-TECH ASSOCIATES, LLC.			
ENGINEERED BY:	DATE:	REVISION DATE:	
Jason Kirlis	07/14/17	03/24/2017 JPK	
 ELEVATOR CONTROLS 6150 WAREHOUSE WAY SACRAMENTO, CA 95826 USA PHONE: (800)829-8106 FAX: (916)428-1728 www.elevatorcontrols.com		CONTROLLER MODEL:	
		PIXEL AC VECTOR-GL-L2	
		JOB NUMBER:	
		17-19017	
		CONTROLLER ID:	
A			
M_PIXEL-9.dwg		03/24/16	
FILE: J19017-A_9Z.dwg			
		CONTROLLER ID:	PAGE NUMBER:
		A	9Z

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	7 NO NC	8 NO NC	
AA	MOTOR CONTACTOR	3	4	/	/	/	/	/	/	/	/	/
BH	BRAKE HOLD	32	4	/	/							
BHA	BRAKE HOLD (EMERGENCY BRAKE)	14	5b	/	/							
BK	BRAKE ENABLE	31	4	/	/		/					
BK2	BRAKE ENABLE #2	16	4	/	/							
EB1	EMERGENCY BRAKE 1	32	3	/	/							
EB2	EMERGENCY BRAKE 2	32	3	/	/							
EBK	EMERGENCY BRAKE	33	2	/	/							
EBX1	EMERGENCY BRAKE AUX. 1	32	3	/	/							
EBX2	EMERGENCY BRAKE AUX. 2	32	3	/	/							
LTO	CAB LIGHT & FAN CONTROL [TOC]	14	6	/	/							
P	RUN ENABLE	31	4	/	/	/	/					
RUN	DRIVE ON SIGNAL	32	4	/	/							

NOTE: AA #4-#8 CONTACTS ARE AUXILIARY CONTACTS
P #5 CONTACT IS A AUXILIARY CONTACT

CAR A ONLY
CAR B ONLY

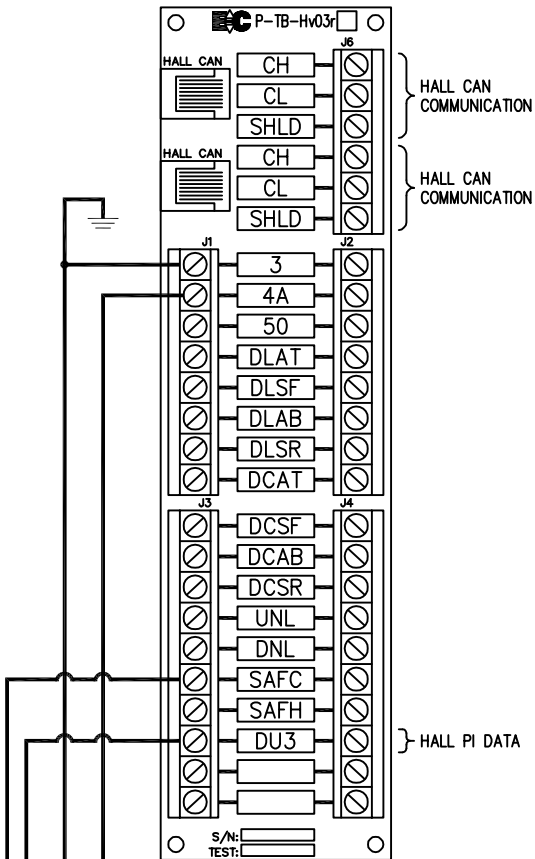
STANDARD	FGR (FORCE GUIDED)
(NUMBER INDICATES POLE AND FIXED CONTACT)	
	EC INTERNAL CONTROLLER WIRING
	PC BOARD TRACE
	FIELD WIRING (BY CUSTOMER)
	HARNESS (IDC) TERMINAL
	SCREW TERMINAL PCB MOUNTED
	PANEL MOUNT SCREW TERMINAL
	HIGH POWER TERMINAL BLOCKS
	MICROPROCESSOR OUTPUT
	SAFETY MICROPROCESSOR OUTPUT
	SAFETY F.P.G.A. OUTPUT
	OUTPUT W/ REPLACEABLE TRANSISTOR
	MICROPROCESSOR INPUT
	SAFETY MICROPROCESSOR INPUT
	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 JUMPED POSITION
	PC BOARD DIP SWITCH (9 POSITION) ON POSITION OFF POSITION
	GROUND (EARTH GROUND)
	MECHANICAL OPERATED CAM SWITCH
	VANE SWITCH
	DRIVING MACHINE OPERATED SWITCH



CONTACT COUNT & NOMENCLATURE			
JOB NAME: 215 PEARL STREET (R1 & R2)			
CUSTOMER: G-TECH ASSOCIATES, LLC.			
ENGINEERED BY: Jason Kirlis		DATE: 07/14/17	
		REVISION DATE:	
			
6150 WAREHOUSE WAY SACRAMENTO, CA 95826 USA PHONE: (916) 428-1106 FAX: (916) 428-1728 www.elevatorcontrols.com		CONTROLLER MODEL: PIXEL AC VECTOR-GL-L2 JOB NUMBER: 17-19017	
M_PIXEL - 10.dwg FILE: j19017_10.dwg		CONTROLLER ID: A & B	
01/01/17		PAGE NUMBER: 10	

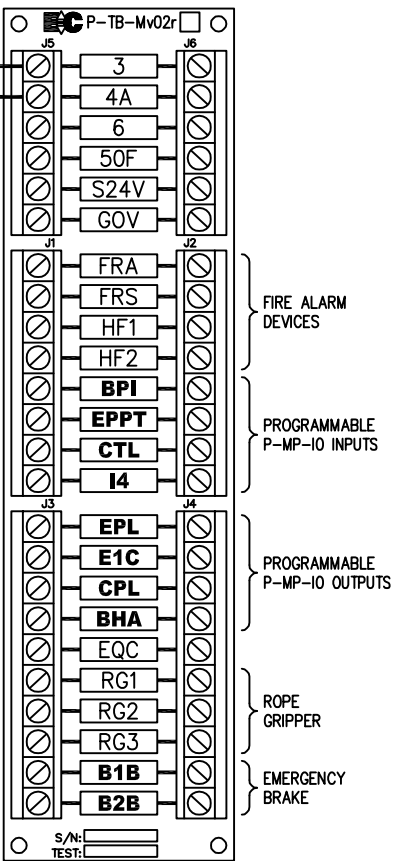
HOISTWAY TERMINALS

(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)
(4) 10-203-005 BEIGE PANEL MOUNT TERMINAL BLOCKS

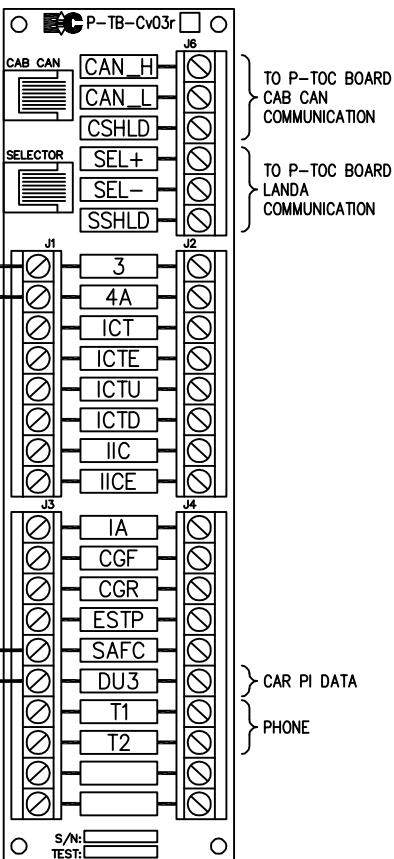


PANEL MOUNT TERMINALS
BELOW P-TB-M BOARD

B1			B1	MAIN BRAKE
B2			B2	
EPTC			EPTC	SHUTDOWN
GVT			GVT	
				GOVERNOR SHEAVE TENSION

CARTOP TERMINALS FOR TRAVELER CABLE

(1) 17-002-138v03 PIXEL TERMINAL BLOCK BOARD - CARTOP (P-TB-C)
(12) 10-203-005 BEIGE PANEL MOUNT TERMINAL BLOCKS



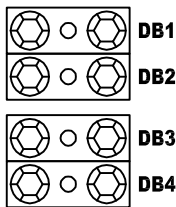
PANEL MOUNT TERMINALS
BELOW P-TB-C BOARD

TOC1			TOC1	TOC POWER
TOC2			TOC2	
WHT			WHT	CAB POWER (115VAC)
BLK			BLK	
GRN			GRN	
BPIX			BPIX	
21A			21A	
21B			21B	
21C			21C	
21D			21D	
22			22	

RESISTOR BOX TERMINALS IN MAIN CONTROLLER

(5) 10-203-005 BEIGE PANEL MOUNT TERMINAL BLOCKS
(2) 10-201-012 POWER TERMINAL BLOCK 600V 175A 2 POLE

RBP1			RBP1
RBP2			RBP2
EBH			EBH
FN1			FN1
FN2			FN2

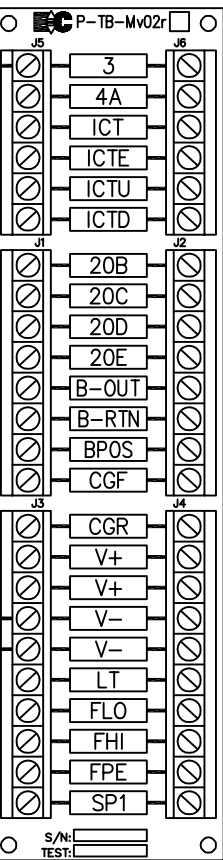
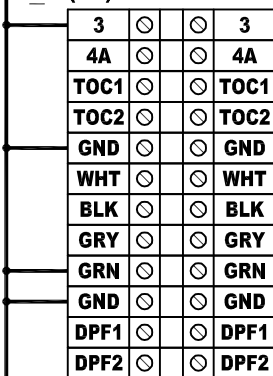


TERMINALS IN MAIN CONTROLLER

(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)
(12) 10-203-005 BEIGE PANEL MOUNT TERMINAL BLOCKS



PIXEL CONTROLLER TERMINAL LABELS & ORDER			
JOB NAME: 215 PEARL STREET (R1 & R2)			
CUSTOMER: G-TECH ASSOCIATES, LLC.			
ENGINEERED BY: Jason Kirlis	DATE: 07/14/17	REVISION DATE:	
		CONTROLLER MODEL: PIXEL AC VECTOR-GL-L2	
6150 WAREHOUSE WAY SACRAMENTO, CA 95826 USA PHONE: (800)829-8106 FAX: (916)428-1728 www.elevatorcontrols.com		JOB NUMBER: 17-19017	
M_PIXEL-TS.dwg FILE: J19017_TS.dwg		03/24/16	PAGE NUMBER: A & B TS