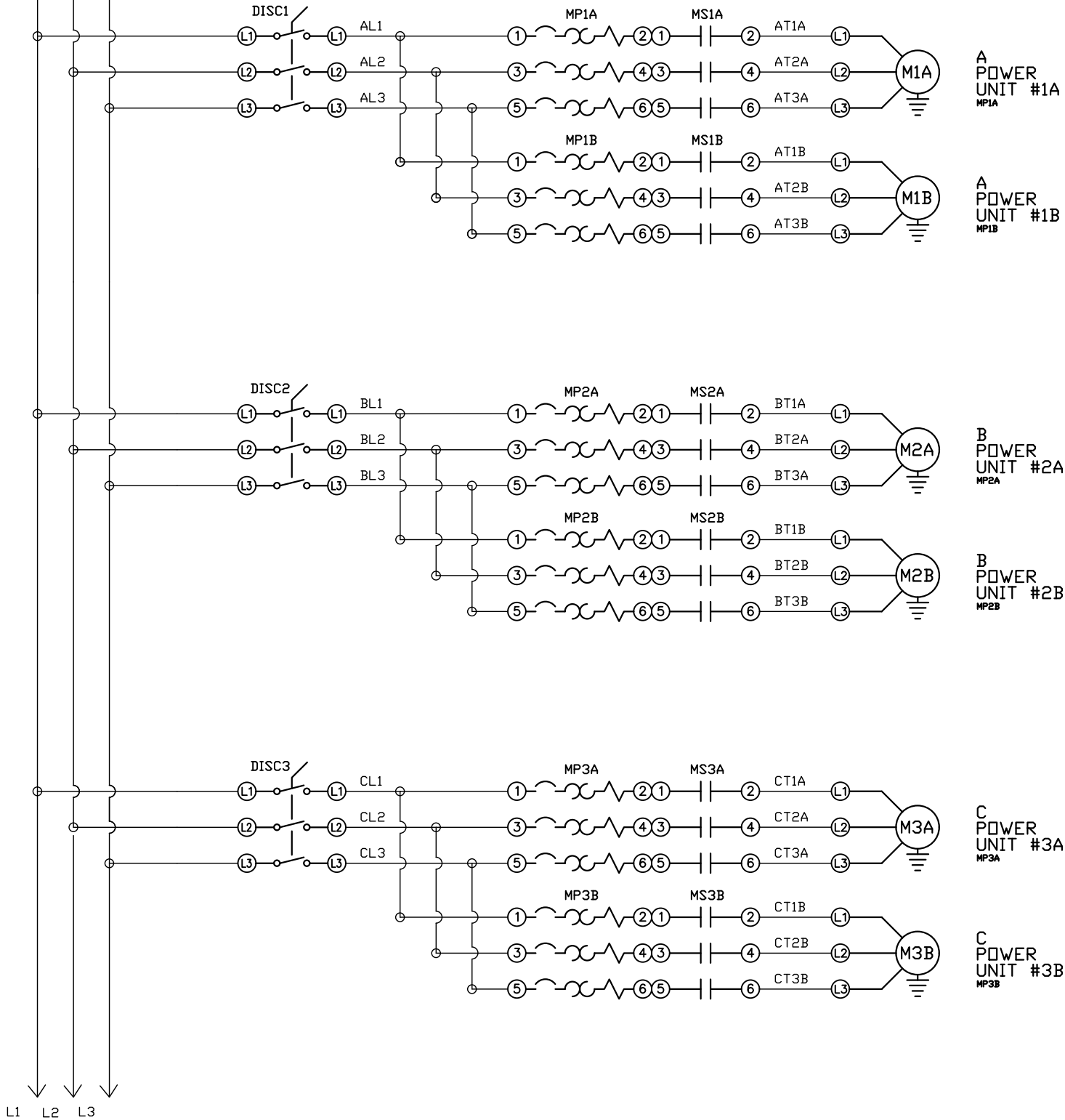


FIELD FURNISHED
DISCONNECT IS
REQUIRED

SEE NOTES ON
DATA TABLE PAGE



REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	10/03/13	PXEC0029	AJL	KMD
G-2	ADDED MORE TERMINAL BLOCKS	03/19/25	PXEC0628	JRD	STK
H-1	ADDED GROUND TERMINAL BLOCKS	05/27/25	PXEC0688	JRD	WMM
J-1	ADDED PLEX ISOLATION	07/22/25	PXEC0639	SEK	WMM

OPTIONAL:

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DRAWN BY	CHECKED BY	ENGINEERING APPROVAL
AJL	KMD	DMS
10/03/13	10/03/13	10/03/13

PANEL TYPE

QUAD MED 2xSCROLL PER PLEX HMI, NFPA

DWG. TYPE WIRING

DWG. NO.

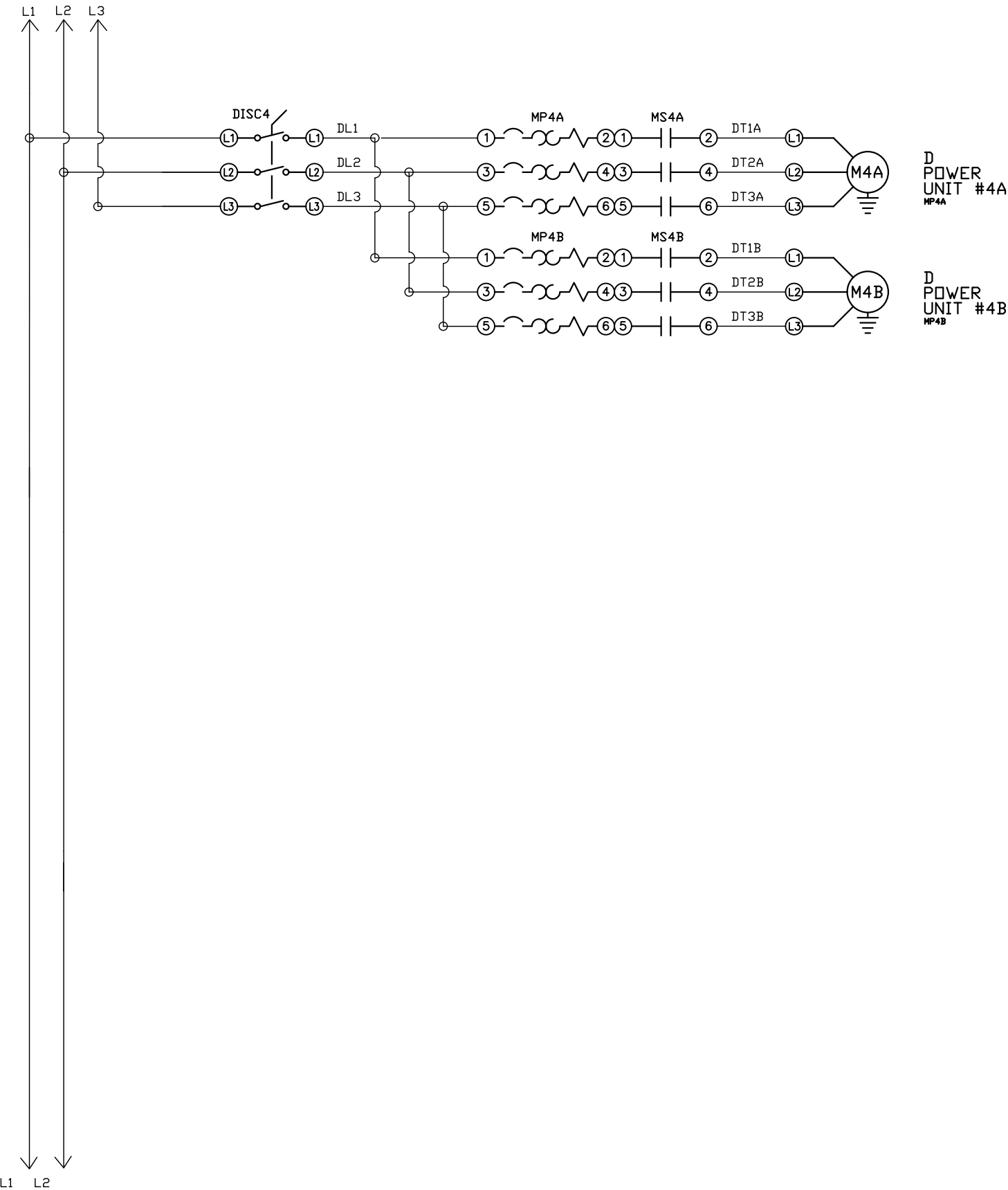
PXMI-S416X

SHEET

W-1

SIZE

B



REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	10/03/13	PXEC0029	AJL	KMD
G-2	ADDED MORE TERMINAL BLOCKS	03/19/25	PXEC0628	JRD	STK
H-1	ADDED GROUND TERMINAL BLOCKS	05/27/25	PXEC0688	JRD	WMM
J-1	ADDED PLEX ISOLATION	07/22/25	PXEC0639	SEK	WMM

OPTIONAL:

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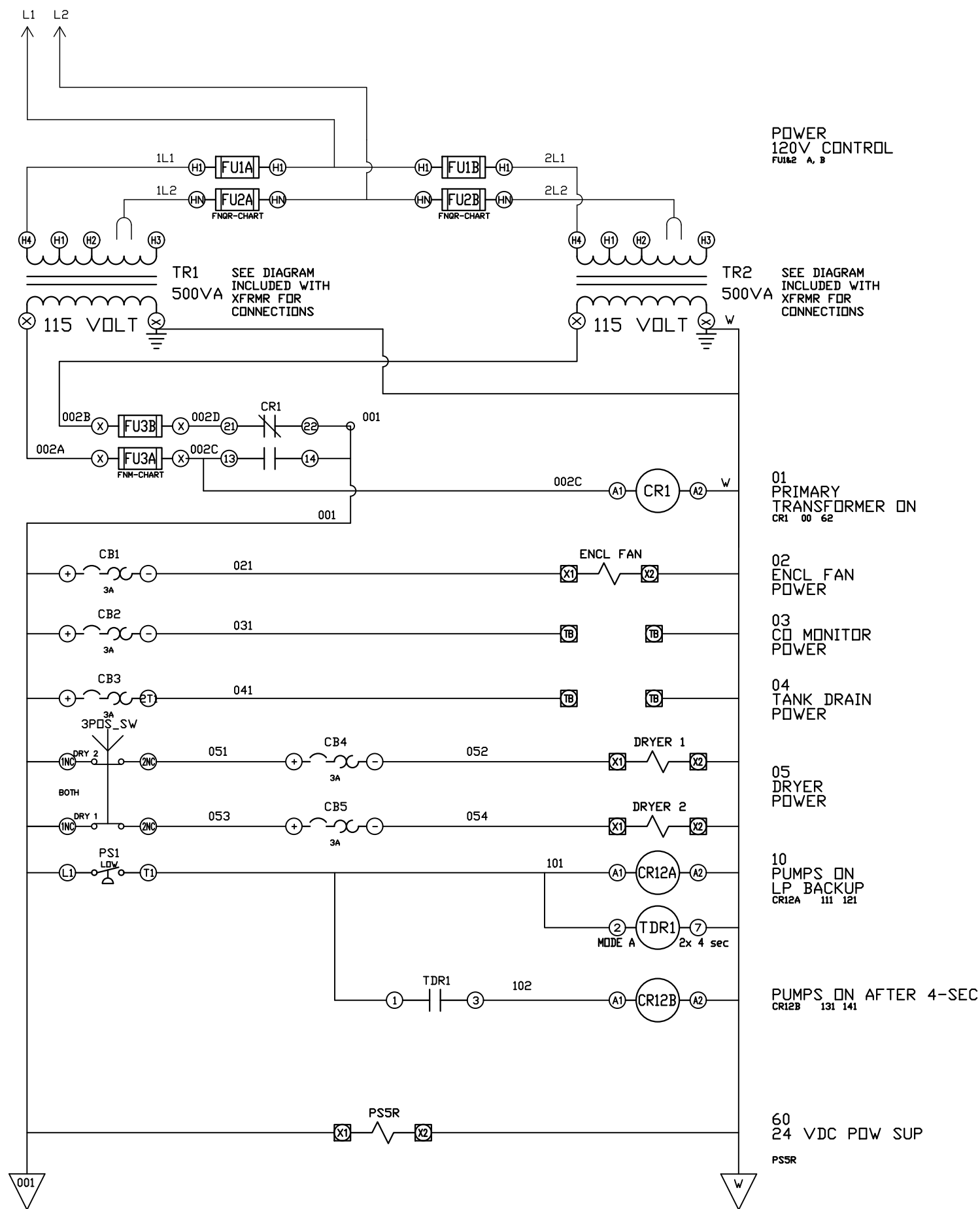
DRAWN BY	CHECKED BY	ENGINEERING APPROVAL
AJL	KMD	DMS
10/03/13	10/03/13	10/03/13

PANEL TYPE
QUAD MED 2xSCROLL PER PLEX HMI, NFPA

DWG. TYPE
WIRING

DWG. NO.
PXMI-S416X

SHEET	SIZE
W-2	B



REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	10/03/13	PXEC0029	AJL	KMD
G-2	ADDED MORE TERMINAL BLOCKS	03/19/25	PXEC0628	JRD	STK
H-1	ADDED GROUND TERMINAL BLOCKS	05/27/25	PXEC0688	JRD	WMM
J-1	ADDED PLEX ISOLATION	07/22/25	PXEC0639	SEK	WMM

OPTIONAL:

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DRAWN BY	CHECKED BY	ENGINEERING APPROVAL
AJL	KMD	DMS
10/03/13	10/03/13	10/03/13

PANEL TYPE

QUAD MED 2xSCROLL PER PLEX HMI, NFPA

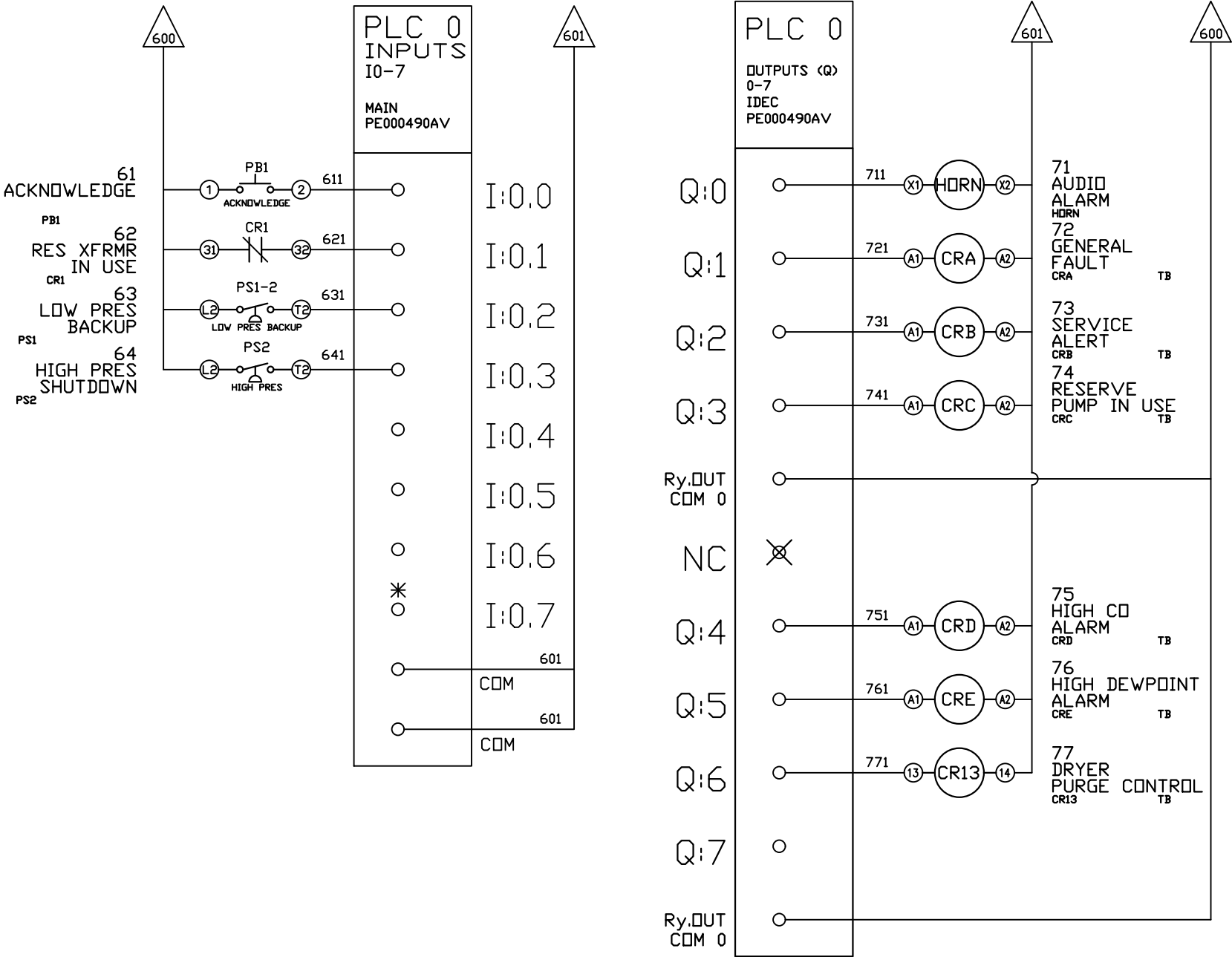
DWG. TYPE WIRING

DWG. NO. PXMI-S416X

SHEET	SIZE
W-3	B

PXMI-S416X C1

REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	10/03/13	PXEC0029	AJL	KMD
G-2	ADDED MORE TERMINAL BLOCKS	03/19/25	PXEC0628	JRD	STK
H-1	ADDED GROUND TERMINAL BLOCKS	05/27/25	PXEC0688	JRD	WMM
J-1	ADDED PLEX ISOLATION	07/22/25	PXEC0639	SEK	WMM



*FACTORY TEST JUMPER LOCATION

OPTIONAL:

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DRAWN BY	CHECKED BY	ENGINEERING APPROVAL
AJL	KMD	DMS
10/03/13	10/03/13	10/03/13

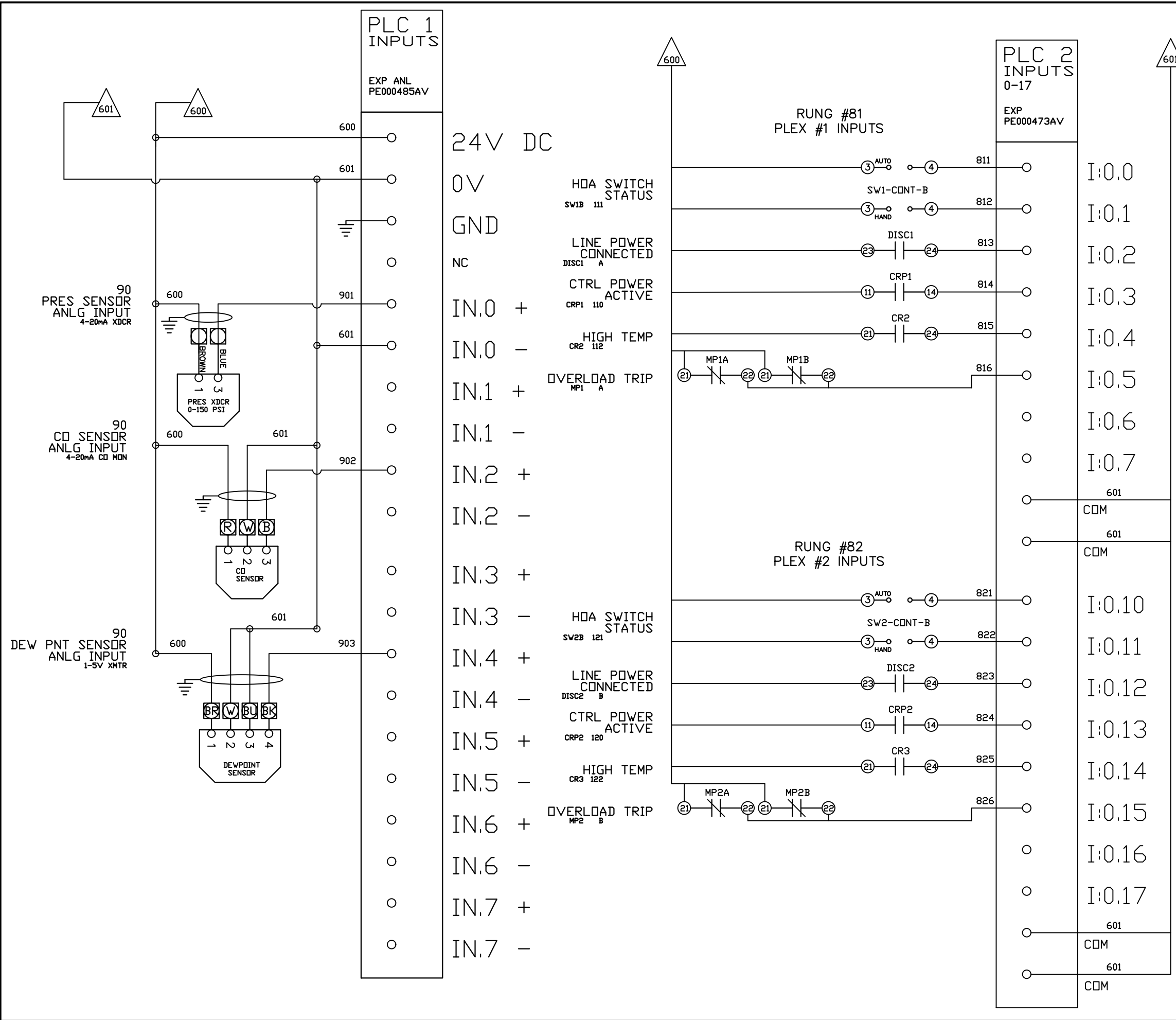
PANEL TYPE
QUAD MED 2xSCROLL PER PLEX HMI, NFPA

DWG. TYPE
WIRING

DWG. NO.
PXMI-S416X

SHEET W-7	SIZE B
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PXMI-S416X C1



REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	10/03/13	PXEC0029	AJL	KMD
G-2	ADDED MORE TERMINAL BLOCKS	03/19/25	PXEC0628	JRD	STK
H-1	ADDED GROUND TERMINAL BLOCKS	05/27/25	PXEC0688	JRD	WMM
J-1	ADDED PLEX ISOLATION	07/22/25	PXEC0639	SEK	WMM

OPTIONAL:

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DRAWN BY	CHECKED BY	ENGINEERING APPROVAL
AJL	KMD	DMS
10/03/13	10/03/13	10/03/13

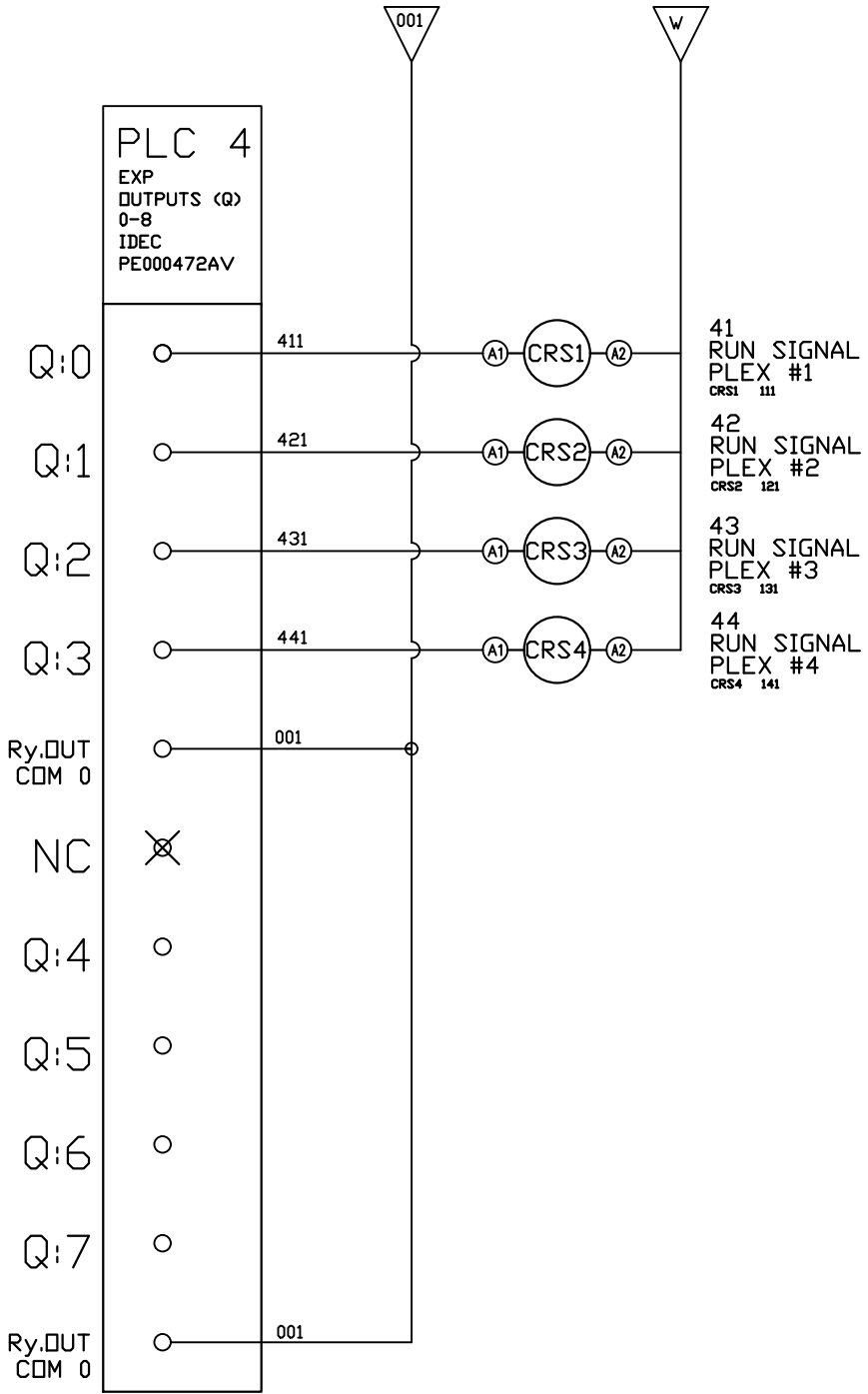
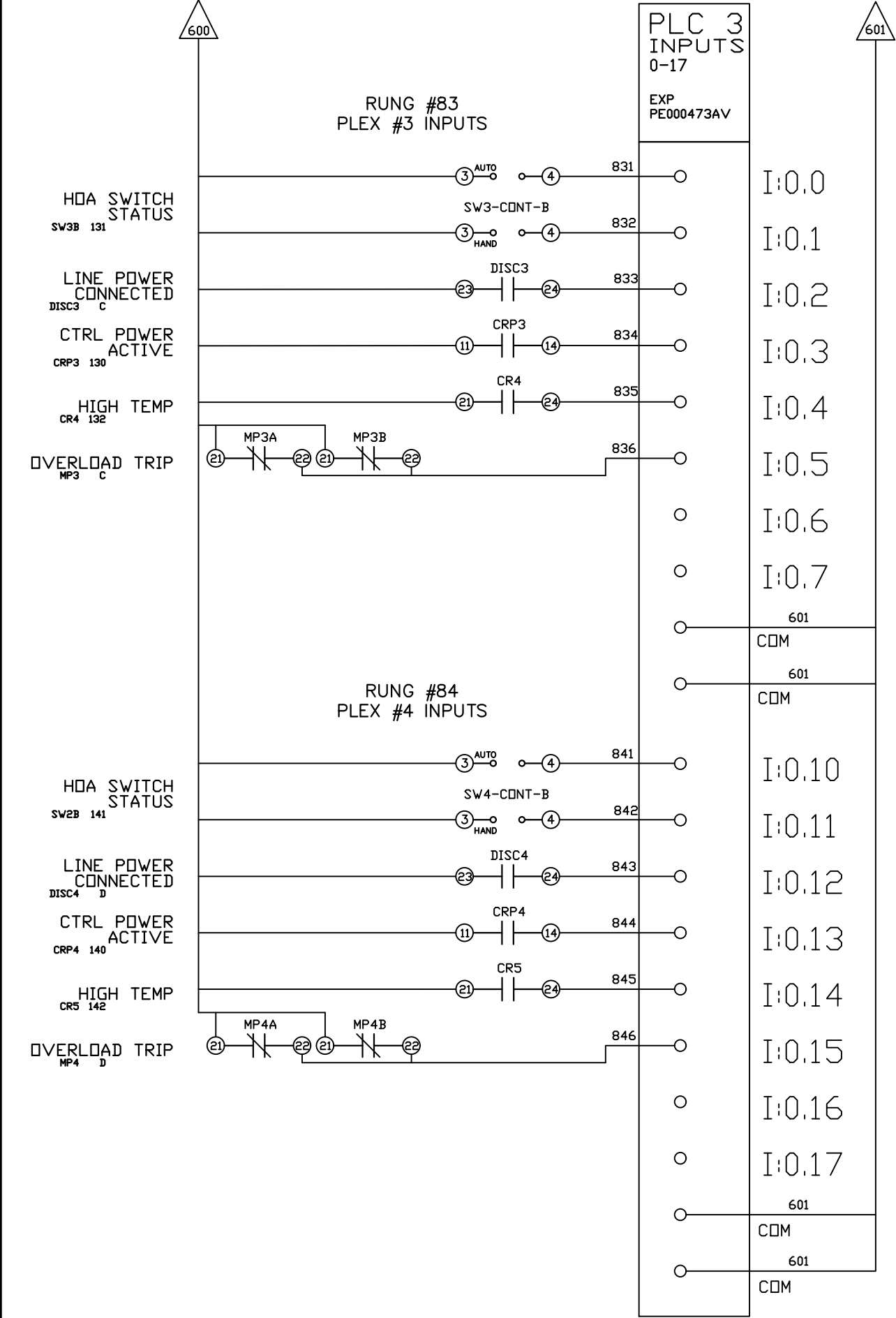
PANEL TYPE
QUAD MED 2xSCROLL PER PLEX HMI, NFPA

DWG. TYPE WIRING

DWG. NO.
PXMI-S416X

SHEET	SIZE
W-8	B

REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	10/03/13	PXEC0029	AJL	KMD
G-2	ADDED MORE TERMINAL BLOCKS	03/19/25	PXEC0628	JRD	STK
H-1	ADDED GROUND TERMINAL BLOCKS	05/27/25	PXEC0688	JRD	WMM
J-1	ADDED PLEX ISOLATION	07/22/25	PXEC0639	SEK	WMM



OPTIONAL:

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DRAWN BY	CHECKED BY	ENGINEERING APPROVAL
AJL	KMD	DMS
10/03/13	10/03/13	10/03/13

PANEL TYPE

QUAD MED 2xSCROLL PER PLEX HMI, NFPA

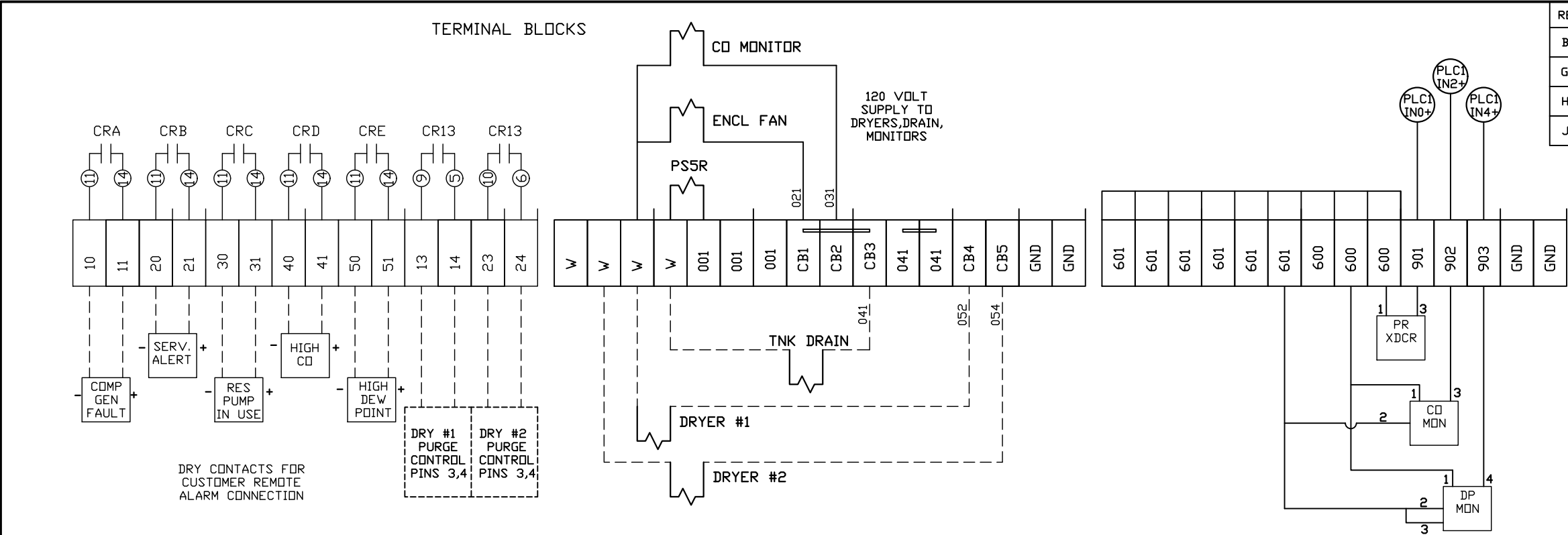
DWG. TYPE WIRING

DWG. NO.

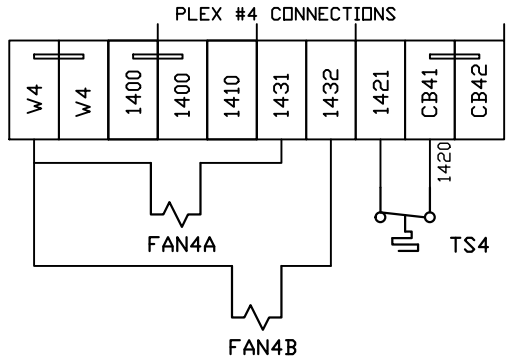
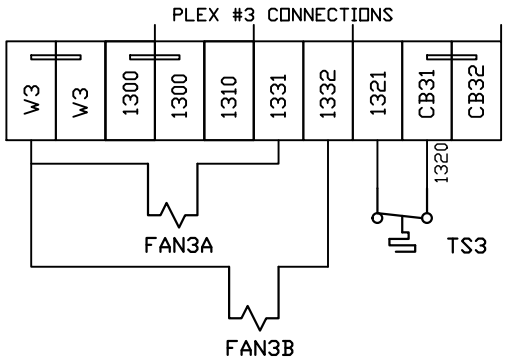
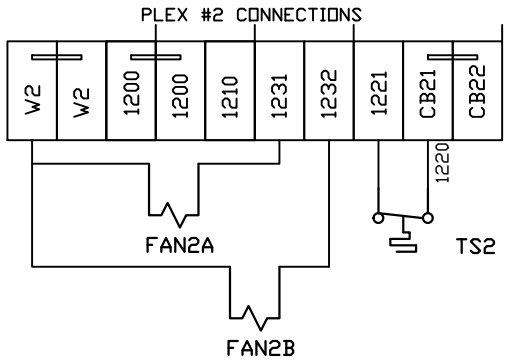
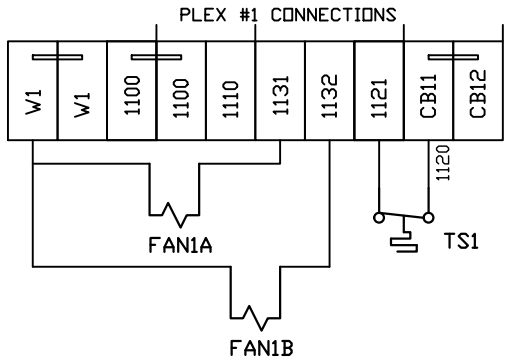
PXMI-S416X

SHEET	SIZE
W-9	B

PXMI-S416X C1



REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	10/03/13	PXEC0029	AJL	KMD
G-2	ADDED MORE TERMINAL BLOCKS	03/19/25	PXEC0628	JRD	STK
H-1	ADDED GROUND TERMINAL BLOCKS	05/27/25	PXEC0688	JRD	WMM
J-1	ADDED PLEX ISOLATION	07/22/25	PXEC0639	SEK	WMM



FIELD WIRING NOTES:

- PANEL GROUND MUST BE CONNECTED TO EARTH GROUND
- TRANSFORMER IS SIZED FOR LOADS SHOWN ON DRAWING ONLY.
- FIELD WIRING INDICATED BY -----, WIRE TO BE COPPER RATED AT 75° C.
- ALL ALARM DRY CONTACTS ARE CLOSED FOR NORMAL OPERATION AND OPEN IN ALARM.
- DRY CONTACT RATING: 30V DC/2A (resistive load, inductive load L/R = 7 ms)
- USE CAT-5 CABLE W/RJ45 CONNECTOR FOR ETHERNET CONNECTION TO COMMUNICATION NETWORK OR BAS SYSTEM

OPTIONAL:

POWEREX™

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DRAWN BY	CHECKED BY	ENGINEERING APPROVAL
AJL	KMD	DMS
10/03/13	10/03/13	10/03/13

PANEL TYPE

QUAD MED 2xSCROLL PER PLEX HMI, NFPA

DWG. TYPE

WIRING

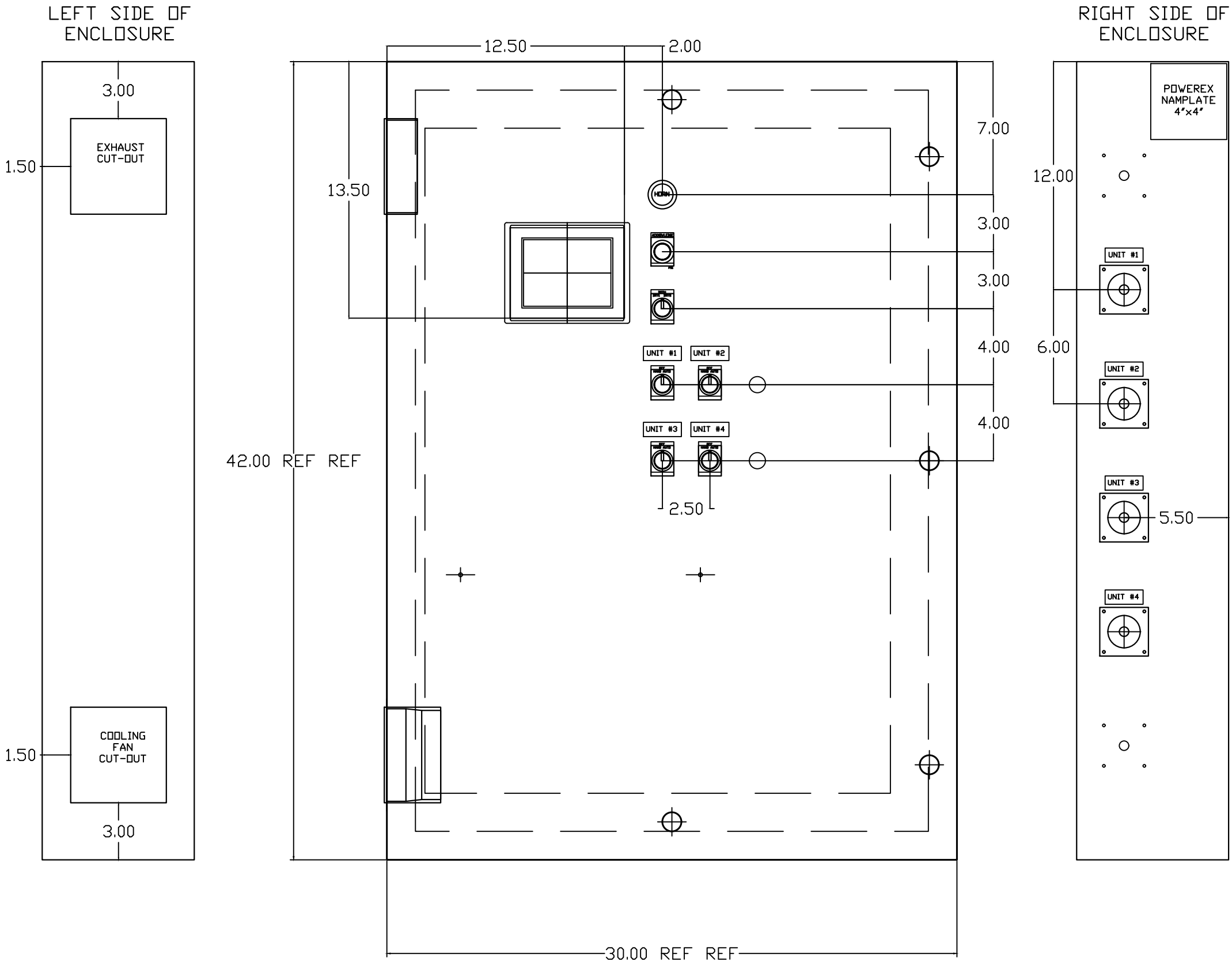
DWG. NO.

PXMI-S416X

SHEET	SIZE
W-10	B

PXMI-S416X C1

REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	10/03/13	PXEC0029	AJL	KMD
G-2	ADDED MORE TERMINAL BLOCKS	03/19/25	PXEC0628	JRD	STK
H-1	ADDED GROUND TERMINAL BLOCKS	05/27/25	PXEC0688	JRD	WMM
J-1	ADDED PLEX ISOLATION	07/22/25	PXEC0639	SEK	WMM



OPTIONAL:

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DRAWN BY	CHECKED BY	ENGINEERING APPROVAL
AJL	KMD	DMS
10/03/13	10/03/13	10/03/13

PANEL TYPE

QUAD MED 10HP SCROLL
HMI, NFPA

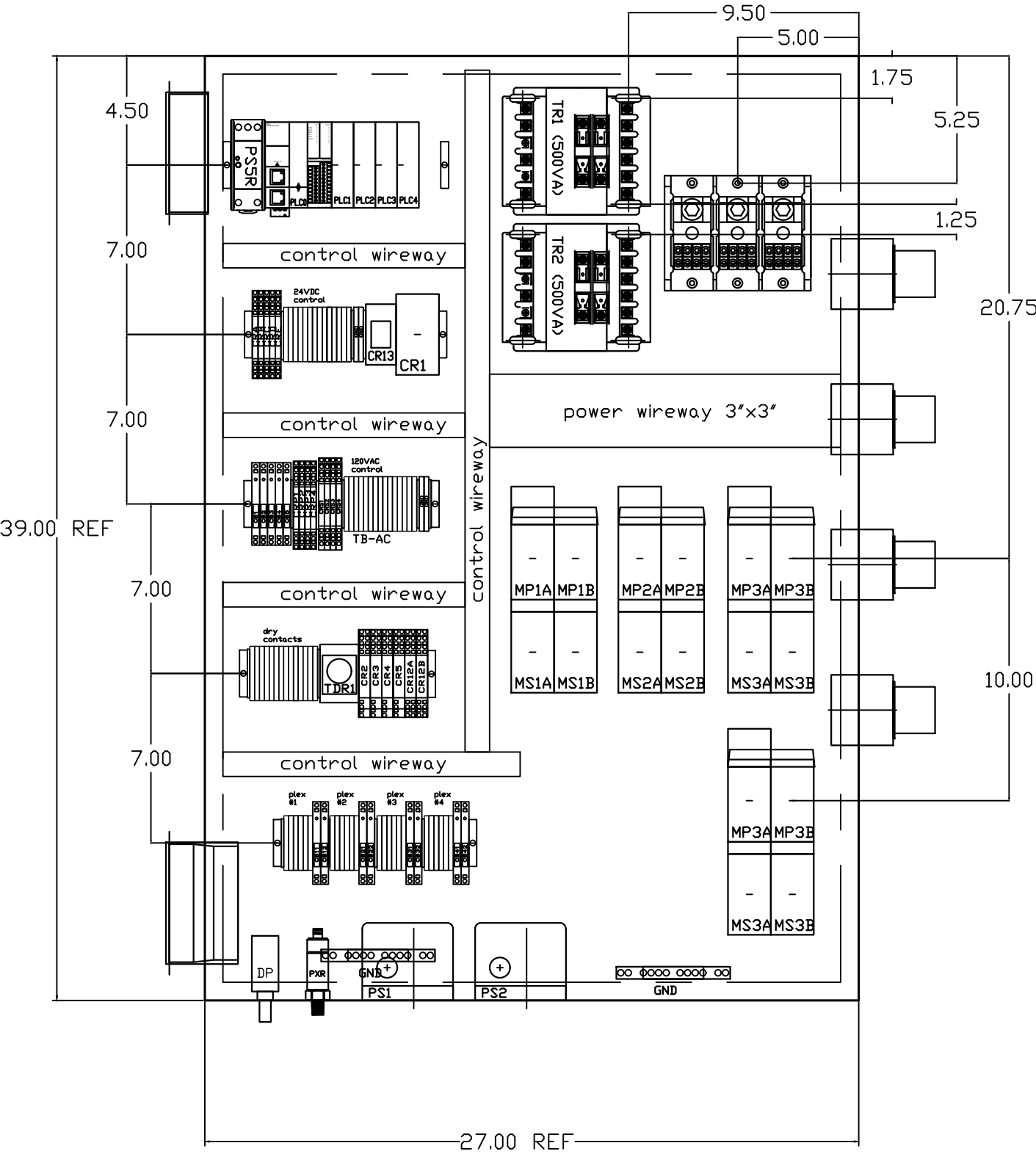
DWG. TYPE LAYOUT

DWG. NO. PXMI-S416X

SHEET	SIZE
L-1	B

PXMI-S416X C1

REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	10/03/13	PXEC0029	AJL	KMD
G-2	ADDED MORE TERMINAL BLOCKS	03/19/25	PXEC0628	JRD	STK
H-1	ADDED GROUND TERMINAL BLOCKS	05/27/25	PXEC0688	JRD	WMM
J-1	ADDED PLEX ISOLATION	07/22/25	PXEC0639	SEK	WMM



OPTIONAL:

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DRAWN BY	CHECKED BY	ENGINEERING APPROVAL
AJL	KMD	DMS
10/03/13	10/03/13	10/03/13

PANEL TYPE

QUAD MED 2xSCROLL PER PLEX HMI, NFPA

DWG. TYPE LAYOUT

DWG. NO. PXMI-S416X

SHEET	SIZE
L-2	B

PXMI-S416X C1

TABLE 1									
PANEL DATA 3ø – 60 Hz 500VA CONTROL CIRCUIT									
(A) LOAD SPECIFICATIONS					(B) BRANCH CIRCUIT PROTECTION – PROVIDED BY INSTALLER				
PANEL PART NUMBER	MOTOR SIZE EACH	(A) POWER (V/PH)	(A) MOTOR LOAD EACH (FLA)	PANEL LOAD TOTAL (FLA)	NONTIME DELAY FUSE	TIME-DELAY FUSE	INVERSE-TIME CIRCUIT BREAKER		
PBMIS416A2AJ	5(X2)	208V/3ø	14.0	114	150A	125A	150A		
PBMIS416A3AJ	5(X2)	230V/3ø	12.7	104	150A	125A	125A		
PBMIS416A4AJ	5(X2)	460V/3ø	6.33	53	70A	60A	70A		
NOTE– ADJUST OVERCURRENT PROTECTION DEVICE NOT TO EXCEED 115% OF MOTOR NAMEPLATE FLA VALUE									

- NOTES:
- RECOMMENDED TIGHTENING TORQUES FOR WIRE TERMINALS:
208-575 VOLT POWER 35 POUND INCHES
120 VOLT POWER AND CONTROL 15 POUND INCHES
 - PANEL GROUND MUST BE CONNECTED TO EARTH GROUND
 - INSTALLER TO PROVIDE MAIN DISCONNECTING DEVICE FOR THIS ELECTRICAL ASSEMBLY. SHORT CIRCUIT PROTECTION IS RECOMMENDED. SEE TABLE 1. IF PROVIDING PANEL SHORT CIRCUIT PROTECTION USING TIME DELAY (CLASS J) FUSES, PANEL SCCR IS 65KA. OTHERWISE, PANEL SCCR IS 5KA.
 - ALL WIRES MUST BE LABELED ON BOTH ENDS
 - TRANSFORMER IS SIZED FOR LOADS SHOWN ON DRAWING ONLY. DO NOT CONNECT ANY OTHER DEVICES
 - △ -INDICATES A DRAWING WIRE CONNECTION TO ANOTHER PAGE.
 - SERVICE DISCONNECT USAGE – turn HOA switch to OFF position. Turn disconnect OF SAME UNIT to OFF position. Associated PLEX will be isolated for maintenance purposes. After completing maintenance, turn disconnect to ON position and return HOA switch to AUTO. This will return PLEX to normal operation.

CONTROL TRANSFORMERS - 500VA									
REPLACEMENT	208	230	460 380	575	WIRE TYPE TABLE				
FUSE TYPE	VOLT	VOLT	VOLT	VOLT					
FU1,2A FU1,2B	FNQR	6A	5A	5A	4A	120VAC 0VAC 24VDC 0VDC GND CUSTOMER SUPPLY	001-599,1100+ W 600-1099 601 - 01-99	16-18AWG 16-18AWG 16-18AWG 16-18AWG VARIES 16-18AWG	RED/BLK WHT/BLK PURPLE PURPLE GREEN YELLOW
SEE XFMR FOR CONNECTIONS									

SEQUENCE OF OPERATIONS

During normal operation the PBMI controller will signal the Lead compressor to run when pressure drops below lead cut-in set-point and stop when the pressure reaches the lead cut-out set-point. Lead alternation to the next pump, will occur with each lead run signal or every 10-minutes (which ever happens first). If demand cannot be satisfied by the lead pump, the lag pump(s) will start and stop based upon the lag cut-in and cut-out set-points. When more than one pump is running, lead alternation will occur when the lowest cut-out set-point is satisfied, or after 10-minutes (which ever happens first). The HOA switch’s place the pump in the following modes: Hand-turns pump on to run continuous. Off-disables pump from running. Auto-places pump in the “ready mode” and will start and stop based on sequence described above.

All plex configurations include a hardwired Back-up pressure switch circuit should a control failure occur. This circuit will call all pumps on and off based on the reserve pressure switch set-points.

Expandable systems include all control devices, operators, and programming for the maximum number of pumps (or plex) required. To expand the system: navigate to the “service screen” and enter the number of pumps.

Additional information and descriptions can be accessed through the HMI “service info” screen by pressing Sequence of Operations button.

REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	10/03/13	PXEC0029	AJL	KMD
G-2	ADDED MORE TERMINAL BLOCKS	03/19/25	PXEC0628	JRD	STK
H-1	ADDED GROUND TERMINAL BLOCKS	05/27/25	PXEC0688	JRD	WMM
J-1	ADDED PLEX ISOLATION	07/22/25	PXEC0639	SEK	WMM

OPTIONAL:



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DRAWN BY	CHECKED BY	ENGINEERING APPROVAL
AJL	KMD	DMS
10/03/13	10/03/13	10/03/13

PANEL TYPE

QUAD MED 2xSCROLL PER PLEX HMI, NFPA

DWG. TYPE DATA

DWG. NO. PXMI-S416X

SHEET	SIZE
D-1	B

PXMI-S416X C1