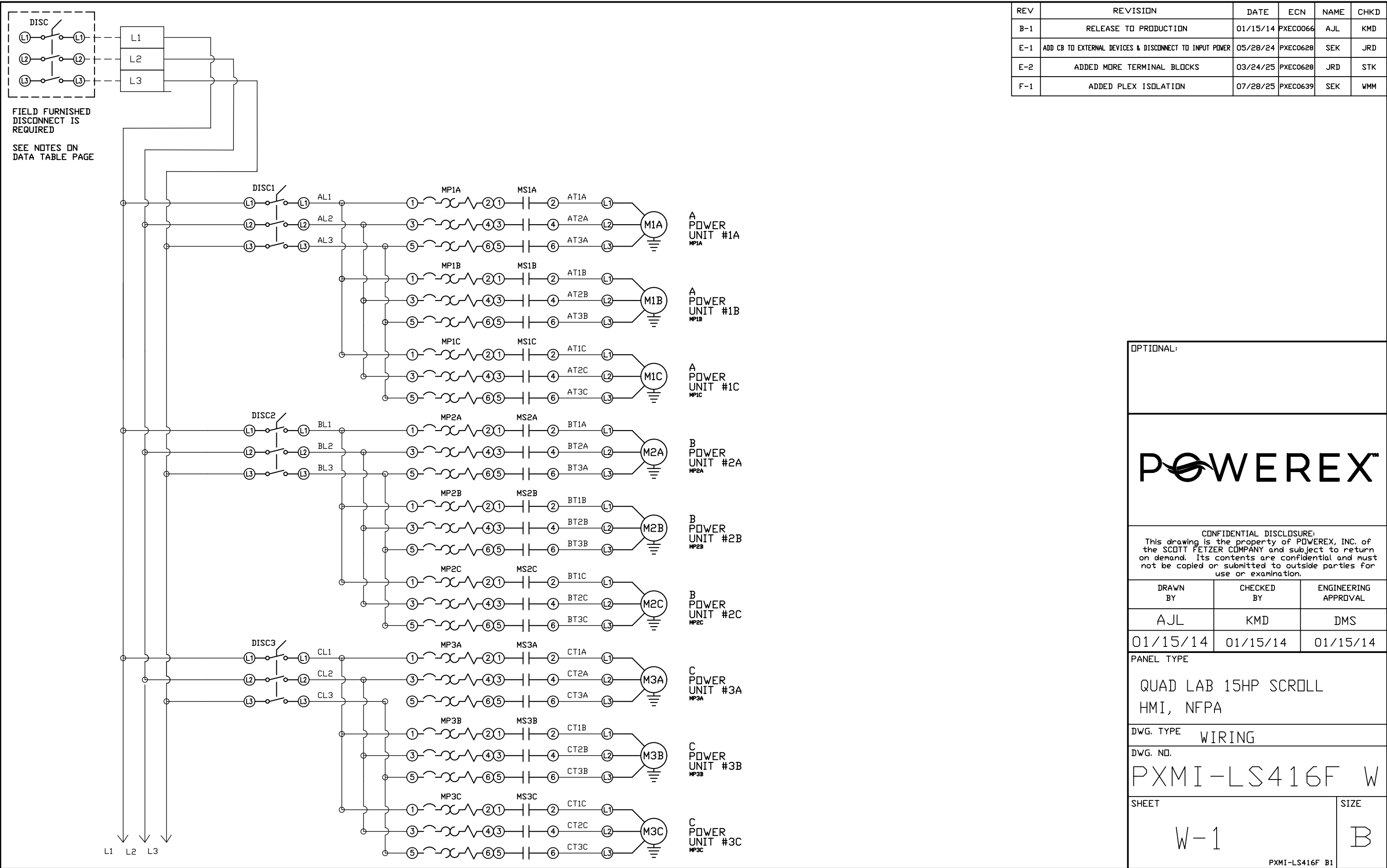




REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	01/15/14	PXEC0066	AJL	KMD
E-1	ADD CB TO EXTERNAL DEVICES & DISCONNECT TO INPUT POWER	05/28/24	PXEC0628	SEK	JRD
E-2	ADDED MORE TERMINAL BLOCKS	03/24/25	PXEC0628	JRD	STK
F-1	ADDED PLEX ISOLATION	07/28/25	PXEC0639	SEK	WMM

OPTIONAL:

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DRAWN BY	CHECKED BY	ENGINEERING APPROVAL
AJL	KMD	DMS
01/15/14	01/15/14	01/15/14

PANEL TYPE

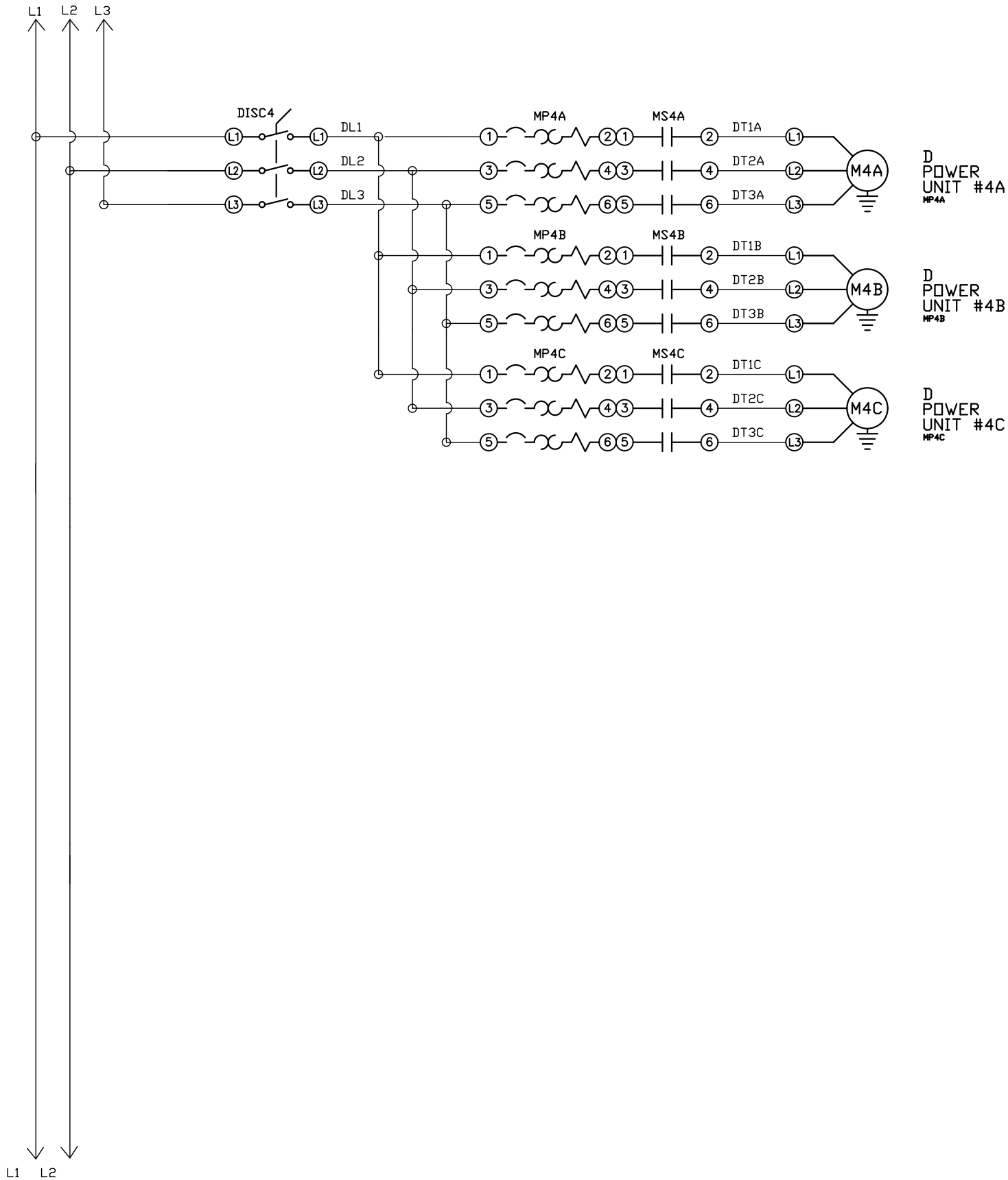
QUAD LAB 15HP SCROLL
HMI, NFPA

DWG. TYPE WIRING

DWG. NO. PXMI-LS416F W

SHEET	SIZE
W-1	B

PXMI-LS416F B1



REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	01/15/14	PXEC0066	AJL	KMD
E-1	ADD CB TO EXTERNAL DEVICES & DISCONNECT TO INPUT POWER	05/28/24	PXEC0628	SEK	JRD
E-2	ADDED MORE TERMINAL BLOCKS	03/24/25	PXEC0628	JRD	STK
F-1	ADDED PLEX ISOLATION	07/28/25	PXEC0639	SEK	WMM

OPTIONAL:

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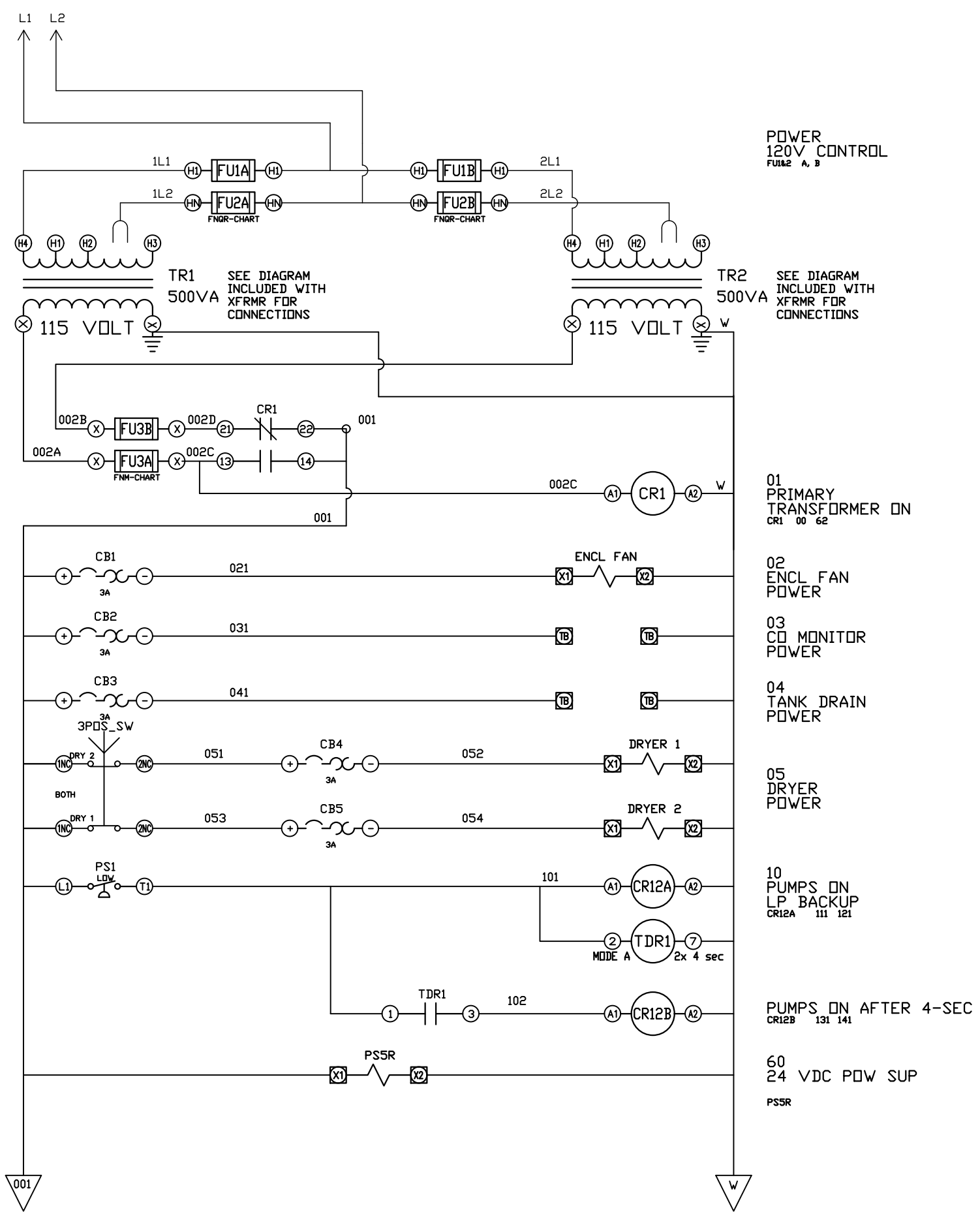
DRAWN BY	CHECKED BY	ENGINEERING APPROVAL
AJL	KMD	DMS
01/15/14	01/15/14	01/15/14

PANEL TYPE
QUAD LAB 15HP SCROLL
HMI, NFPA

DWG. TYPE
WIRING

DWG. NO.
PXMI-LS416F W

SHEET	SIZE
W-2	B



REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	01/15/14	PXEC0066	AJL	KMD
E-1	ADD CB TO EXTERNAL DEVICES & DISCONNECT TO INPUT POWER	05/28/24	PXEC0628	SEK	JRD
E-2	ADDED MORE TERMINAL BLOCKS	03/24/25	PXEC0628	JRD	STK
F-1	ADDED PLEX ISOLATION	07/28/25	PXEC0639	SEK	WMM

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DRAWN BY	CHECKED BY	ENGINEERING APPROVAL
AJL	KMD	DMS
01/15/14	01/15/14	01/15/14

PANEL TYPE

QUAD LAB 15HP SCROLL HMI, NFPA

DWG. TYPE WIRING

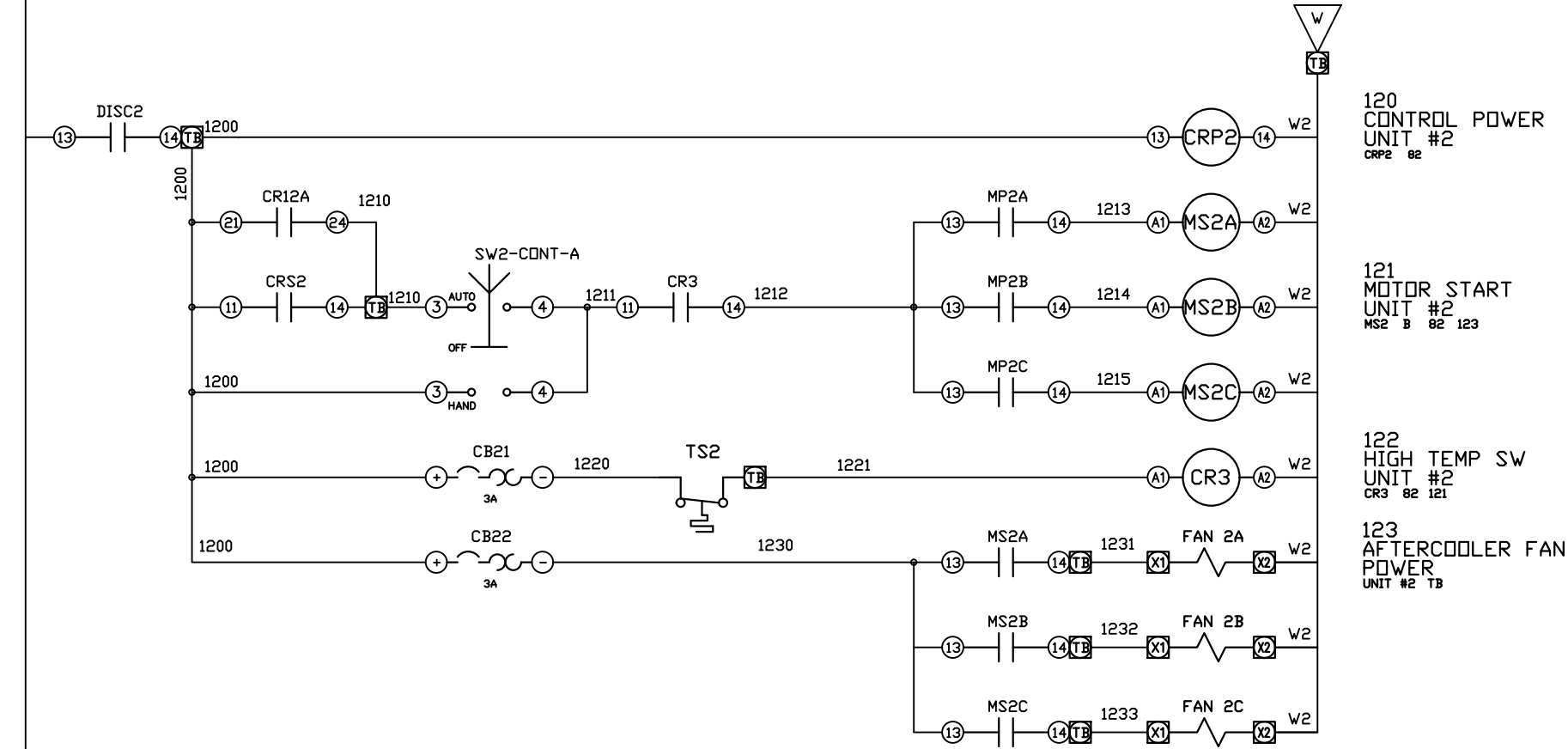
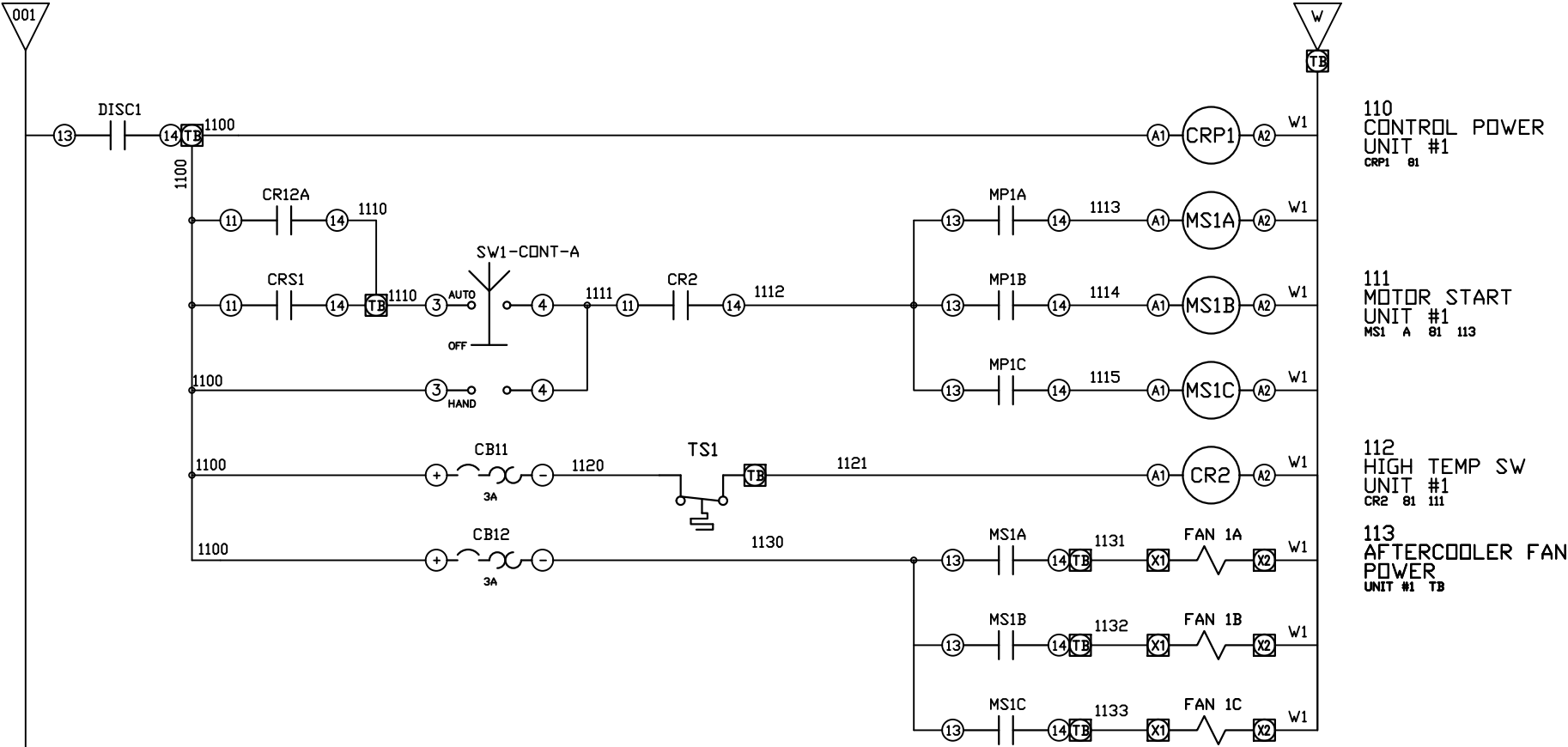
DWG. NO.

PXMI-LS416F W

SHEET	SIZE
W-3	B

PXMI-LS416F B1

REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	01/15/14	PXEC0066	AJL	DMS
E-1	ADD CB TO EXTERNAL DEVICES & DISCONNECT TO INPUT POWER	05/28/24	PXEC0628	SEK	JRD
E-2	ADDED MORE TERMINAL BLOCKS	03/24/25	PXEC0628	JRD	STK
F-1	ADDED PLEX ISOLATION	07/28/25	PXEC0639	SEK	WMM



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DRAWN BY	CHECKED BY	ENGINEERING APPROVAL
AJL	KMD	DMS
01/15/14	01/15/14	01/15/14

PANEL TYPE

QUAD LAB 15HP SCROLL
HMI, NFPA

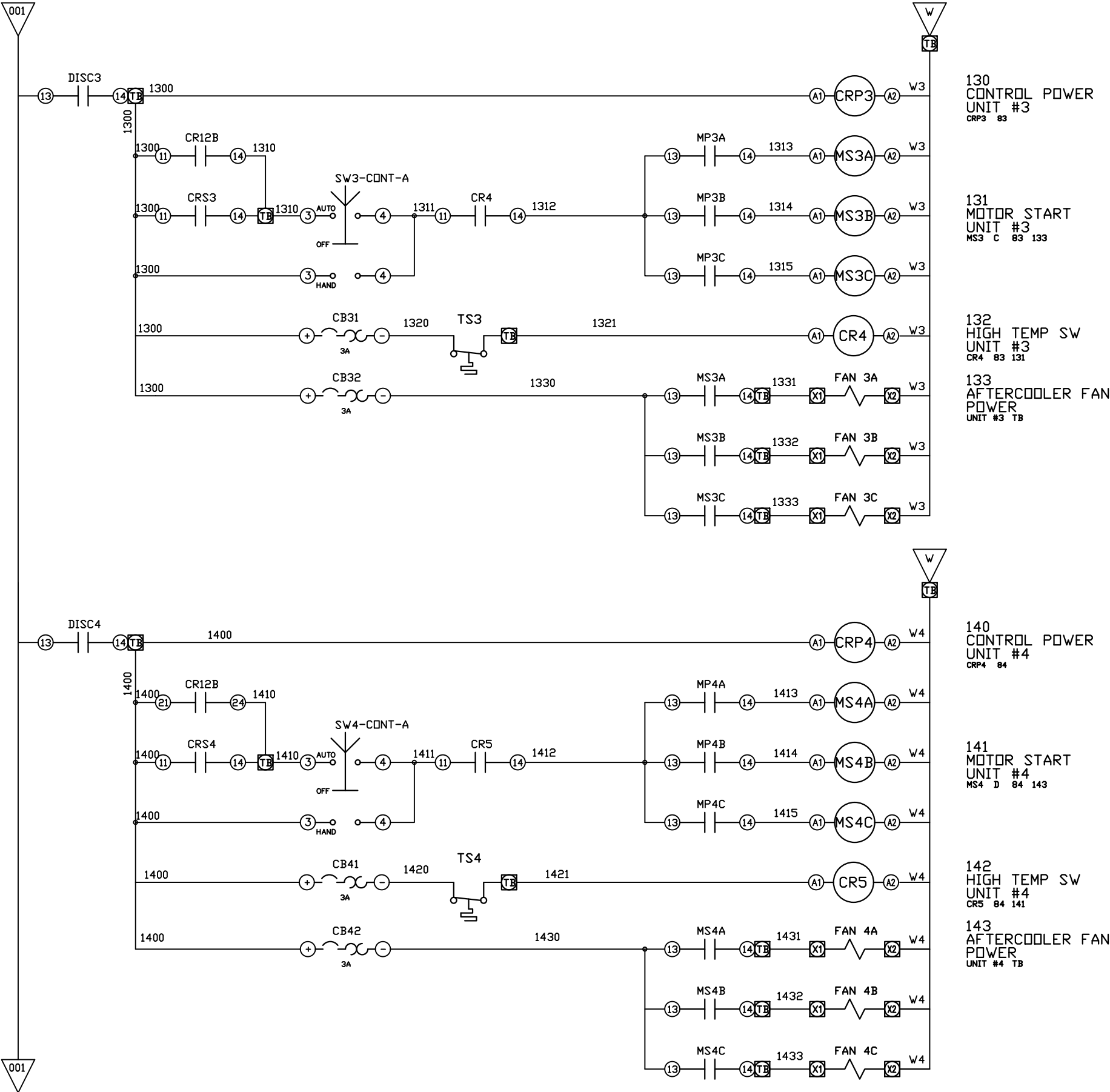
DWG. TYPE WIRING

DWG. NO.
PXMI-LS416F W

SHEET	SIZE
W-4	B

PXMI-LS416F B1

REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	01/15/14	PXEC0066	AJL	DMS
E-1	ADD CB TO EXTERNAL DEVICES & DISCONNECT TO INPUT POWER	05/28/24	PXEC0628	SEK	JRD
E-2	ADDED MORE TERMINAL BLOCKS	03/24/25	PXEC0628	JRD	STK
F-1	ADDED PLEX ISOLATION	07/28/25	PXEC0639	SEK	WMM



OPTIONAL:

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DRAWN BY	CHECKED BY	ENGINEERING APPROVAL
AJL	KMD	DMS
01/15/14	01/15/14	01/15/14

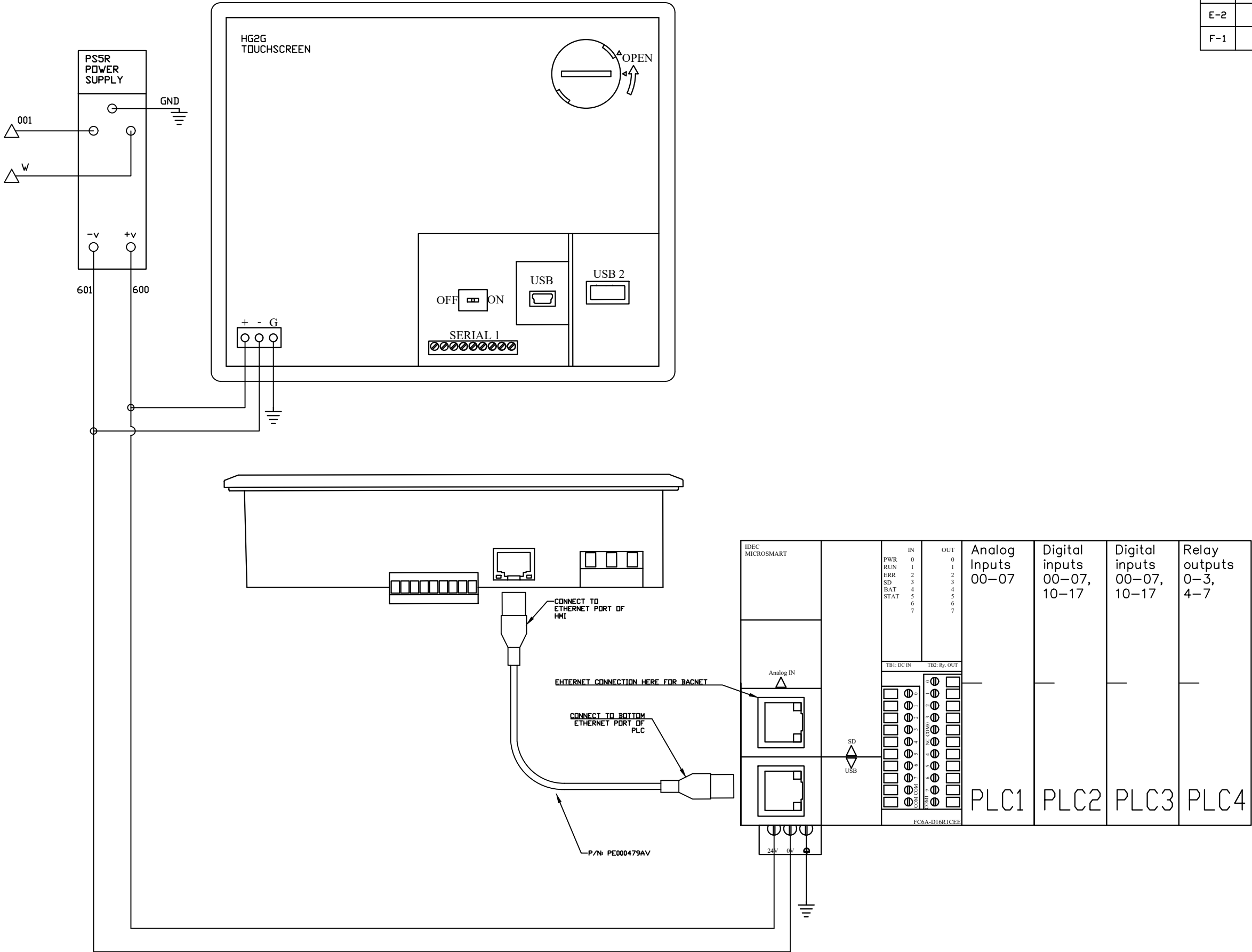
PANEL TYPE
QUAD LAB 15HP SCROLL
HMI, NFPA

DWG. TYPE
WIRING

DWG. NO.
PXMI-LS416F W

SHEET	SIZE
W-5	B

REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	01/15/14	PXEC0066	AJL	KMD
E-1	ADD CB TO EXTERNAL DEVICES & DISCONNECT TO INPUT POWER	05/28/24	PXEC0628	SEK	JRD
E-2	ADDED MORE TERMINAL BLOCKS	03/24/25	PXEC0628	JRD	STK
F-1	ADDED PLEX ISOLATION	07/28/25	PXEC0639	SEK	WMM



OPTIONAL:

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DRAWN BY	CHECKED BY	ENGINEERING APPROVAL
AJL	KMD	DMS
01/15/14	01/15/14	01/15/14

PANEL TYPE

QUAD LAB 15HP SCROLL
HMI, NFPA

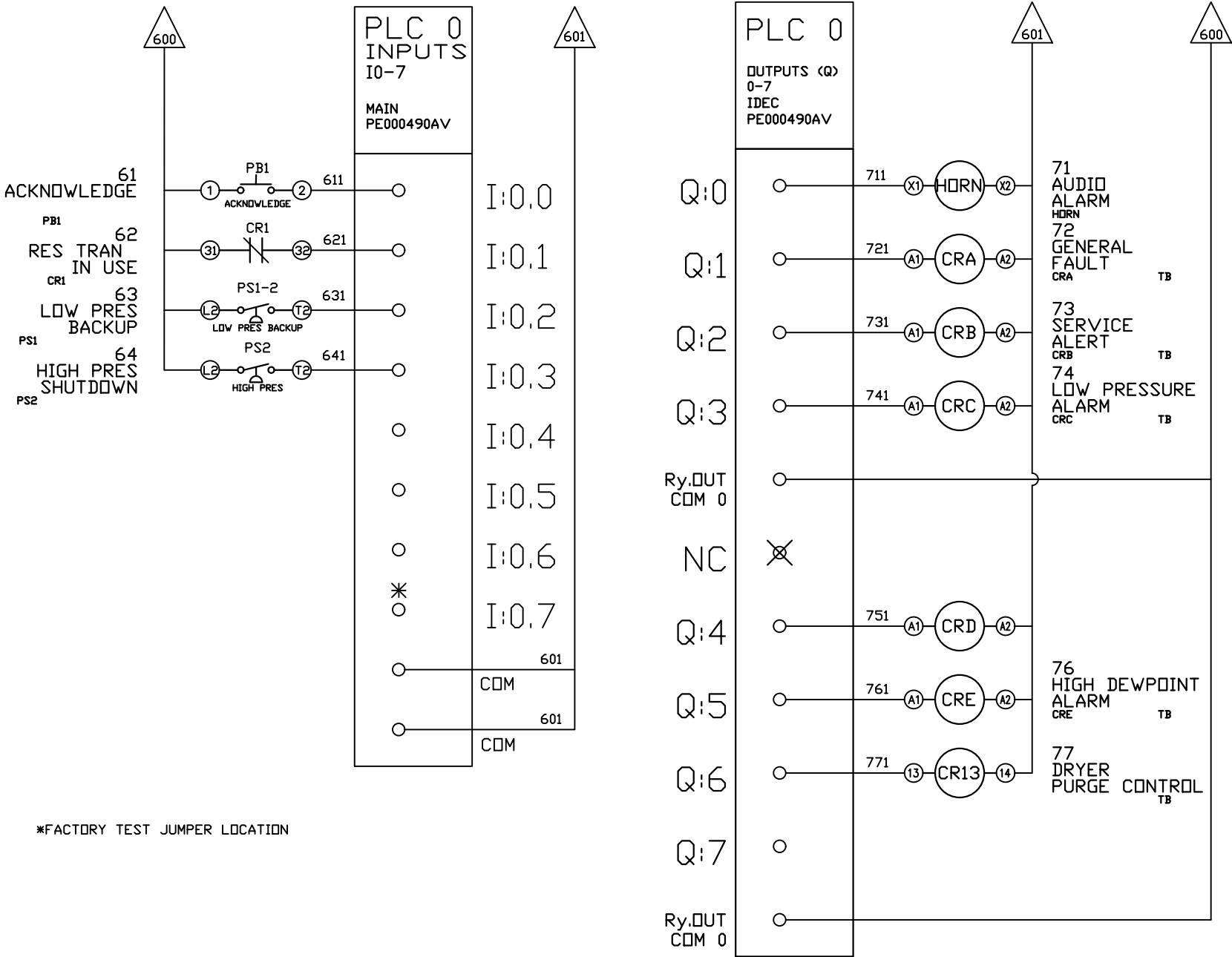
DWG. TYPE WIRING

DWG. NO.
PXMI-LS416F W

SHEET	SIZE
W-6	B

PXMI-LS416F B1

REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	01/15/14	PXEC0066	AJL	KMD
E-1	ADD CB TO EXTERNAL DEVICES & DISCONNECT TO INPUT POWER	05/28/24	PXEC0628	SEK	JRD
E-2	ADDED MORE TERMINAL BLOCKS	03/24/25	PXEC0628	JRD	STK
F-1	ADDED PLEX ISOLATION	07/28/25	PXEC0639	SEK	WMM



OPTIONAL:

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DRAWN BY	CHECKED BY	ENGINEERING APPROVAL
AJL	KMD	DMS
01/15/14	01/15/14	01/15/14

PANEL TYPE
QUAD LAB 15HP SCROLL
HMI, NFPA

DWG. TYPE WIRING

DWG. NO.

PXMI-LS416F W

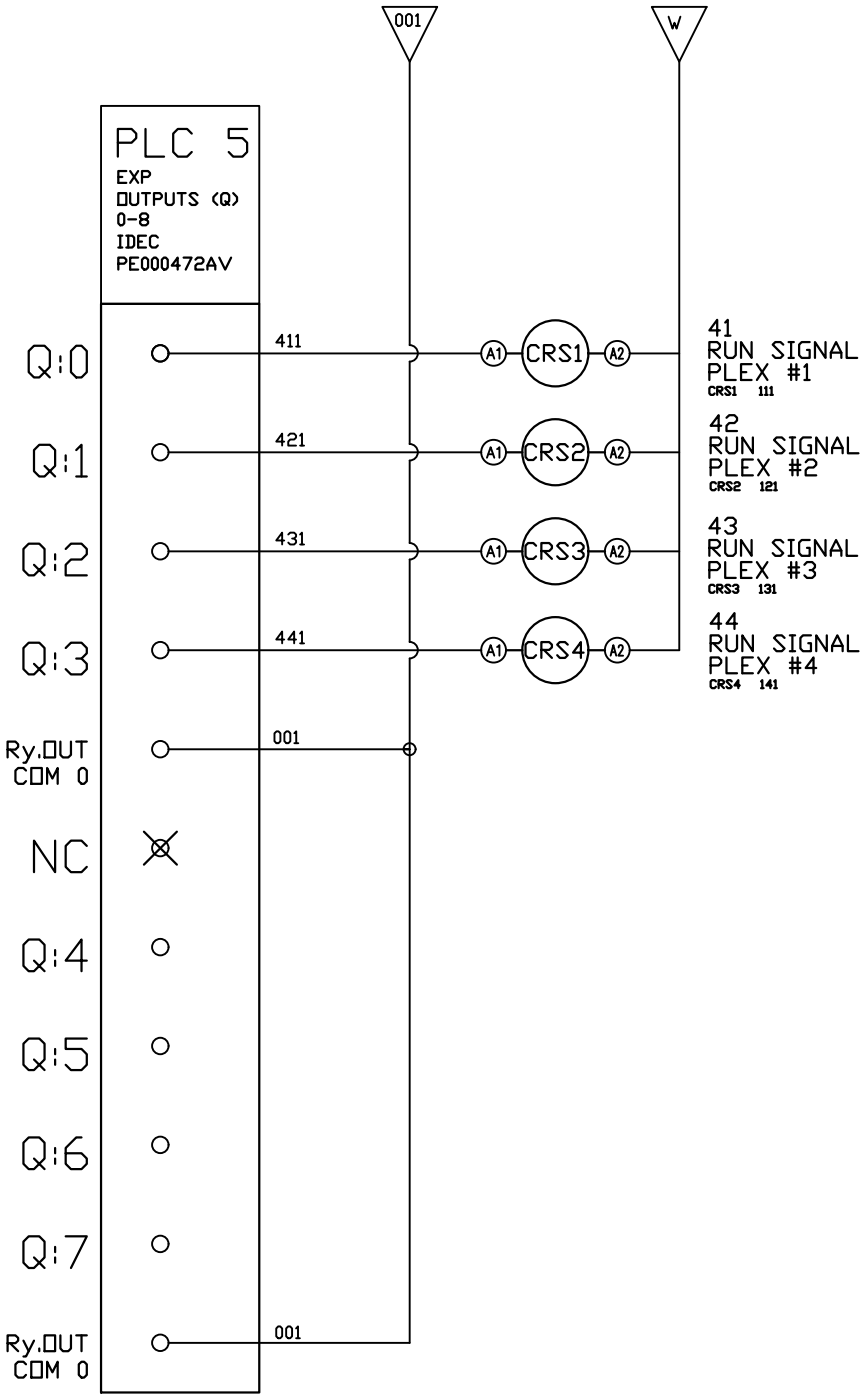
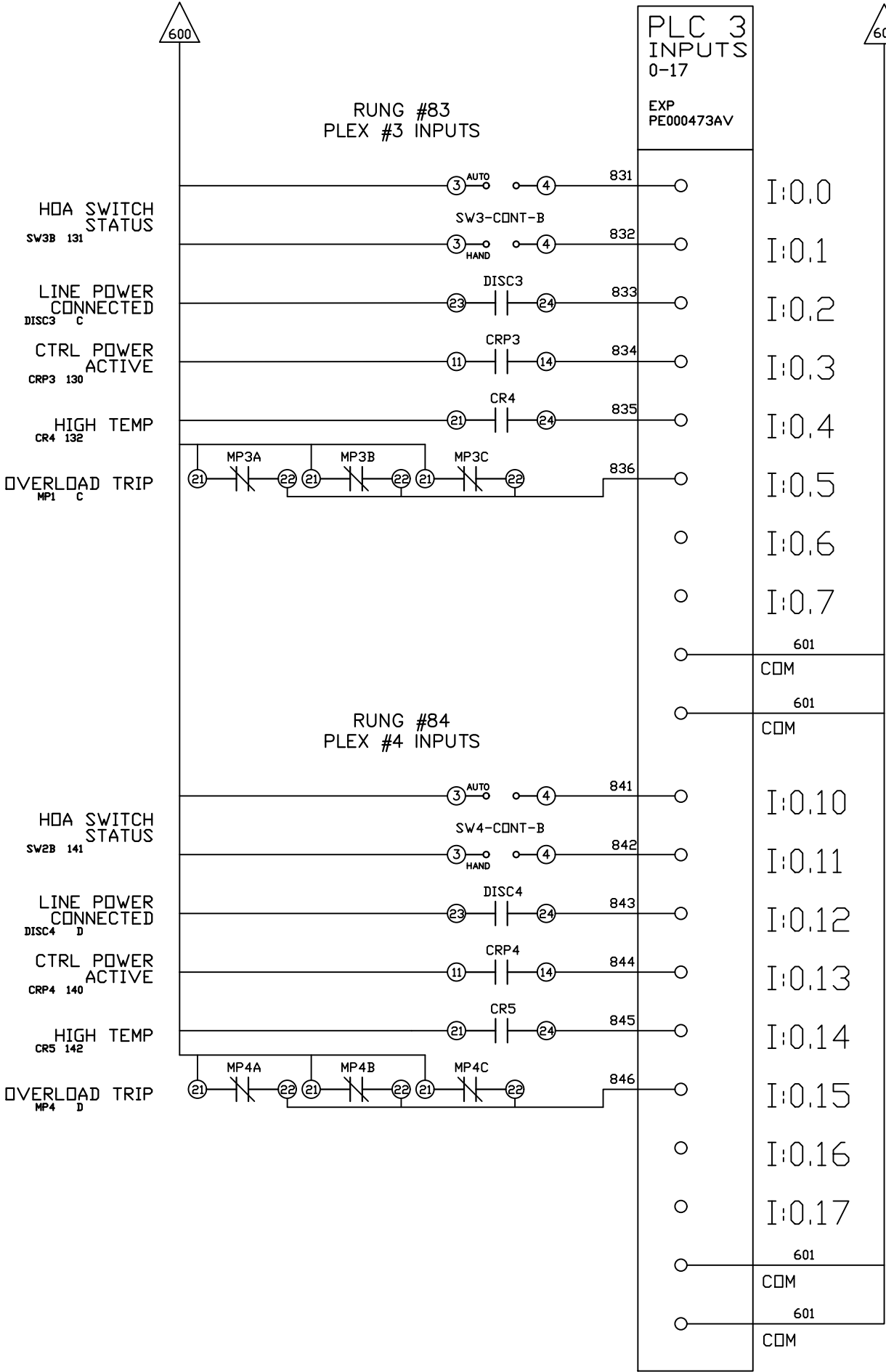
SHEET

W-7

SIZE

B

REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	01/15/14	PXEC0066	AJL	KMD
E-1	ADD CB TO EXTERNAL DEVICES & DISCONNECT TO INPUT POWER	05/28/24	PXEC0628	SEK	JRD
E-2	ADDED MORE TERMINAL BLOCKS	03/24/25	PXEC0628	JRD	STK
F-1	ADDED PLEX ISOLATION	07/28/25	PXEC0639	SEK	WMM



OPTIONAL:

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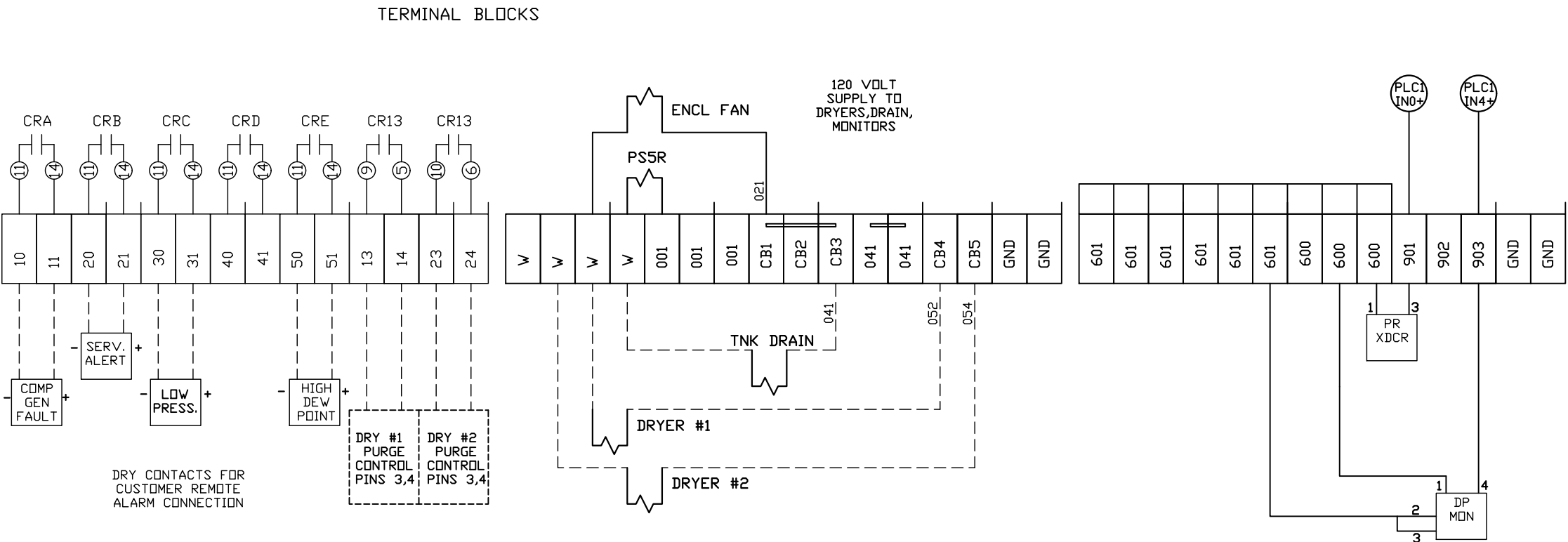
DRAWN BY	CHECKED BY	ENGINEERING APPROVAL
AJL	KMD	DMS
01/15/14	01/15/14	01/15/14

PANEL TYPE
QUAD LAB 15HP SCROLL
HMI, NFPA

DWG. TYPE
WIRING

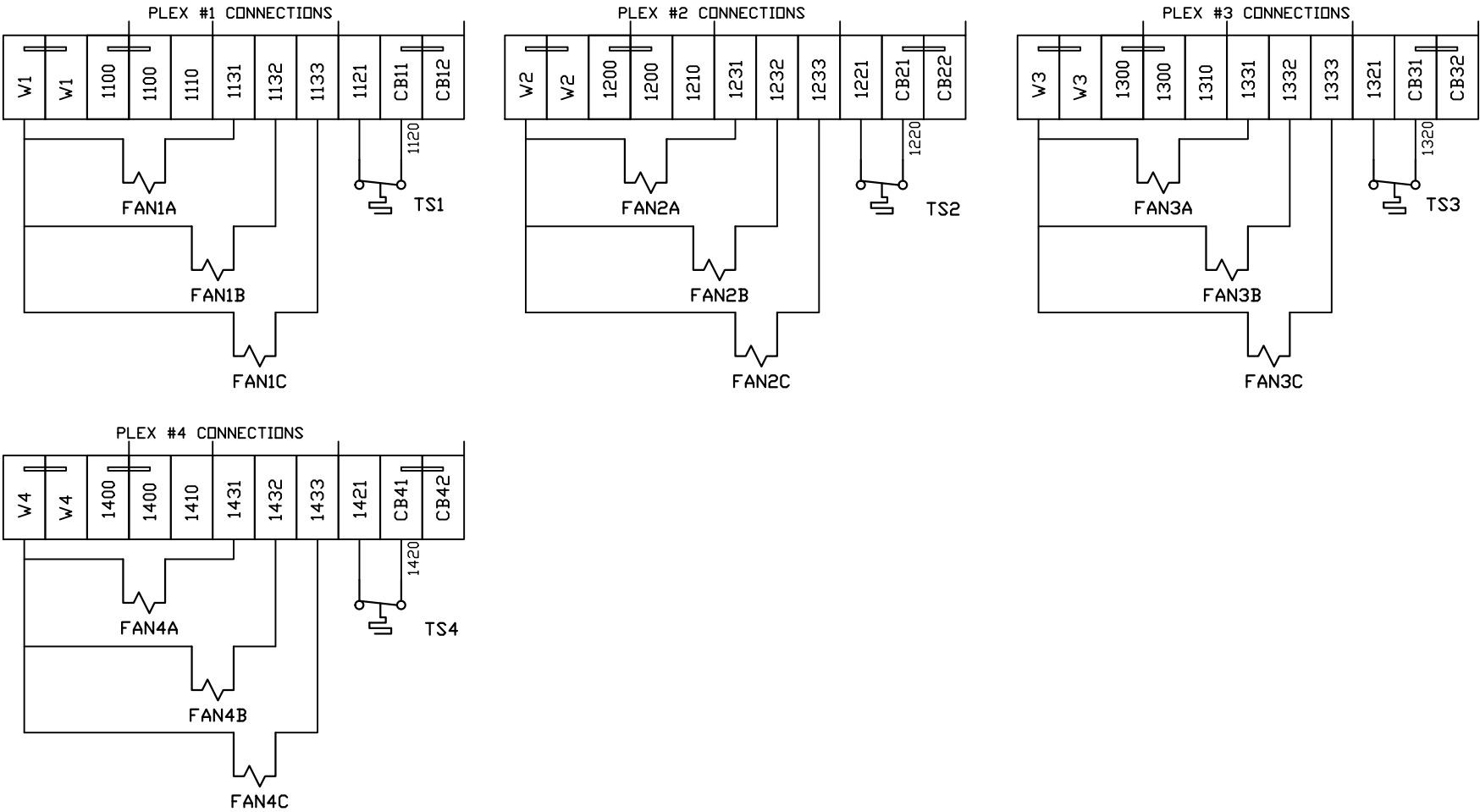
DWG. NO.
PXMI-LS416F W

SHEET	SIZE
W-9	B



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



REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	01/15/14	PXEC0066	AJL	KMD
E-1	ADD CB TO EXTERNAL DEVICES & DISCONNECT TO INPUT POWER	05/28/24	PXEC0628	SEK	JRD
E-2	ADDED MORE TERMINAL BLOCKS	03/24/25	PXEC0628	JRD	STK
F-1	ADDED PLEX ISOLATION	07/28/25	PXEC0639	SEK	WMM

OPTIONAL:

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DRAWN BY	CHECKED BY	ENGINEERING APPROVAL
AJL	KMD	DMS
01/15/14	01/15/14	01/15/14

PANEL TYPE
QUAD LAB 15HP SCROLL
HMI, NFPA

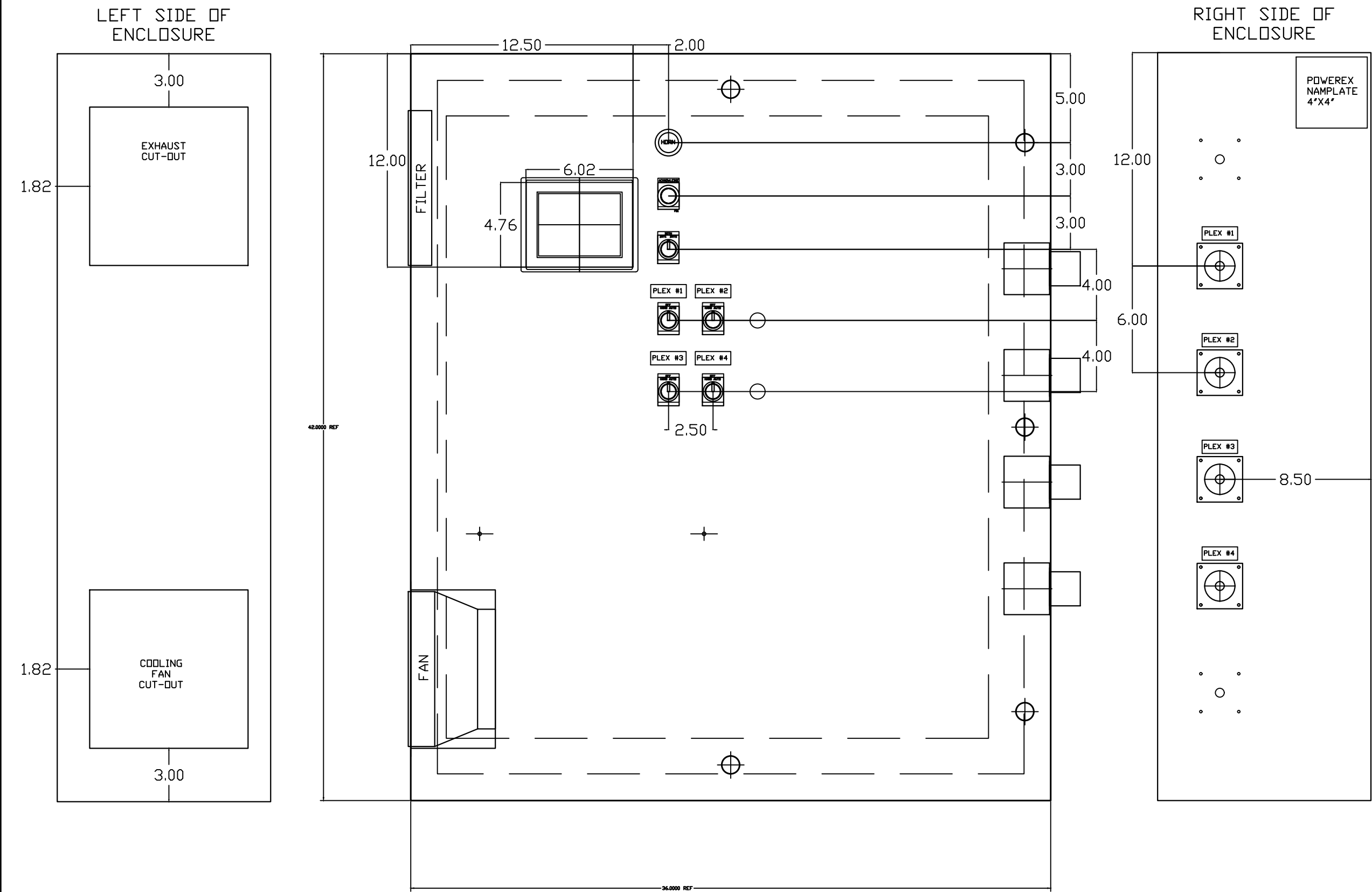
DWG. TYPE
WIRING

DWG. NO.
PXMI-LS416F W

SHEET
W-10

SIZE
B

REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	01/15/14	PXEC0066	AJL	KMD
E-1	ADD CB TO EXTERNAL DEVICES & DISCONNECT TO INPUT POWER	05/28/24	PXEC0628	SEK	JRD
E-2	ADDED MORE TERMINAL BLOCKS	03/24/25	PXEC0628	JRD	STK
F-1	ADDED PLEX ISOLATION	07/28/25	PXEC0639	SEK	WMM



OPTIONAL:

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DRAWN BY	CHECKED BY	ENGINEERING APPROVAL
AJL	KMD	DMS
01/15/14	01/15/14	01/15/14

PANEL TYPE

QUAD LAB 15HP SCROLL
HMI, NFPA

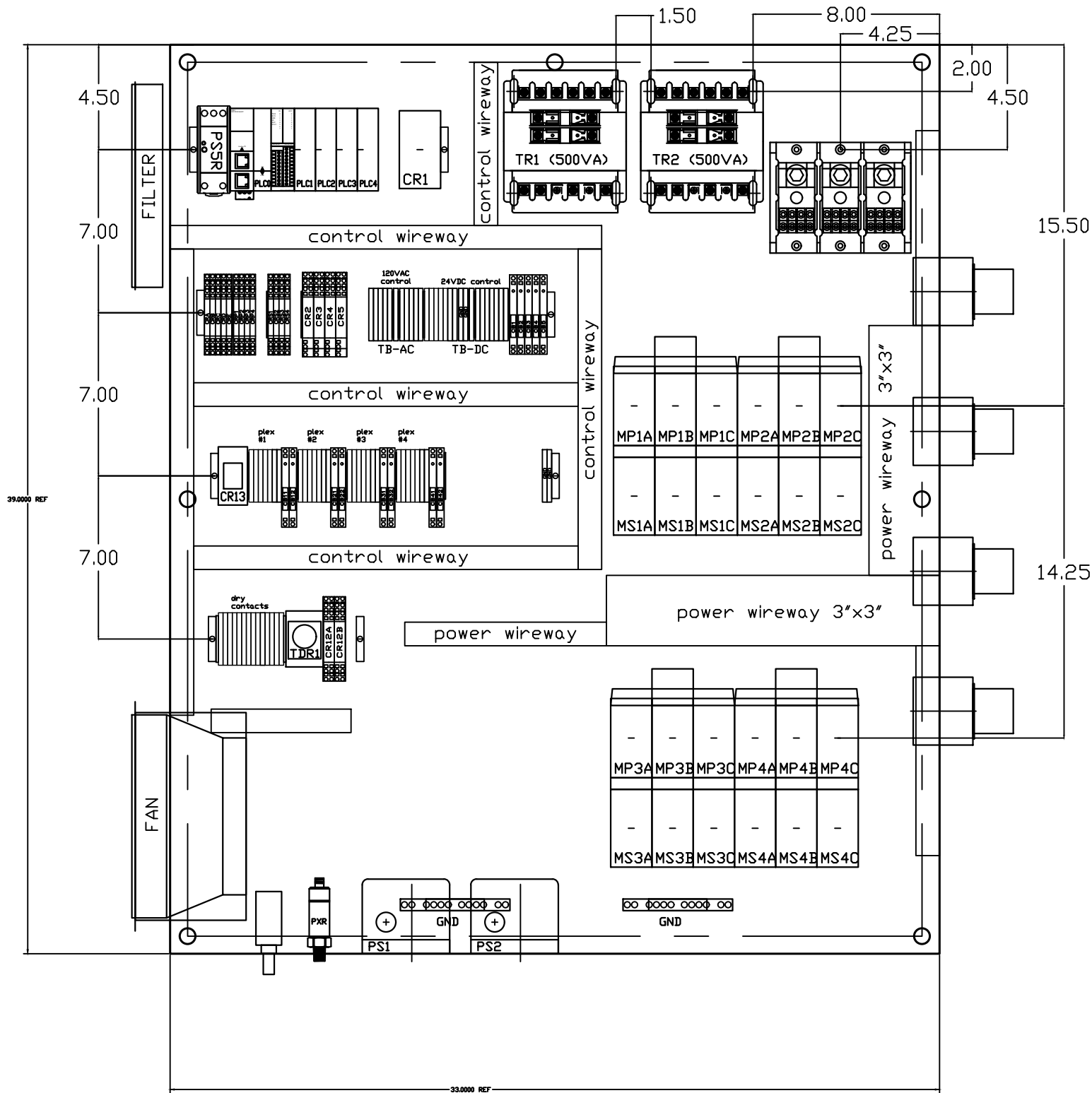
DWG. TYPE LAYOUT

DWG. NO. PXMI-LS416F W

SHEET	SIZE
L-1	B

PXMI-LS416F B1

REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	01/15/14	PXEC0066	AJL	KMD
E-1	ADD CB TO EXTERNAL DEVICES & DISCONNECT TO INPUT POWER	05/28/24	PXEC0628	SEK	JRD
E-2	ADDED MORE TERMINAL BLOCKS	03/24/25	PXEC0628	JRD	STK
F-1	ADDED PLEX ISOLATION	07/28/25	PXEC0639	SEK	WMM



OPTIONAL:

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DRAWN BY	CHECKED BY	ENGINEERING APPROVAL
AJL	KMD	DMS
01/15/14	01/15/14	01/15/14

PANEL TYPE
QUAD LAB 15HP SCROLL HMI, NFPA

DWG. TYPE LAYOUT

DWG. NO. PXMI-LS416F W

SHEET	SIZE
L-2	B

PXMI-LS416F B1

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 (HP)	(A) POWER (V/Ph)	(A) MOTOR LOAD EACH (FLA)	PANEL LOAD TOTAL (FLA)	NONTIME DELAY FUSE	TIME-DELAY FUSE	INVERSE-TIME CIRCUIT BREAKER
PXMILS416F2AJ	5(X3)	208V/3Ø	14.6	177.6	300A	225A	250A
PXMILS416F3AJ	5(X3)	230V/3Ø	12.7	154.6	250A	200A	225A
PXMILS416F4AJ	5(X3)	460V/3Ø	6.33	77.0	125A	100A	110A
NOTE– ADJUST OVERCURRENT PROTECTION DEVICE NOT TO EXCEED 115% OF MOTOR NAMEPLATE FLA VALUE							

NOTES:

1. RECOMMENDED TIGHTENING TORQUES FOR WIRE TERMINALS:
208-575 VOLT POWER 35 POUND INCHES
120 VOLT POWER AND CONTROL VOLTAGE 15 POUND INCHES
2. PANEL GROUND MUST BE CONNECTED TO EARTH GROUND
3. 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.
4. ALL WIRES MUST BE LABELED ON BOTH ENDS
5. TRANSFORMER IS SIZED FOR LOADS SHOWN ON DRAWING ONLY. DO NOT CONNECT ANY OTHER DEVICES
6. Δ -INDICATES A DRAWING WIRE CONNECTION TO ANOTHER PAGE.
7. 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.

REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	01/15/15	PXEC0066	AJL	KMD
E-1	ADD CB TO EXTERNAL DEVICES & DISCONNECT TO INPUT POWER	05/28/24	PXEC0628	SEK	JRD
E-2	ADDED MORE TERMINAL BLOCKS	03/24/25	PXEC0628	JRD	STK
F-1	ADDED PLEX ISOLATION	07/28/25	PXEC0639	SEK	WMM

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.

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	VOLTAGE	WIRE NUMBERS	GAUGE	COLOR
						120VAC	001-599,1100+	16-18AWG	RED/BLK
						0VAC	W	16-18AWG	WHT/BLK
						24VDC	600-1099	16-18AWG	PURPLE
						0VDC	601	16-18AWG	PURPLE
FU3A,B	FNM	7A	7A	7A	7A	GND	-	VARIES	GREEN
SEE XFRMR FOR CONNECTIONS						CUSTOMER SUPPLY	01-99	16-18AWG	YELLOW

OPTIONAL:



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DRAWN BY	CHECKED BY	ENGINEERING APPROVAL
AJL	KMD	DMS
01/15/14	01/15/14	01/15/14

PANEL TYPE

QUAD LAB 15HP SCROLL
HMI, NFPA

DWG. TYPE DATA

DWG. NO.

PXMI-LS416F W

SHEET	SIZE
D-1	B

PXMI-LS416F B1