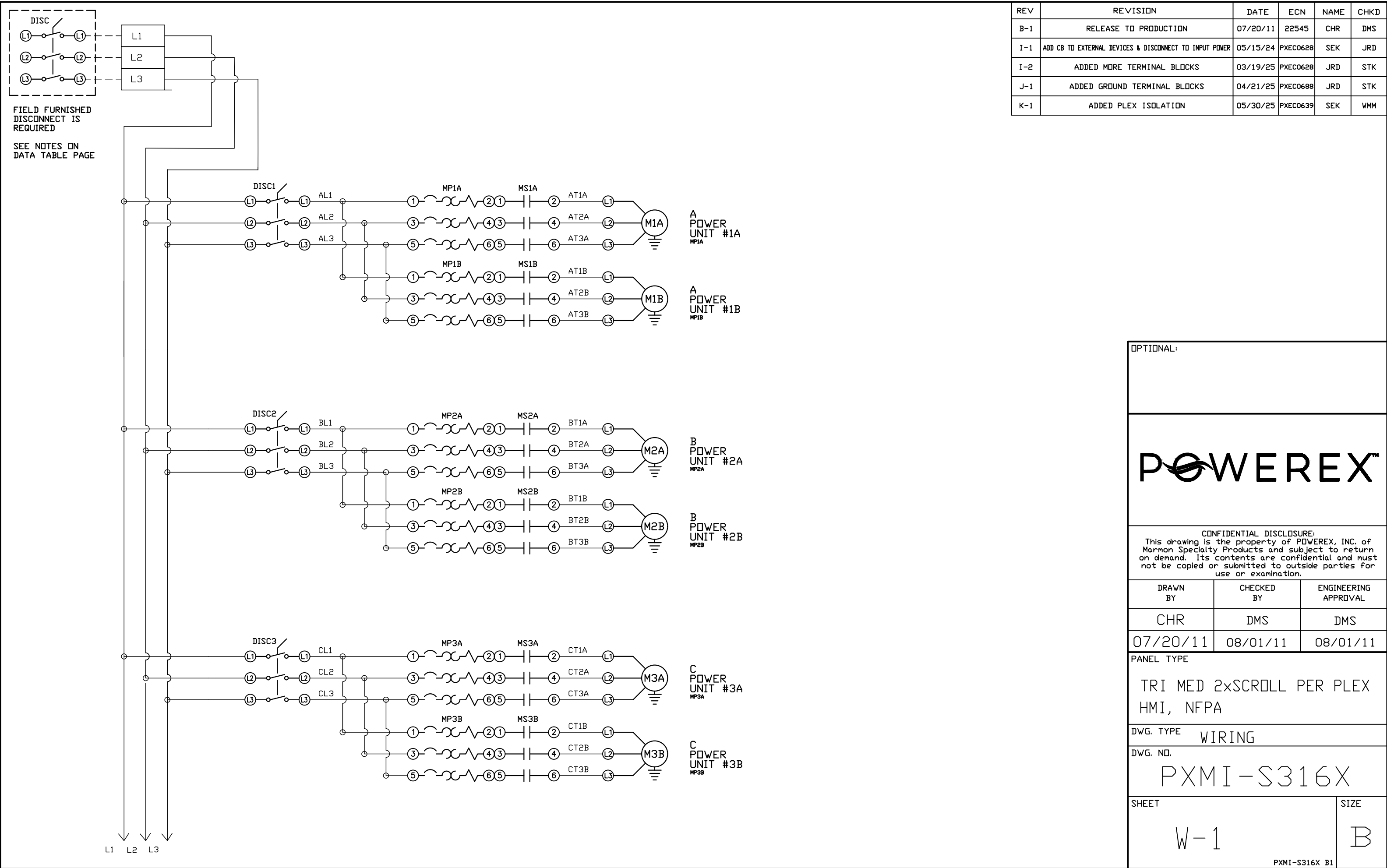




DISC3

CL1

CL2

CL3

MP3A

MS3A

CT1A

CT2A

CT3A

M3A

C POWER UNIT #3A

L1

L2

L3

MP1B

MS1B

AT1B

AT2B

AT3B

M1B

A POWER UNIT #1B

MP2B

MS2B

BT1B

BT2B

BT3B

M2B

B POWER UNIT #2B

MP3B

MS3B

CT1B

CT2B

CT3B

M3B

C POWER UNIT #3B

REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	07/20/11	22545	CHR	DMS
I-1	ADD CB TO EXTERNAL DEVICES & DISCONNECT TO INPUT POWER	05/15/24	PXEC0628	SEK	JRD
I-2	ADDED MORE TERMINAL BLOCKS	03/19/25	PXEC0628	JRD	STK
J-1	ADDED GROUND TERMINAL BLOCKS	04/21/25	PXEC0688	JRD	STK
K-1	ADDED PLEX ISOLATION	05/30/25	PXEC0639	SEK	WMM

OPTIONAL:



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DRAWN BY	CHECKED BY	ENGINEERING APPROVAL
CHR	DMS	DMS
07/20/11	08/01/11	08/01/11

PANEL TYPE

TRI MED 2xSCROLL PER PLEX HMI, NFPA

DWG. TYPE

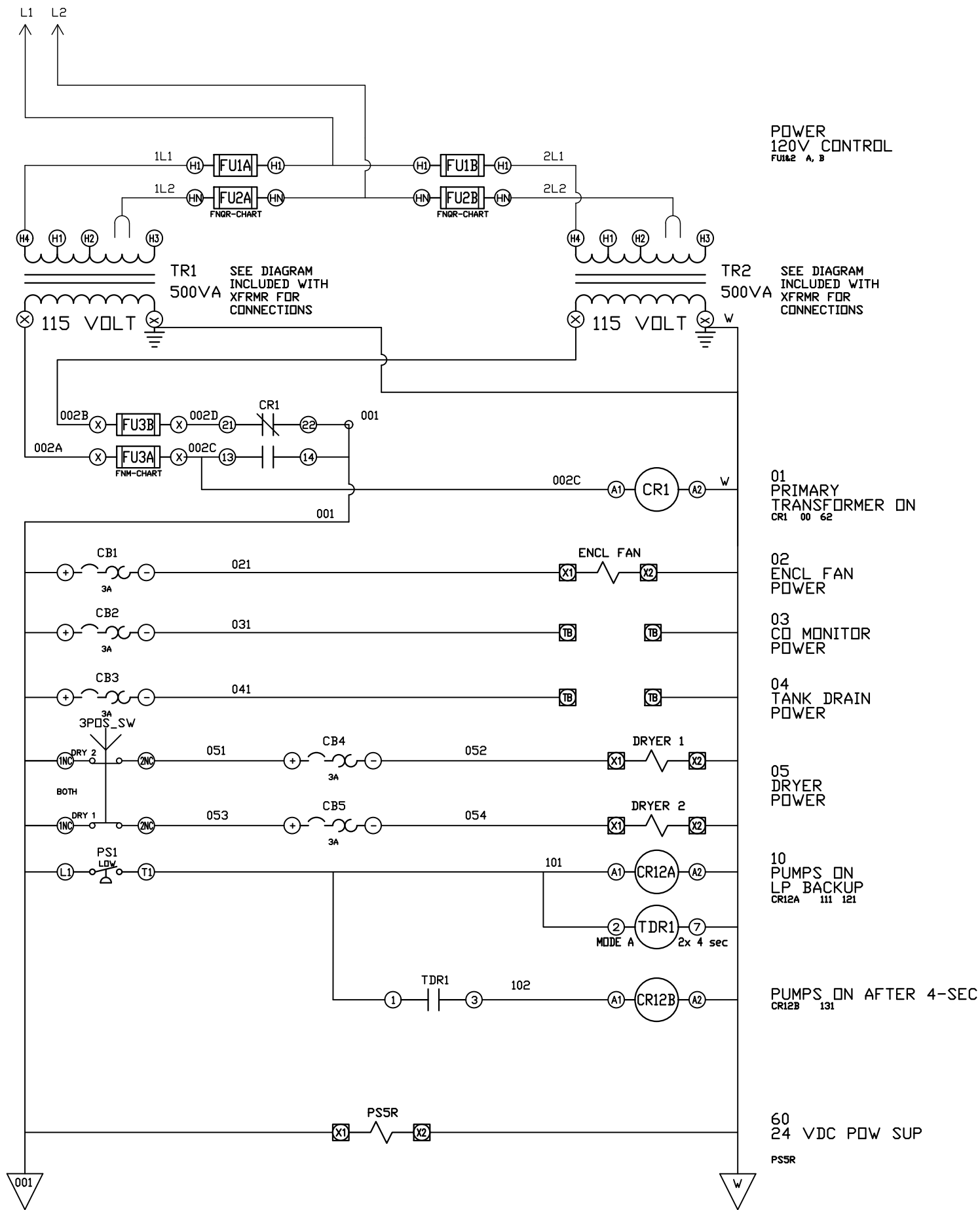
WIRING

DWG. NO.

PXMI-S316X

SHEET	SIZE
W-1	B

PXMI-S316X B1



REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	07/20/11	22545	CHR	DMS
I-1	ADD CB TO EXTERNAL DEVICES & DISCONNECT TO INPUT POWER	05/15/24	PXEC0628	SEK	JRD
I-2	ADDED MORE TERMINAL BLOCKS	03/19/25	PXEC0628	JRD	STK
J-1	ADDED GROUND TERMINAL BLOCKS	04/21/25	PXEC0688	JRD	STK
K-1	ADDED PLEX ISOLATION	05/30/25	PXEC0639	SEK	WMM

OPTIONAL:

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DRAWN BY	CHECKED BY	ENGINEERING APPROVAL
CHR	DMS	DMS
07/20/11	08/01/11	08/01/11

PANEL TYPE

TRI MED 2xSCROLL PER PLEX HMI, NFPA

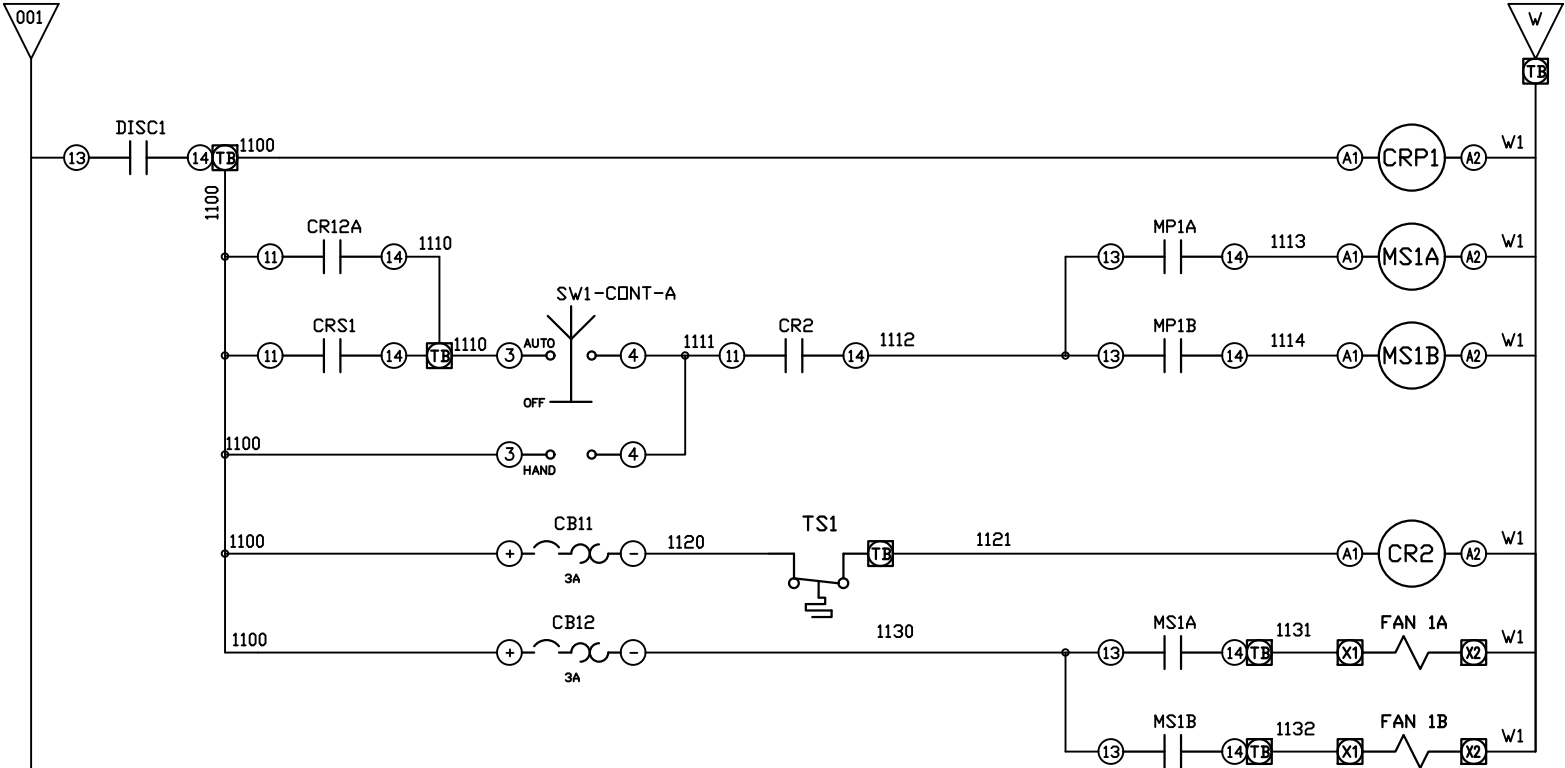
DWG. TYPE WIRING

DWG. NO. PXMI-S316X

SHEET	SIZE
W-2	B

PXMI-S316X B1

001



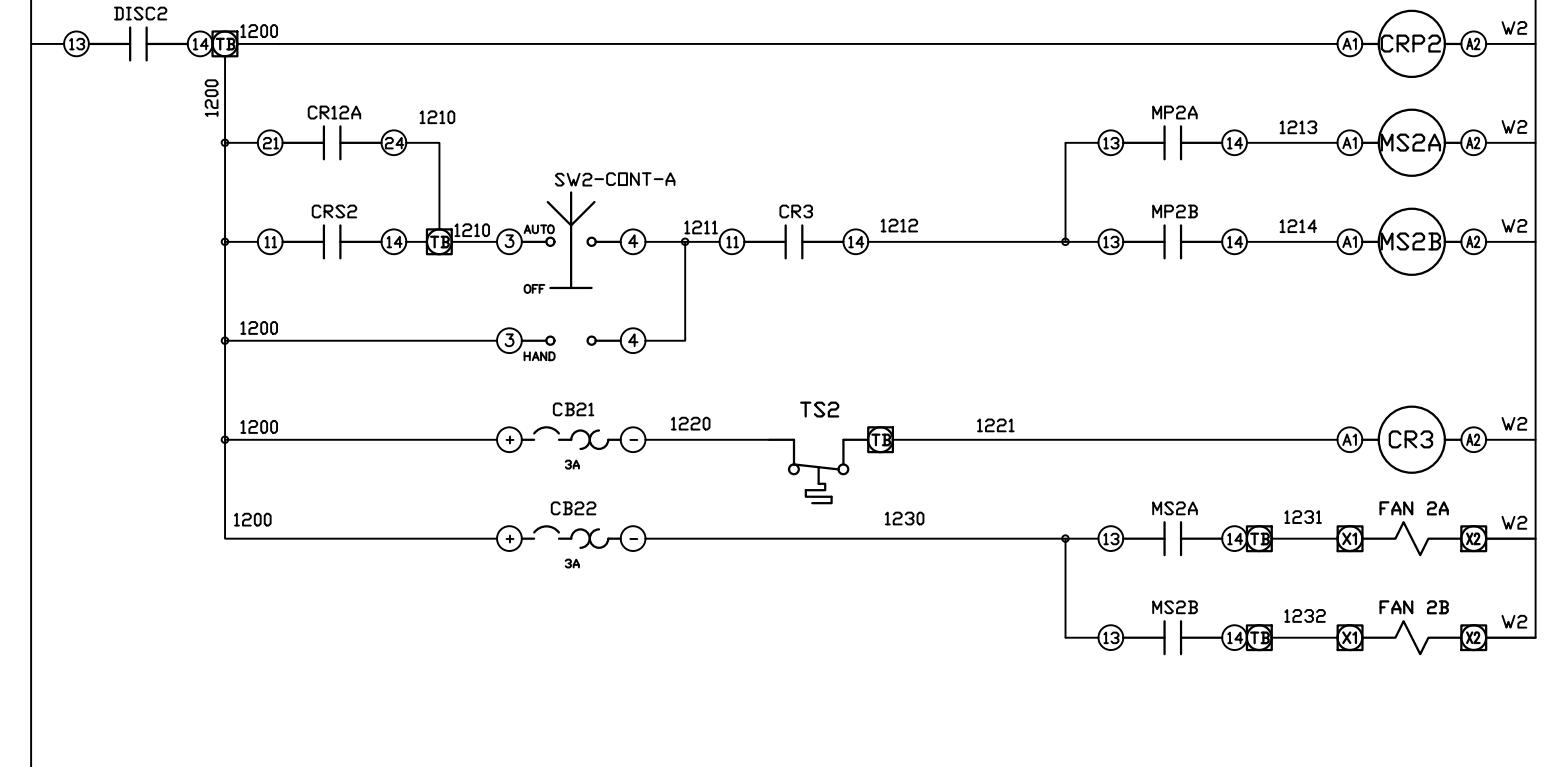
110
CONTROL POWER
PLEX #1
CRP1 81

111
MOTOR START
PLEX #1
MS1 A 81 113

112
HIGH TEMP SW
PLEX #1
CR2 81 111

113
AFTERCOOLER FAN
POWER
UNIT #1 TB

001



120
CONTROL POWER
PLEX #2
CRP2 82

121
MOTOR START
PLEX #2
MS2 B 82 123

122
HIGH TEMP SW
PLEX #2
CR3 82 121

123
AFTERCOOLER FAN
POWER
UNIT #2 TB

REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	07/20/11	22545	CHR	DMS
I-1	ADD CB TO EXTERNAL DEVICES & DISCONNECT TO INPUT POWER	05/15/24	PXEC0628	SEK	JRD
I-2	ADDED MORE TERMINAL BLOCKS	03/19/25	PXEC0628	JRD	STK
J-1	ADDED GROUND TERMINAL BLOCKS	04/21/25	PXEC0688	JRD	STK
K-1	ADDED PLEX ISOLATION	05/30/25	PXEC0639	SEK	WMM

OPTIONAL:

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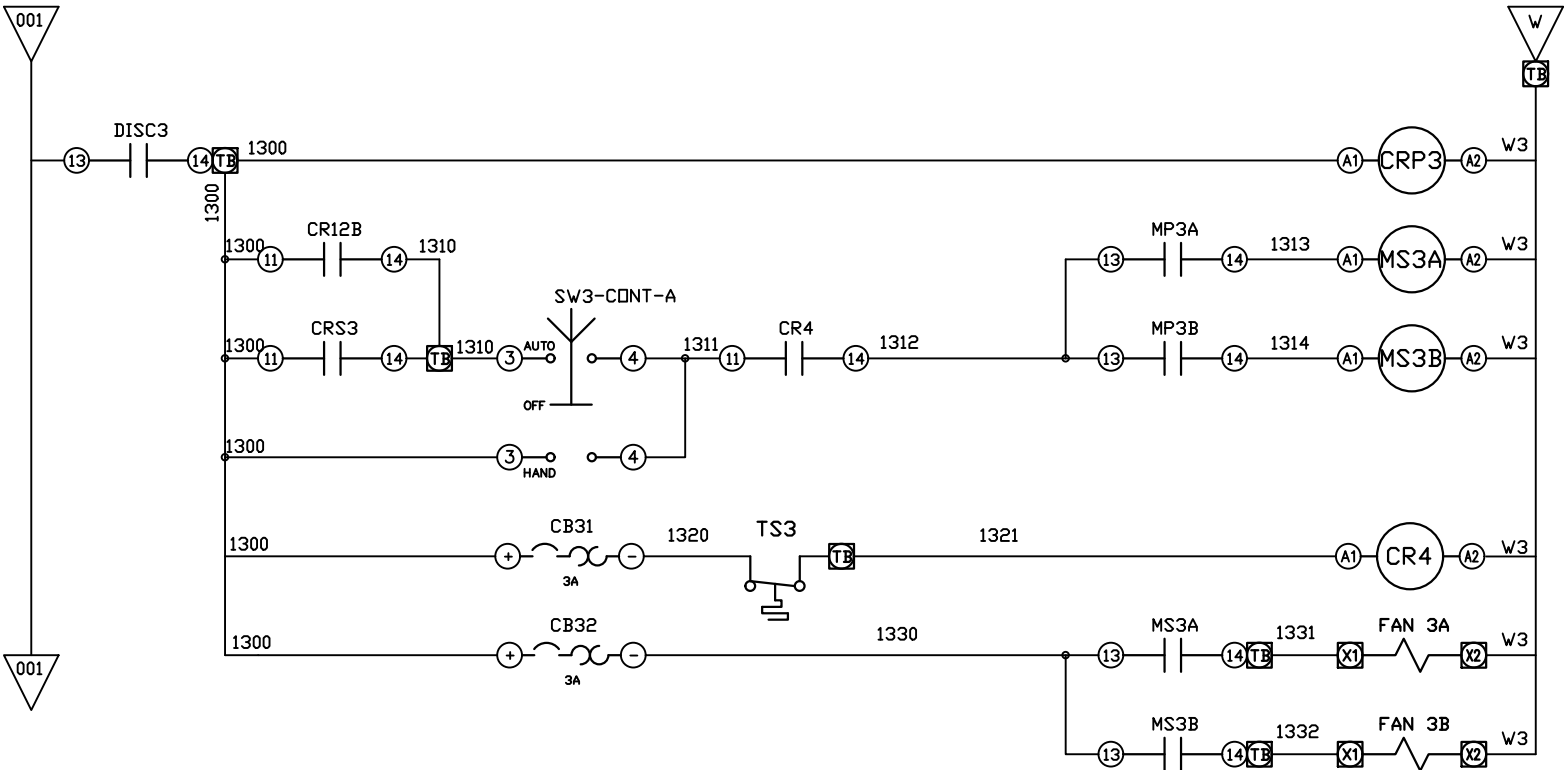
DRAWN BY	CHECKED BY	ENGINEERING APPROVAL
CHR	DMS	DMS
07/20/11	08/01/11	08/01/11

PANEL TYPE
TRI MED 2xSCROLL PER PLEX HMI, NFPA

DWG. TYPE WIRING

DWG. NO. PXMI-S316X

SHEET W-3
SIZE B



130
CONTROL POWER
PLEX #3
CRP3 83

131
MOTOR START
PLEX #3
MS3 C 83 133

132
HIGH TEMP SW
PLEX #3
CR4 83 131

133
AFTERCOOLER FAN
POWER
UNIT #3 TB

REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	07/20/11	22545	CHR	DMS
I-1	ADD CB TO EXTERNAL DEVICES & DISCONNECT TO INPUT POWER	05/15/24	PXEC0628	SEK	JRD
I-2	ADDED MORE TERMINAL BLOCKS	03/19/25	PXEC0628	JRD	STK
J-1	ADDED GROUND TERMINAL BLOCKS	04/21/25	PXEC0688	JRD	STK
K-1	ADDED PLEX ISOLATION	05/30/25	PXEC0639	SEK	WMM

OPTIONAL:

POWEREX™

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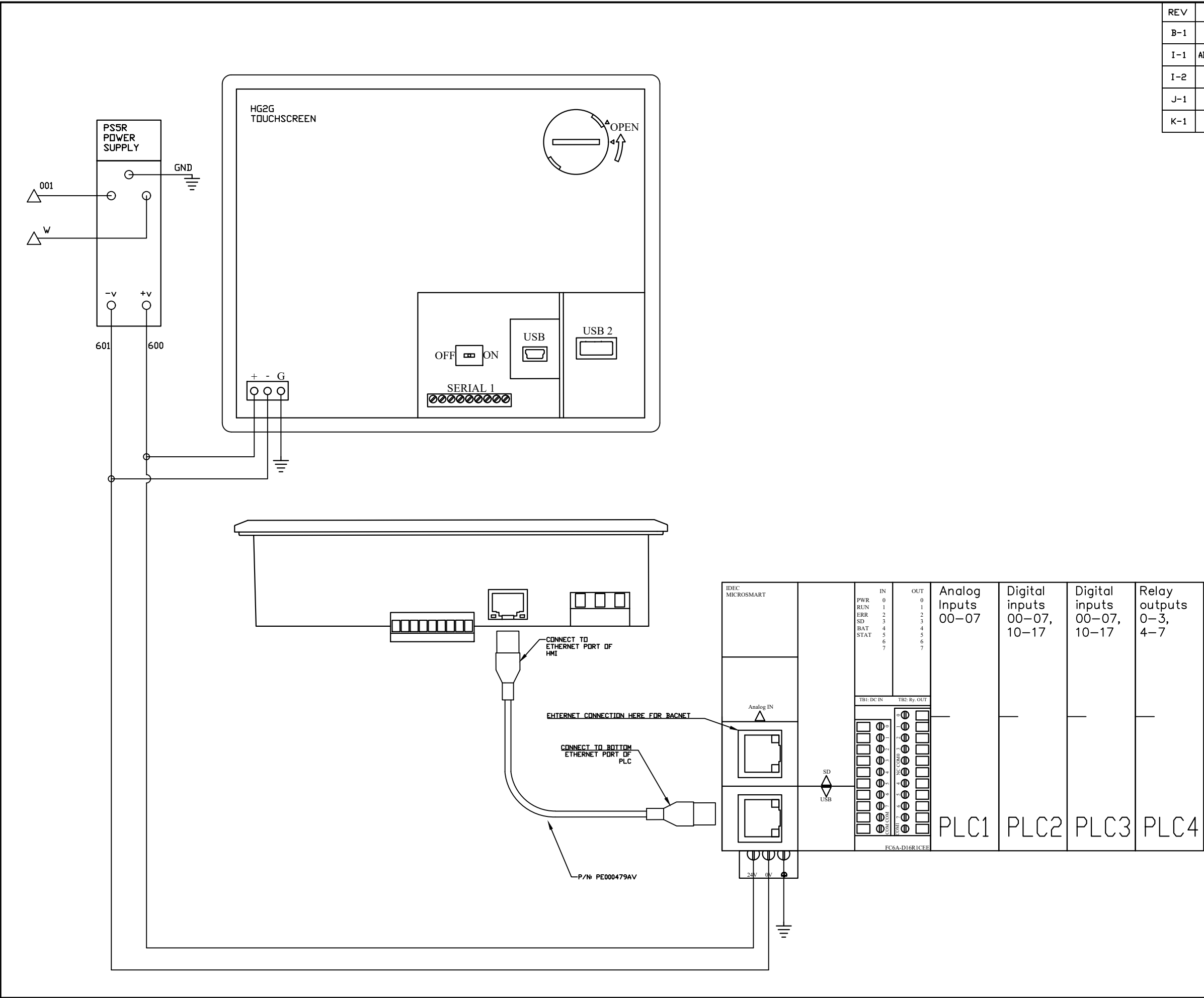
DRAWN BY	CHECKED BY	ENGINEERING APPROVAL
CHR	DMS	DMS
07/20/11	08/01/11	08/01/11

PANEL TYPE
TRI MED 2xSCROLL PER PLEX
HMI, NFPA

DWG. TYPE WIRING

DWG. NO.
PXMI-S316X

SHEET	SIZE
W-4	B



REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	07/20/11	22545	CHR	DMS
I-1	ADD CB TO EXTERNAL DEVICES & DISCONNECT TO INPUT POWER	05/15/24	PXEC0628	SEK	JRD
I-2	ADDED MORE TERMINAL BLOCKS	03/19/25	PXEC0628	JRD	STK
J-1	ADDED GROUND TERMINAL BLOCKS	04/21/25	PXEC0688	JRD	STK
K-1	ADDED PLEX ISOLATION	05/30/25	PXEC0639	SEK	WMM

OPTIONAL:

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DRAWN BY	CHECKED BY	ENGINEERING APPROVAL
CHR	DMS	DMS
07/20/11	08/01/11	08/01/11

PANEL TYPE
TRI MED 2xSCROLL PER PLEX HMI, NFPA

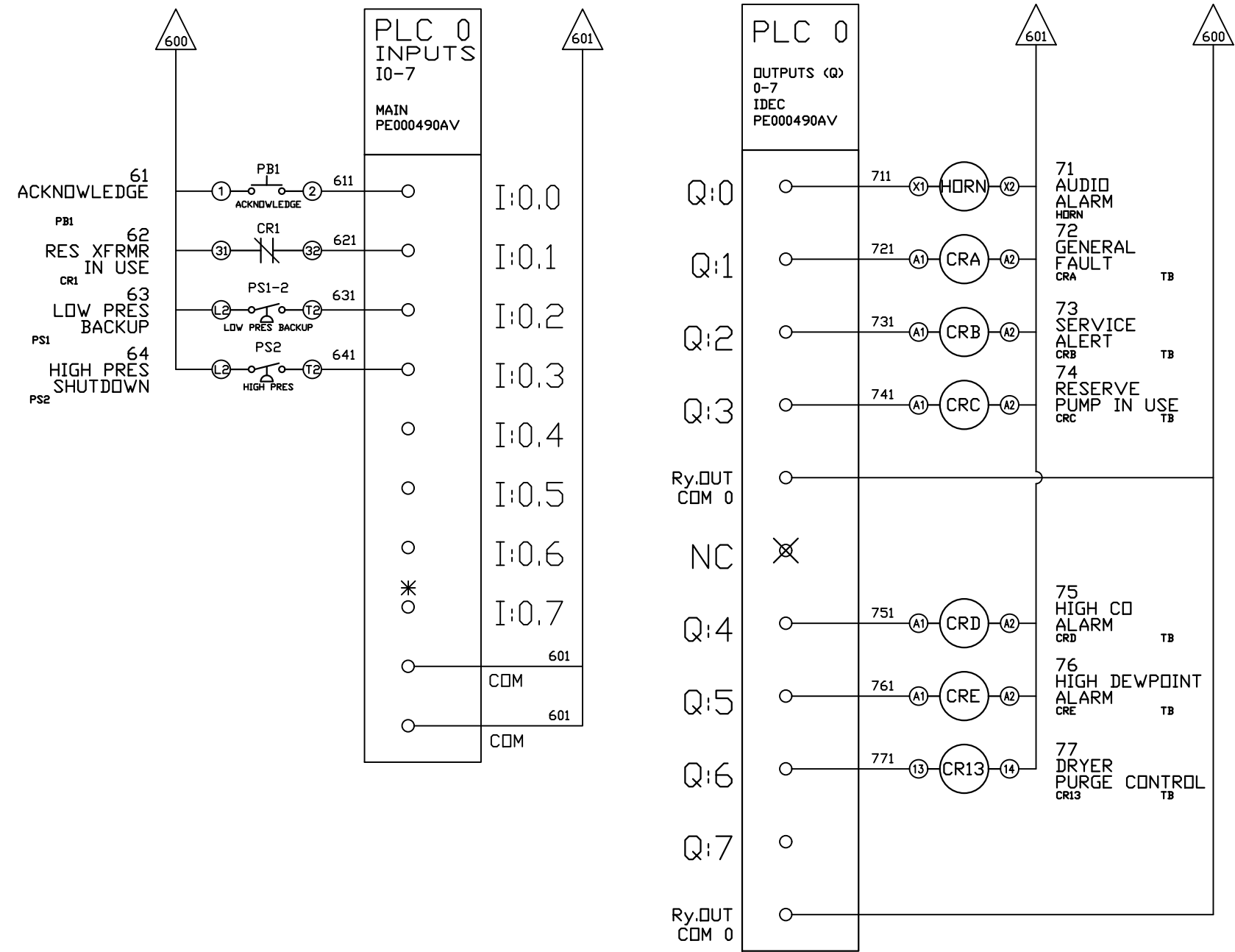
DWG. TYPE
WIRING

DWG. NO.
PXMI-S316X

SHEET W-5	SIZE B
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PXMI-S316X B1

REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	07/20/11	22545	CHR	DMS
I-1	ADD CB TO EXTERNAL DEVICES & DISCONNECT TO INPUT POWER	05/15/24	PXEC0628	SEK	JRD
I-2	ADDED MORE TERMINAL BLOCKS	03/19/25	PXEC0628	JRD	STK
J-1	ADDED GROUND TERMINAL BLOCKS	04/21/25	PXEC0688	JRD	STK
K-1	ADDED PLEX ISOLATION	05/30/25	PXEC0639	SEK	WMM



*FACTORY TEST JUMPER LOCATION

OPTIONAL:

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DRAWN BY	CHECKED BY	ENGINEERING APPROVAL
CHR	DMS	DMS
07/20/11	08/01/11	08/01/11

PANEL TYPE

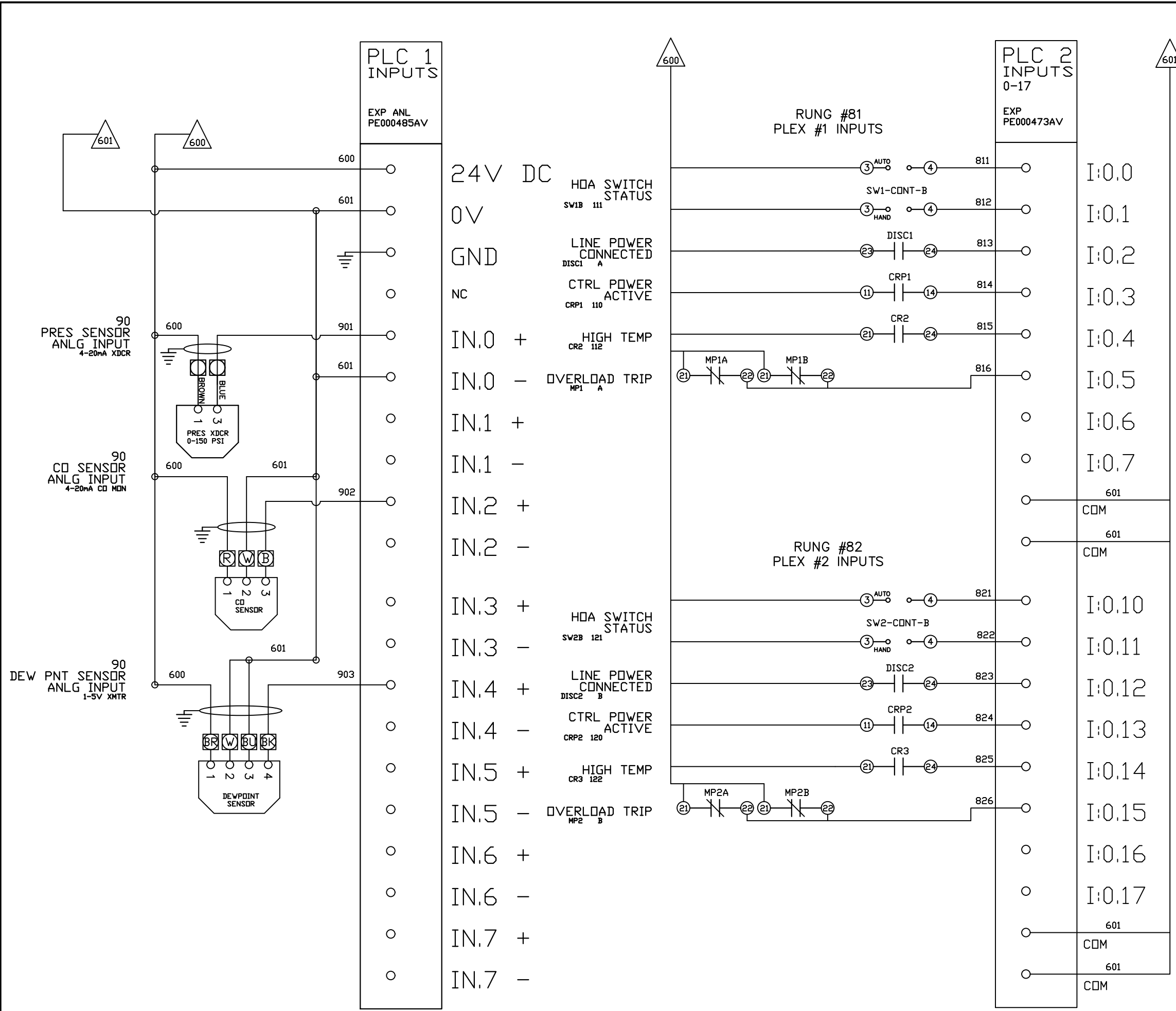
TRI MED 2xSCROLL PER PLEX HMI, NFPA

DWG. TYPE WIRING

DWG. NO. PXMI-S316X

SHEET	SIZE
W-6	B

PXMI-S316X B1



REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	07/20/11	22545	CHR	DMS
I-1	ADD CB TO EXTERNAL DEVICES & DISCONNECT TO INPUT POWER	05/15/24	PXEC0628	SEK	JRD
I-2	ADDED MORE TERMINAL BLOCKS	03/19/25	PXEC0628	JRD	STK
J-1	ADDED GROUND TERMINAL BLOCKS	04/21/25	PXEC0688	JRD	STK
K-1	ADDED PLEX ISOLATION	05/30/25	PXEC0639	SEK	WMM

OPTIONAL:

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DRAWN BY	CHECKED BY	ENGINEERING APPROVAL
CHR	DMS	DMS
07/20/11	08/01/11	08/01/11

PANEL TYPE

TRI MED 2xSCROLL PER PLEX HMI, NFPA

DWG. TYPE WIRING

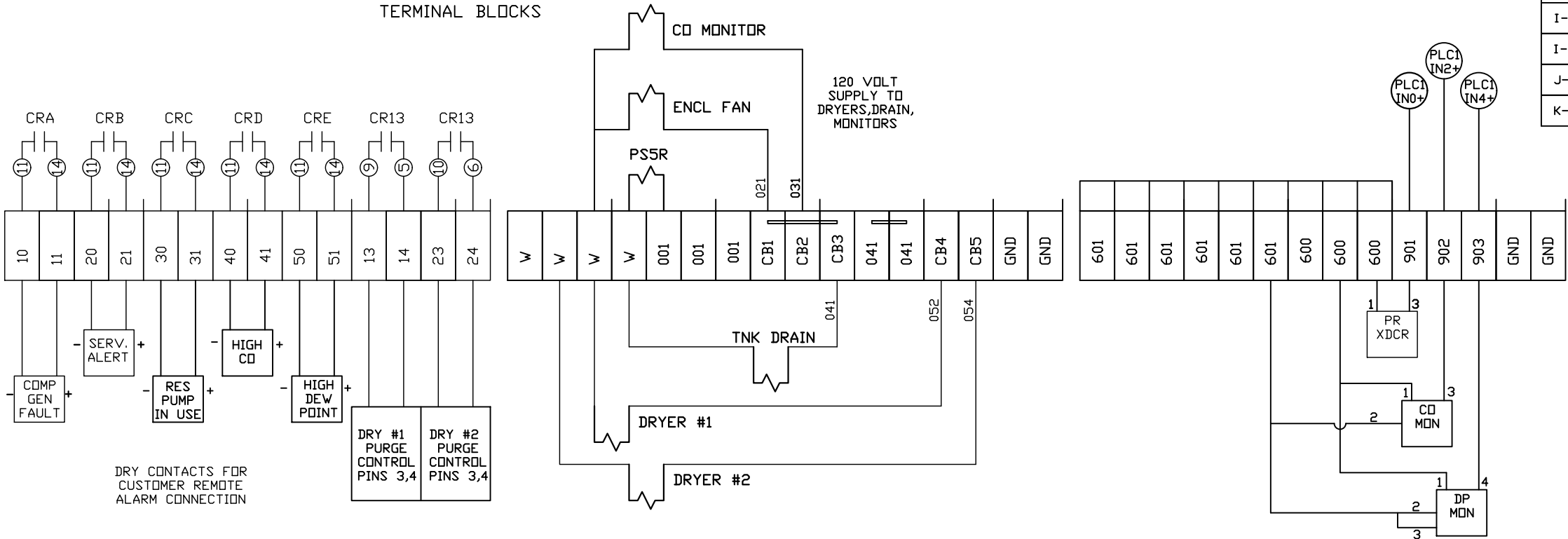
DWG. NO.

PXMI-S316X

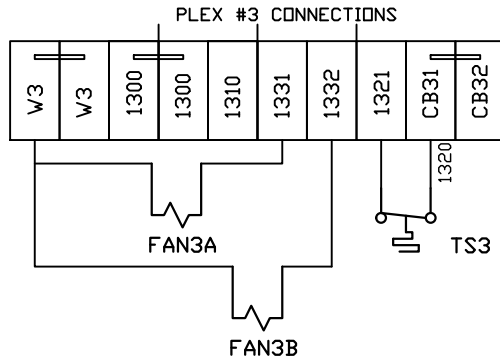
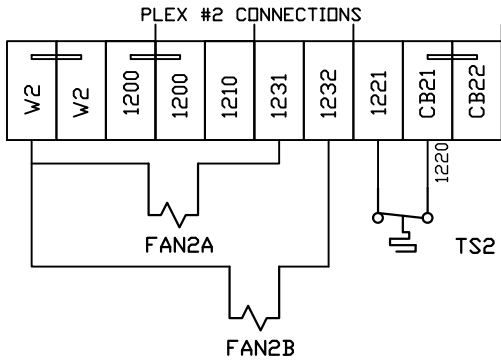
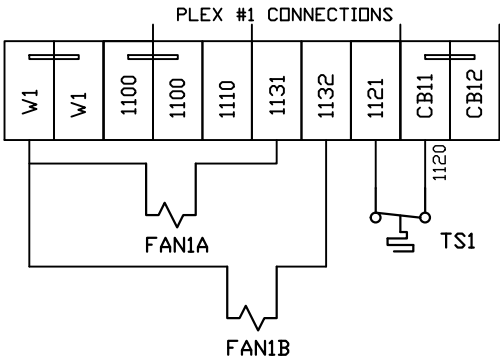
SHEET	SIZE
W-7	B

PXMI-S316X B1

REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	07/20/11	22545	CHR	DMS
I-1	ADD CB TO EXTERNAL DEVICES & DISCONNECT TO INPUT POWER	05/15/24	PXEC0628	SEK	JRD
I-2	ADDED MORE TERMINAL BLOCKS	03/19/25	PXEC0628	JRD	STK
J-1	ADDED GROUND TERMINAL BLOCKS	04/21/25	PXEC0688	JRD	STK
K-1	ADDED PLEX ISOLATION	05/30/25	PXEC0639	SEK	WMM



DRY CONTACTS FOR
CUSTOMER REMOTE
ALARM CONNECTION



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
CHR	DMS	DMS
07/20/11	08/01/11	08/01/11

PANEL TYPE

TRI MED 2xSCROLL PER PLEX HMI, NFPA

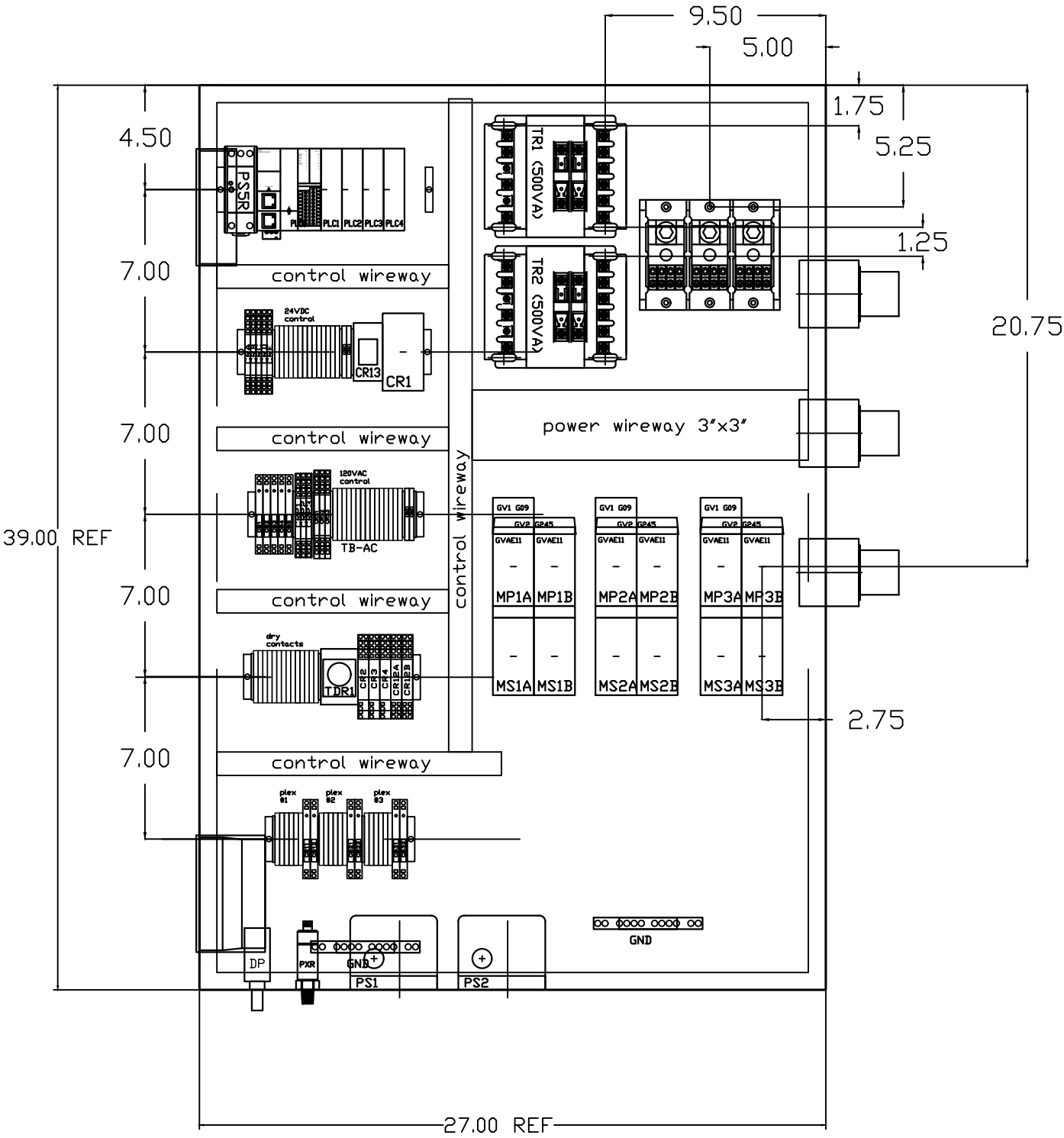
DWG. TYPE WIRING

DWG. NO.

PXMI-S316X

SHEET	SIZE
W-9	B

REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	07/20/11	22545	CHR	DMS
I-1	ADD CB TO EXTERNAL DEVICES & DISCONNECT TO INPUT POWER	05/15/24	PXEC0628	SEK	JRD
I-2	ADDED MORE TERMINAL BLOCKS	03/19/25	PXEC0628	JRD	STK
J-1	ADDED GROUND TERMINAL BLOCKS	04/21/25	PXEC0688	JRD	STK
K-1	ADDED PLEX ISOLATION	05/30/25	PXEC0639	SEK	WMM



OPTIONAL:

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DRAWN BY	CHECKED BY	ENGINEERING APPROVAL
CHR	DMS	DMS
07/20/11	08/01/11	08/01/11

PANEL TYPE
TRI MED 2xSCROLL PER PLEX HMI, NFPA

DWG. TYPE
LAYOUT

DWG. NO.
PXMI-S316X

SHEET	SIZE
L-2	B

PXMI-S316X 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	(A) POWER (V/PH)	(A) MOTOR LOAD EACH (FLA)	PANEL LOAD TOTAL (FLA)	NONTIME DELAY FUSE	TIME-DELAY FUSE	INVERSE-TIME CIRCUIT BREAKER
PBMIS316A2AJ	5(X2)	208V/3ø	14.0	86	125A	100A	110A
PBMIS316A3AJ	5(X2)	230V/3ø	12.7	78.2	110A	90A	100A
PBMIS316A4AJ	5(X2)	460V/3ø	6.33	40	60A	45A	50A
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 VOLTAGE 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 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.

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-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	575
FUSE TYPE		VOLT	VOLT	380 VOLT	VOLT
FU1,2A FU1,2B	FNQR (CC)	6A	5A	5A	4A
FU3A,B	FNM	7A	7A	7A	7A
SEE XFMR FOR CONNECTIONS					

WIRE TYPE TABLE			
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
GND	-	VARIES	GREEN
CUSTOMER SUPPLY	01-99	16-18AWG	YELLOW

REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	07/20/11	22545	CHR	DMS
I-1	ADD CB TO EXTERNAL DEVICES & DISCONNECT TO INPUT POWER	05/15/24	PXEC0628	SEK	JRD
I-2	ADDED MORE TERMINAL BLOCKS	03/19/25	PXEC0628	JRD	STK
J-1	ADDED GROUND TERMINAL BLOCKS	04/21/25	PXEC0688	JRD	STK
K-1	ADDED PLEX ISOLATION	05/30/25	PXEC0639	SEK	WMM

OPTIONAL:



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DRAWN BY	CHECKED BY	ENGINEERING APPROVAL
CHR	DMS	DMS
07/20/11	08/01/11	08/01/11

PANEL TYPE

TRI MED 2xSCROLL PER PLEX
HMI, NFPA

DWG. TYPE DATA TABLE

DWG. NO.

PXMI-S316A W

SHEET	SIZE
D-1	B

PXMI-S316A B1

TABLE 1					DISC1		
PANEL DATA 60 Hz 500VA CONTROL CIRCUIT							
PANEL PART NUMBER	MOTOR SIZE EACH	POWER (V/PH)	UL MOTOR LOAD EACH (FLA)	UL PANEL LOAD TOTAL (FLA)	NON-TIME DELAY FUSE	TIME DELAY FUSE	INVERSE-TIME CIRCUIT BREAKER
PBMIS316ABAJ 5(X2)	380V/3ø	6.60	21.8		35	30	35
NOTE- LOAD VALUES ABOVE MAY NOT REFLECT MOTOR NAMEPLATE VALUES. 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 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. △ -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.

SEQUENCE OF OPERATIONS

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CONTROL TRANSFORMERS - 500VA				
REPLACEMENT	208	230	460	575
FUSE TYPE	VOLT	VOLT	380 VOLT	VOLT
FU1,2A FU1,2B	FNQR (CC)	6A	5A	5A 4A
FU3A,B	FNM	7A	7A	7A 7A
SEE XFRMR FOR CONNECTIONS				

WIRE TYPE TABLE			
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
GND	-	VARIES	GREEN
CUSTOMER SUPPLY	01-99	16-18AWG	YELLOW

REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	07/20/11	22545	CHR	DMS
I-1	ADD CB TO EXTERNAL DEVICES & DISCONNECT TO INPUT POWER	05/15/24	PXEC0628	SEK	JRD
I-2	ADDED MORE TERMINAL BLOCKS	03/19/25	PXEC0628	JRD	STK
J-1	ADDED GROUND TERMINAL BLOCKS	04/21/25	PXEC0688	JRD	STK
K-1	ADDED PLEX ISOLATION	05/30/25	PXEC0639	SEK	WMM

OPTIONAL:

POWEREX

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DRAWN BY	CHECKED BY	ENGINEERING APPROVAL
CHR	DMS	DMS
07/20/11	08/01/11	08/01/11

PANEL TYPE
TRI MED 2xSCROLL PER PLEX
HMI, NFPA

DWG. TYPE DATA TABLE

DWG. NO.
PXMI-S316A W

SHEET	SIZE
D-1	B
PXMI-S316A B1	