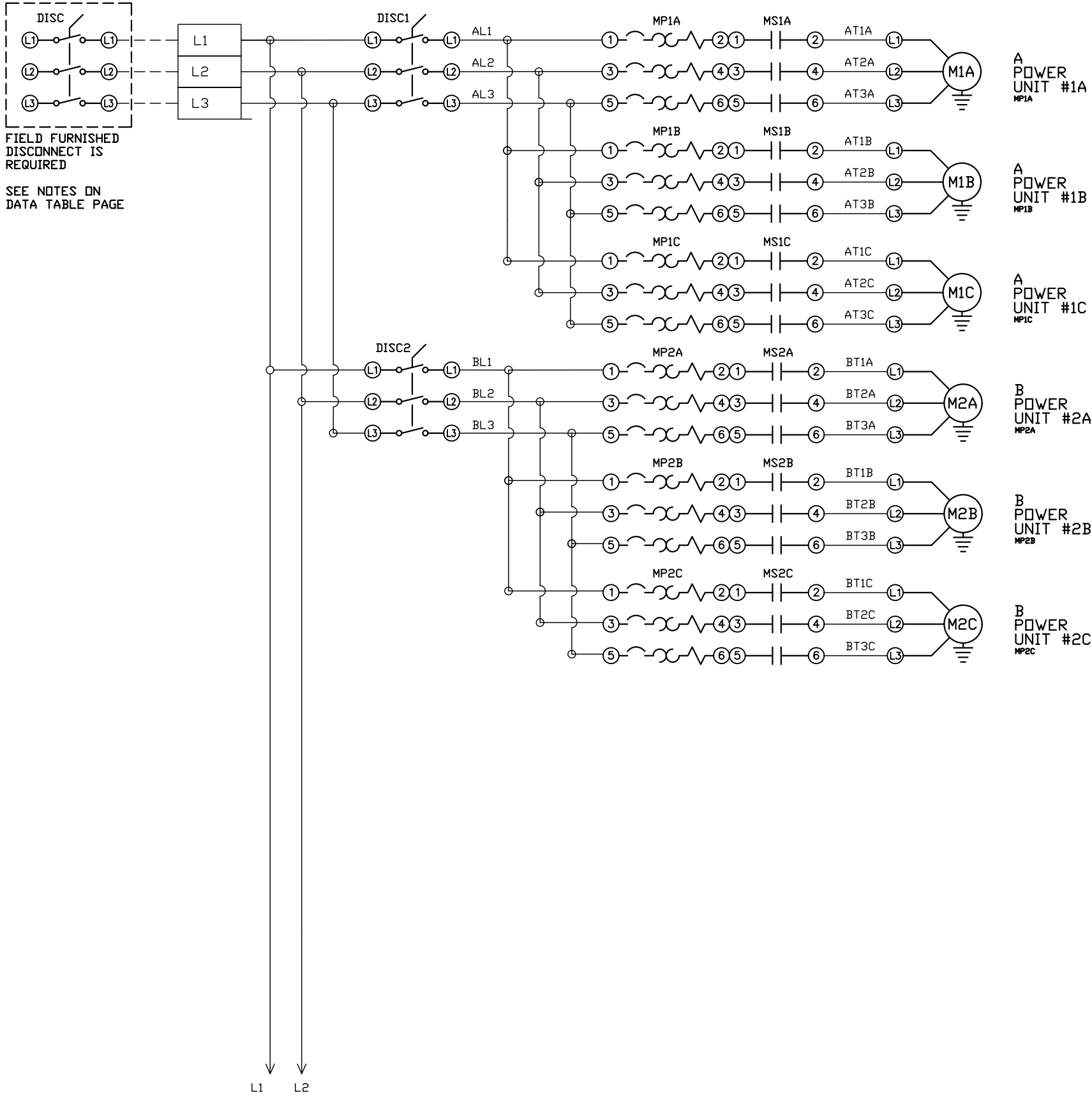




REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	10/18/12	22722	BFH	CHR
E-1	SWAP PLC TO FC6A	02/08/19	PXEC0200	JLM	AJL
F-1	REMOVED RUNGS 73-76 HIGH TEMP INPUTS	05/17/21	PXEC0414	KMD	AJL
G-1	ADD CB TO EXTERNAL DEVICES & DISCONNECT TO INPUT POWER	05/20/24	PXEC0628	SEK	JRD
G-2	ADDED MORE TERMINAL BLOCKS	03/19/25	PXEC0628	JRD	STK
H-1	ADDED PLEX ISOLATION	05/08/25	PXEC0639	SEK	WMM

OPTIONAL:

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DRAWN BY	CHECKED BY	ENGINEERING APPROVAL
BFH	CHR	CHR
10/18/12	10/23/12	10/23/12

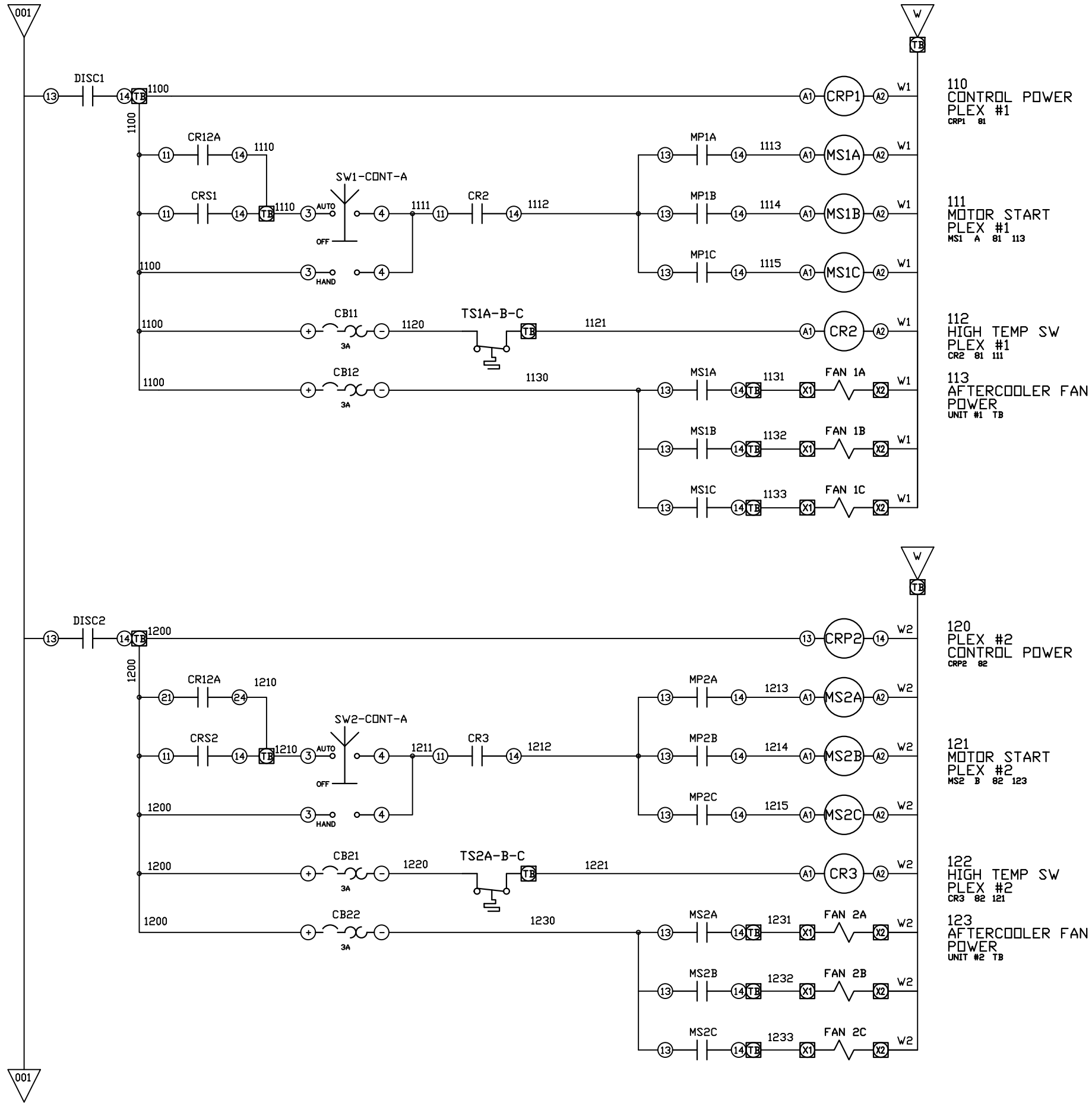
PANEL TYPE
DUPLX MED 15HP SCROLL
HMI, NFPA

DWG. TYPE
WIRING

DWG. NO.
PXMI-S216F W

SHEET	SIZE
W-1	B

PXMI-S216F B1



REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	10/18/12	22722	BFH	CHR
E-1	SWAP PLC TO FC6A	02/08/19	PXEC0200	JLM	AJL
F-1	REMOVED RUNGS 73-76 HIGH TEMP INPUTS	05/17/21	PXEC0414	KMD	AJL
G-1	ADD CB TO EXTERNAL DEVICES & DISCONNECT TO INPUT POWER	05/20/24	PXEC0628	SEK	JRD
G-2	ADDED MORE TERMINAL BLOCKS	03/19/25	PXEC0628	JRD	STK
H-1	ADDED PLEX ISOLATION	05/08/25	PXEC0639	SEK	WMM

OPTIONAL:

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DRAWN BY	CHECKED BY	ENGINEERING APPROVAL
BFH	CHR	CHR
10/18/12	10/23/12	10/23/12

PANEL TYPE
DUPLX MED 15HP SCROLL
HMI, NFPA

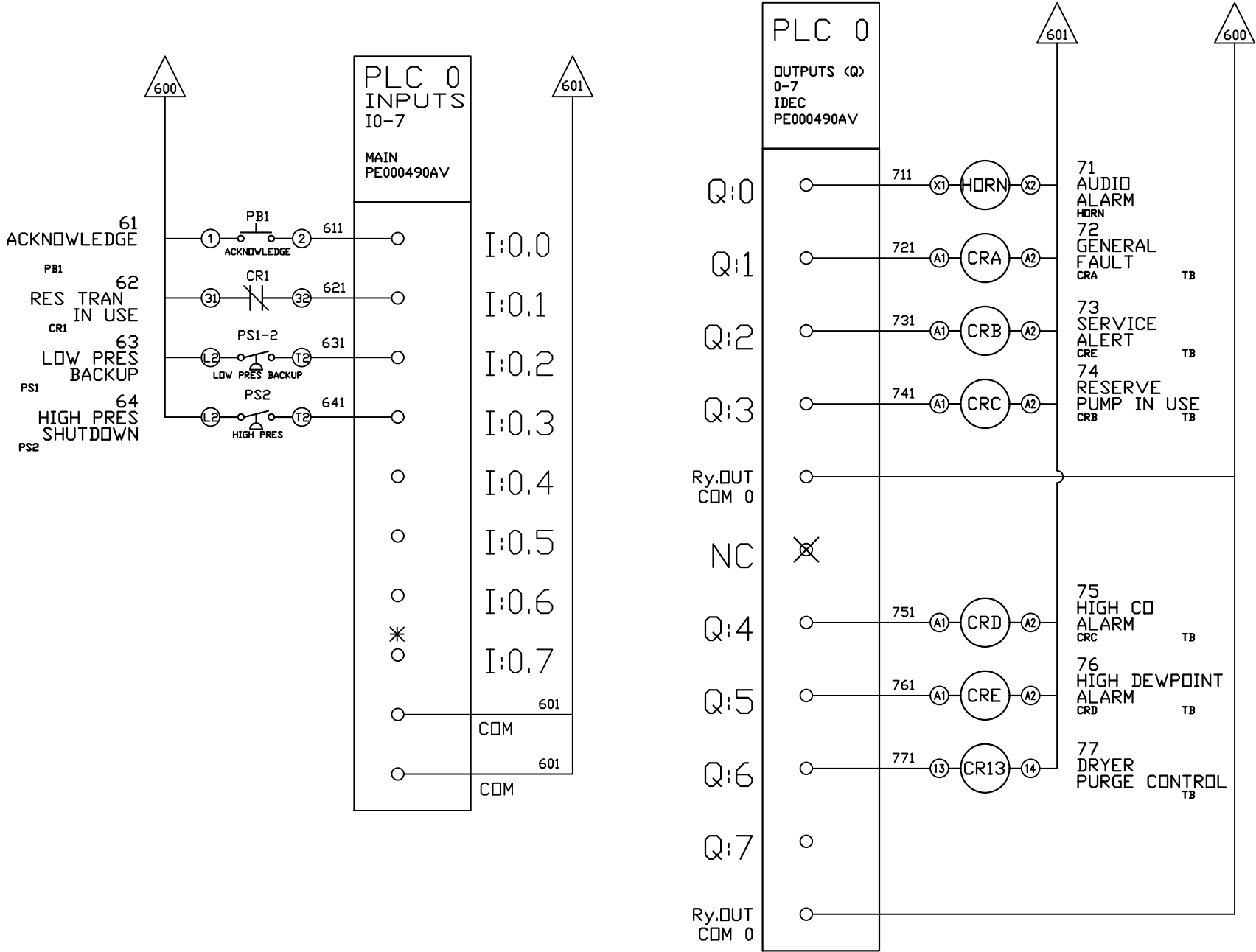
DWG. TYPE
WIRING

DWG. NO.
PXMI-S216F W

SHEET
W-3

SIZE
B

REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	10/18/12	22722	BFH	CHR
E-1	SWAP PLC TO FC6A	02/08/19	PXEC0200	JLM	AJL
F-1	REMOVED RUNGS 73-76 HIGH TEMP INPUTS	05/17/21	PXEC0414	KMD	AJL
G-1	ADD CB TO EXTERNAL DEVICES & DISCONNECT TO INPUT POWER	05/20/24	PXEC0628	SEK	JRD
G-2	ADDED MORE TERMINAL BLOCKS	03/19/25	PXEC0628	JRD	STK
H-1	ADDED PLEX ISOLATION	05/08/25	PXEC0639	SEK	WMM



*FACTORY TEST JUMPER LOCATION

OPTIONAL:

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DRAWN BY	CHECKED BY	ENGINEERING APPROVAL
BFH	CHR	CHR
10/18/12	10/23/12	10/23/12

PANEL TYPE

DUPLEX MED 15HP SCROLL HMI, NFPA

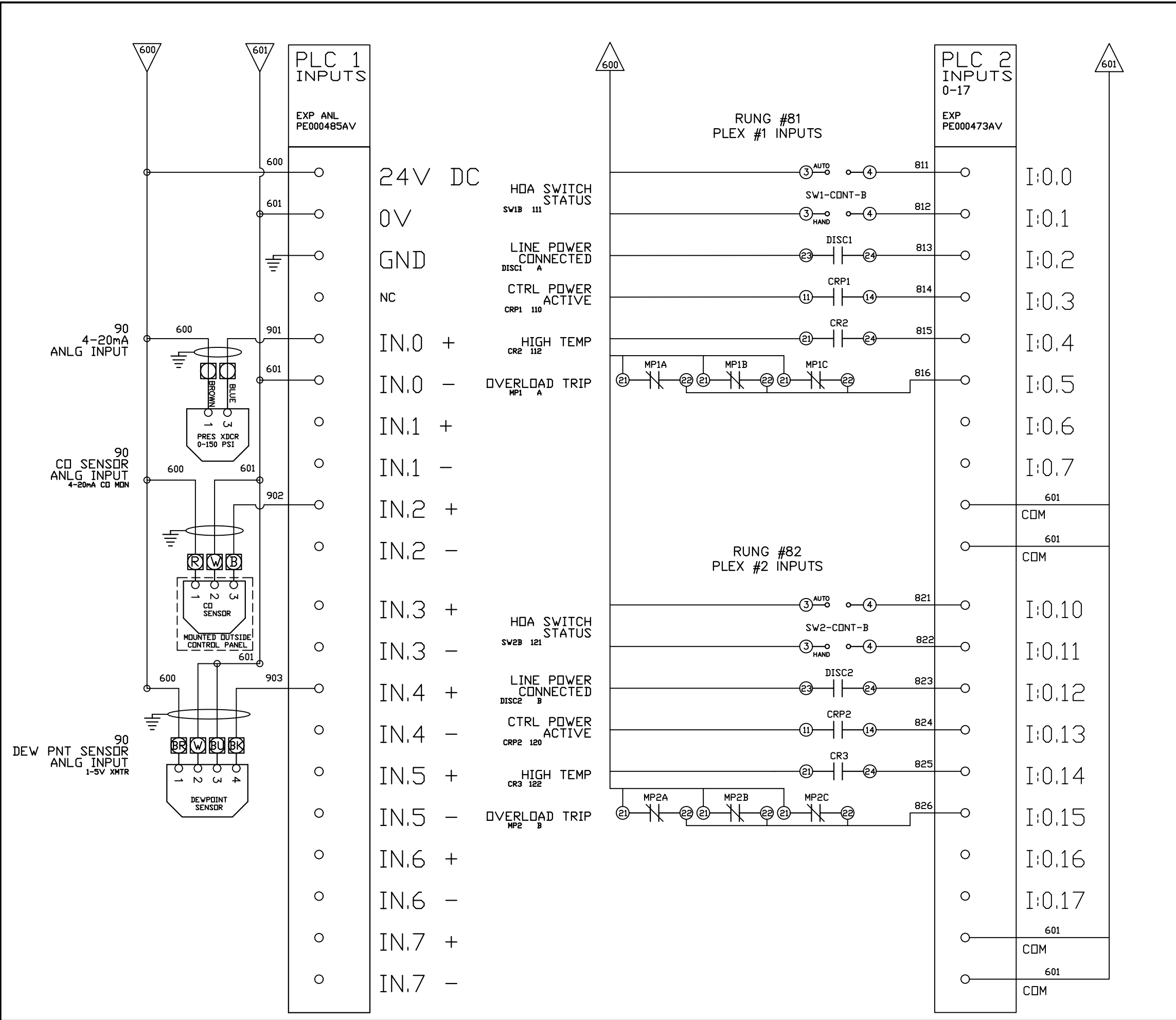
DWG. TYPE WIRING

DWG. NO.

PXMI-S216F W

SHEET	SIZE
W-5	B

PXMI-S216F B1



REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	10/18/12	22722	BFH	CHR
E-1	SWAP PLC TO FC6A	02/08/19	PXEC0200	JLM	AJL
F-1	REMOVED RUNGS 73-76 HIGH TEMP INPUTS	05/17/21	PXEC0414	KMD	AJL
G-1	ADD CB TO EXTERNAL DEVICES & DISCONNECT TO INPUT POWER	05/20/24	PXEC0628	SEK	JRD
G-2	ADDED MORE TERMINAL BLOCKS	03/19/25	PXEC0628	JRD	STK
H-1	ADDED PLEX ISOLATION	05/08/25	PXEC0639	SEK	WMM

OPTIONAL:

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DRAWN BY	CHECKED BY	ENGINEERING APPROVAL
BFH	CHR	CHR
10/18/12	10/23/12	10/23/12

PANEL TYPE

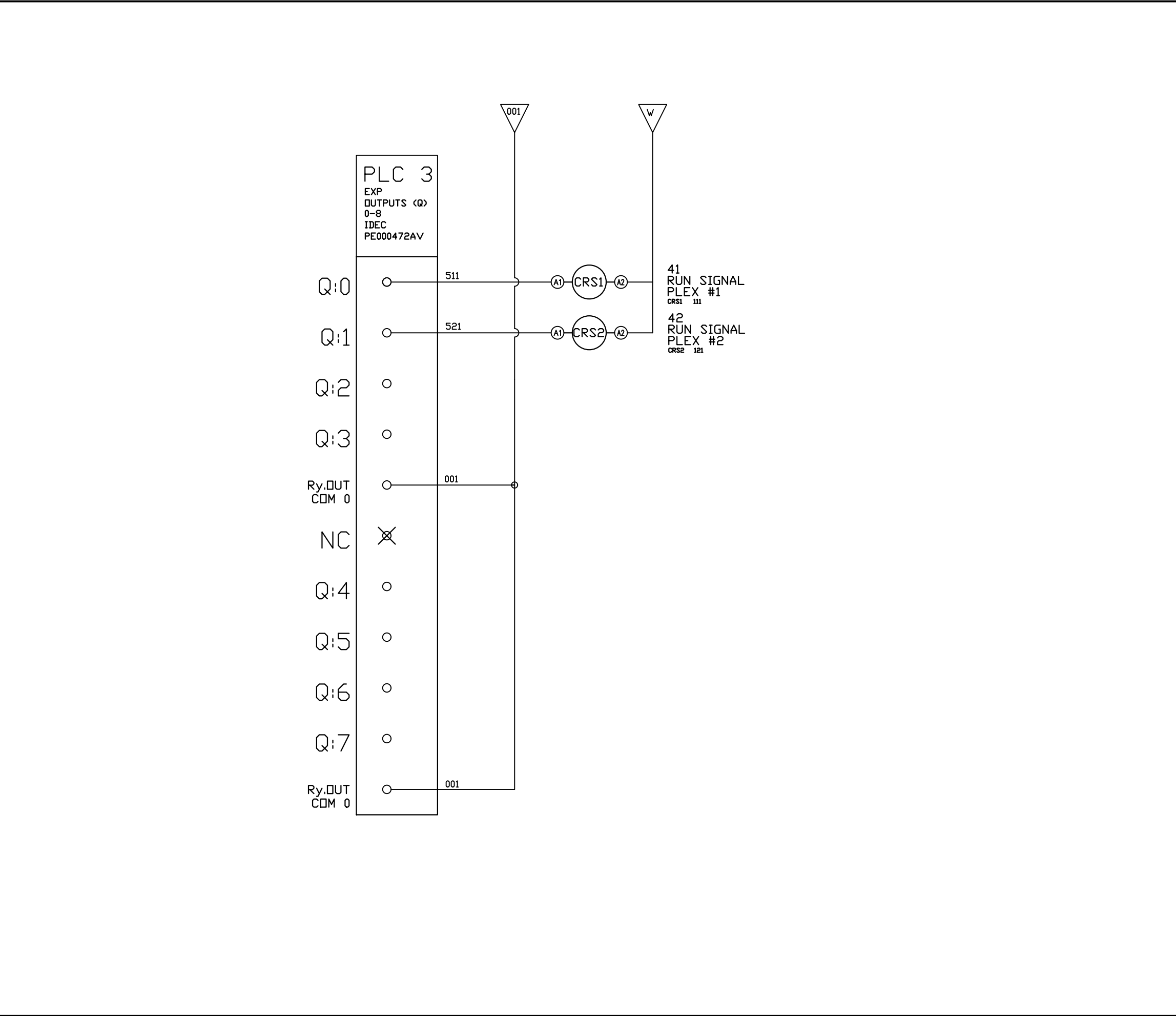
DUPLEX MED 15HP SCROLL HMI, NFPA

DWG. TYPE WIRING

DWG. NO. PXMI-S216F W

SHEET	SIZE
W-6	B

PXMI-S216F B1



REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	10/18/12	22722	BFH	CHR
E-1	SWAP PLC TO FC6A	02/08/19	PXEC0200	JLM	AJL
F-1	REMOVED RUNGS 73-76 HIGH TEMP INPUTS	05/17/21	PXEC0414	KMD	AJL
G-1	ADD CB TO EXTERNAL DEVICES & DISCONNECT TO INPUT POWER	05/20/24	PXEC0628	SEK	JRD
G-2	ADDED MORE TERMINAL BLOCKS	03/19/25	PXEC0628	JRD	STK
H-1	ADDED PLEX ISOLATION	05/08/25	PXEC0639	SEK	WMM

OPTIONAL:

POWEREX™

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DRAWN BY	CHECKED BY	ENGINEERING APPROVAL
BFH	CHR	CHR
10/18/12	10/23/12	10/23/12

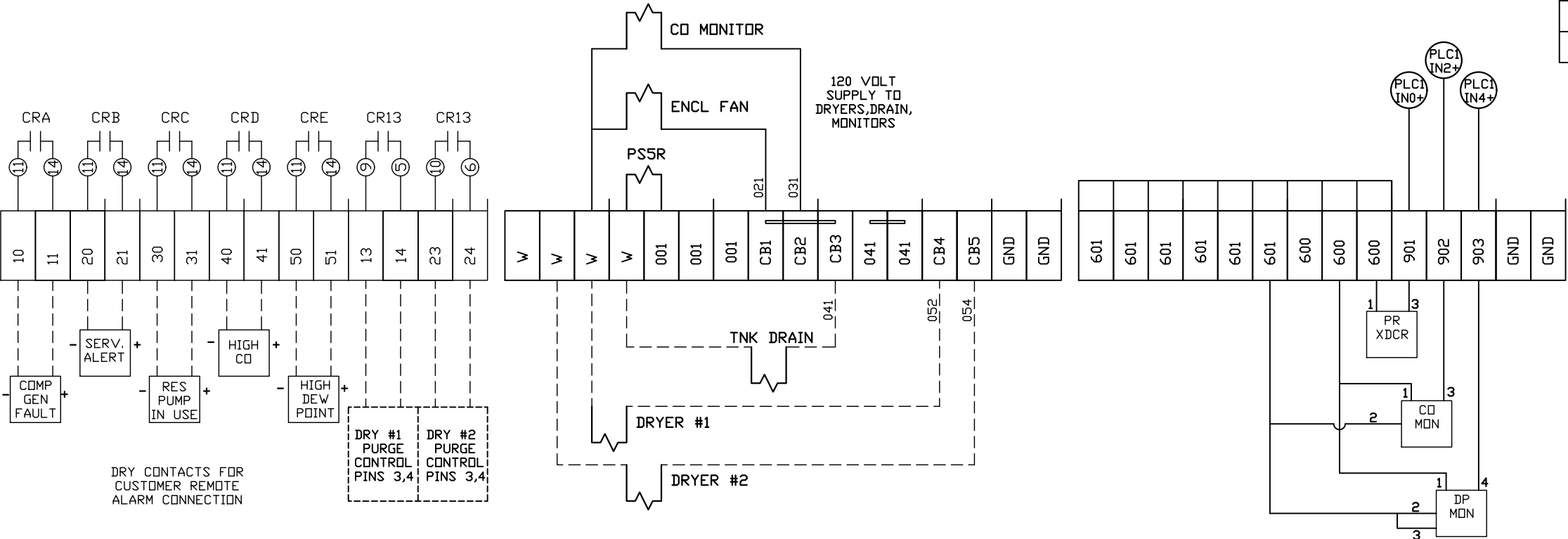
PANEL TYPE
DUPLEX MED 15HP SCROLL
HMI, NFPA

DWG. TYPE WIRING

DWG. NO.
PXMI-S216F W

SHEET	SIZE
W-7	B
PXMI-S216F B1	

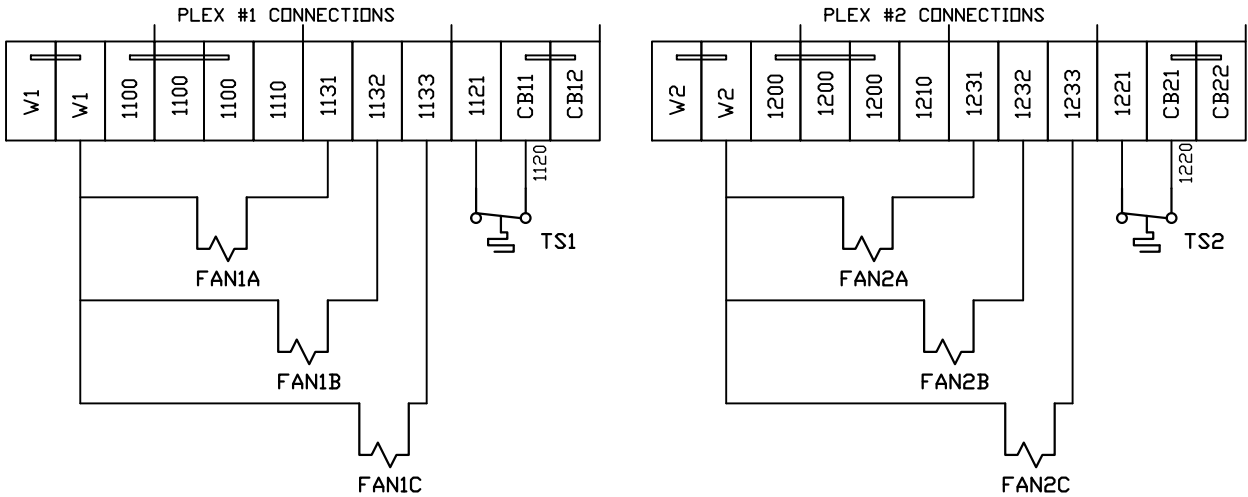
TERMINAL BLOCKS



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



REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	10/18/12	22722	BFH	CHR
E-1	SWAP PLC TO FC6A	02/08/19	PXEC0200	JLM	AJL
F-1	REMOVED RUNGS 73-76 HIGH TEMP INPUTS	05/17/21	PXEC0414	KMD	AJL
G-1	ADD CB TO EXTERNAL DEVICES & DISCONNECT TO INPUT POWER	05/20/24	PXEC0628	SEK	JRD
G-2	ADDED MORE TERMINAL BLOCKS	03/19/25	PXEC0628	JRD	STK
H-1	ADDED PLEX ISOLATION	05/08/25	PXEC0639	SEK	WMM

OPTIONAL:

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DRAWN BY	CHECKED BY	ENGINEERING APPROVAL
BFH	CHR	CHR
10/18/12	10/23/12	10/23/12

PANEL TYPE
DUPLX MED 15HP SCROLL
HMI, NFPA

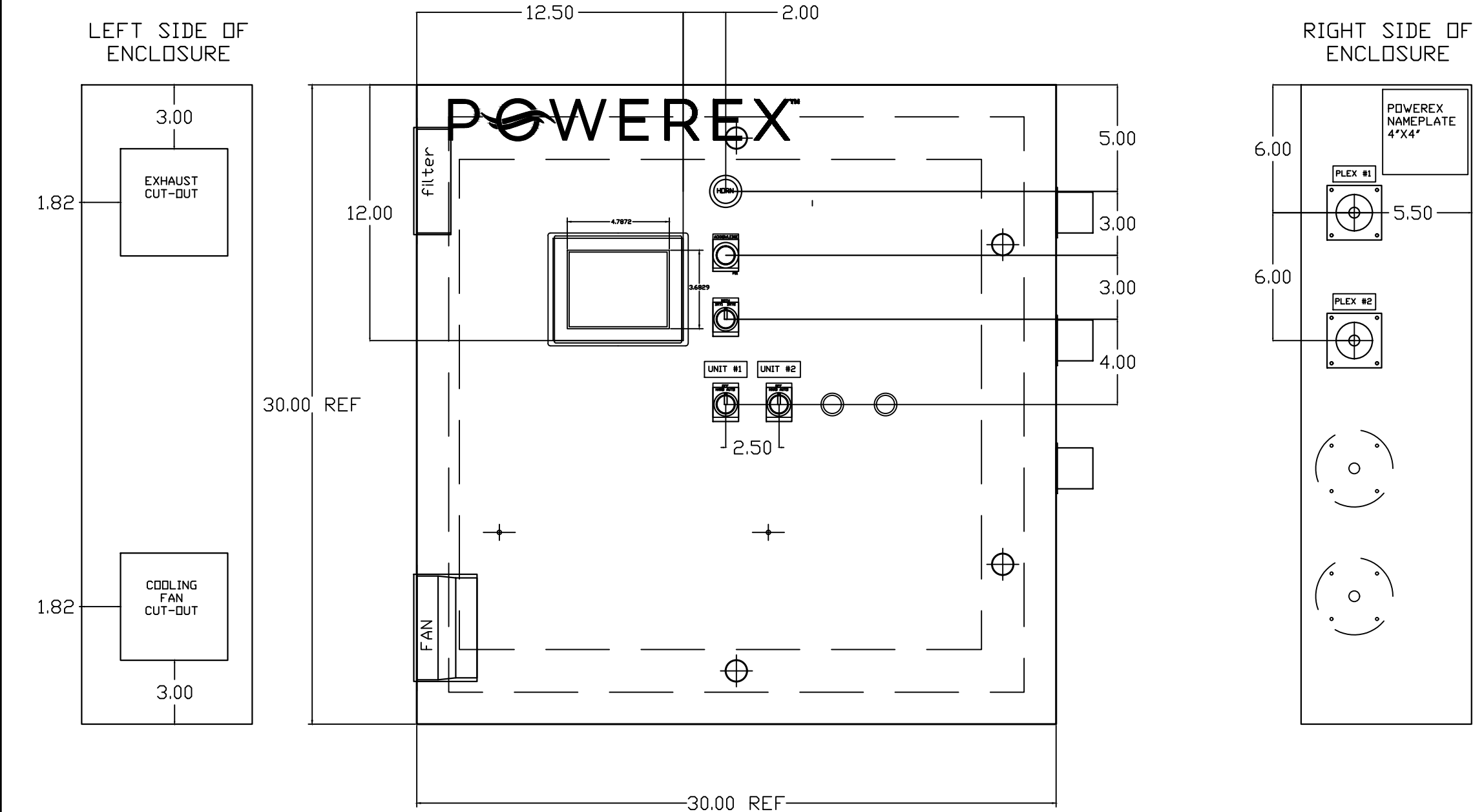
DWG. TYPE
WIRING

DWG. NO.
PXMI-S216F W

SHEET
W-8

SIZE
B

REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	10/18/12	22722	BFH	CHR
E-1	SWAP PLC TO FC6A	02/08/19	PXEC0200	JLM	AJL
F-1	REMOVED RUNGS 73-76 HIGH TEMP INPUTS	05/17/21	PXEC0414	KMD	AJL
G-1	ADD CB TO EXTERNAL DEVICES & DISCONNECT TO INPUT POWER	05/20/24	PXEC0628	SEK	JRD
G-2	ADDED MORE TERMINAL BLOCKS	03/19/25	PXEC0628	JRD	STK
H-1	ADDED PLEX ISOLATION	05/08/25	PXEC0639	SEK	WMM



OPTIONAL:

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DRAWN BY	CHECKED BY	ENGINEERING APPROVAL
BFH	CHR	CHR
10/18/12	10/23/12	10/23/12

PANEL TYPE

DUPLEX MED 15HP SCROLL HMI, NFPA

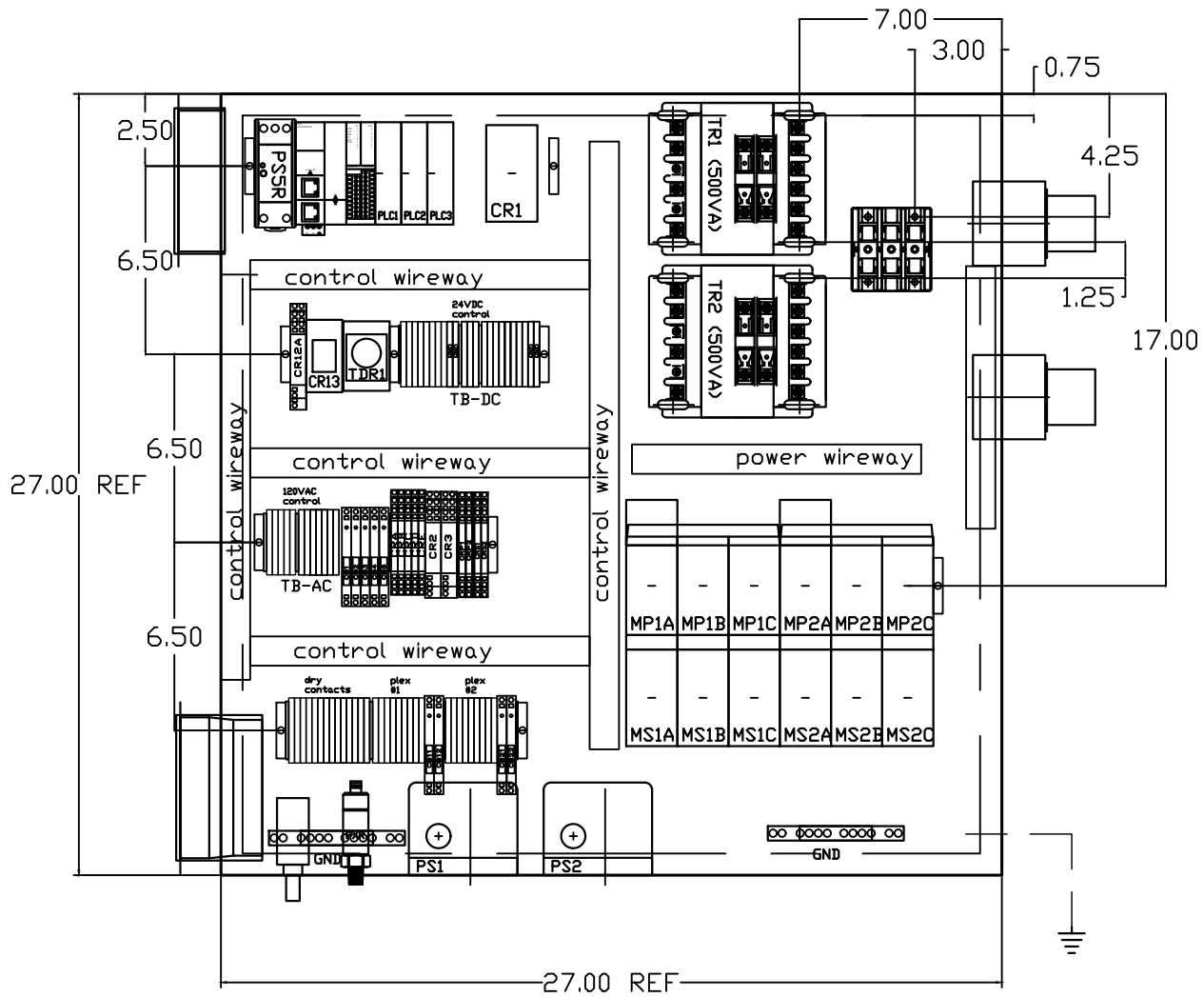
DWG. TYPE LAYOUT

DWG. NO. PXMI-S216F W

SHEET	SIZE
L-1	B

PXMI-S216F B1

REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	10/18/12	22722	BFH	CHR
E-1	SWAP PLC TO FC6A	02/08/19	PXEC0200	JLM	AJL
F-1	REMOVED RUNGS 73-76 HIGH TEMP INPUTS	05/17/21	PXEC0414	KMD	AJL
G-1	ADD CB TO EXTERNAL DEVICES & DISCONNECT TO INPUT POWER	05/20/24	PXEC0628	SEK	JRD
G-2	ADDED MORE TERMINAL BLOCKS	03/19/25	PXEC0628	JRD	STK
H-1	ADDED PLEX ISOLATION	05/08/25	PXEC0639	SEK	WMM



OPTIONAL:

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DRAWN BY	CHECKED BY	ENGINEERING APPROVAL
BFH	CHR	CHR
10/18/12	10/23/12	10/23/12

PANEL TYPE

DUPLEX MED 15HP SCROLL
HMI, NFPA

DWG. TYPE LAYOUT

DWG. NO.

PXMI-S216F W

SHEET	SIZE
L-2	B

PXMI-S216F 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		
PBMIS216F2AJ (5HPx3)x2	208V/3ø	14.0	88		125A	100A	110A		
PBMIS216F3AJ (5HPx3)x2	230V/3ø	12.7	81		110A	90A	100A		
PBMIS216F4AJ (5HPx3)x2	460V/3ø	6.33	42		60A	50A	60A		
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 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. △ -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

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	VOLTAGE	WIRE NUMBERS	GAUGE	COLOR
FU1,2A FU1,2B	FNQR	6A	5A	5A	4A	120VAC 0VAC 24VDC	001-599,1100+ W 600-1099	16-18AWG 16-18AWG 16-18AWG	RED/BLK WHT/BLK PURPLE
FU3A,B	FNM	7A	7A	7A	7A	0VDC GND	601 -	16-18AWG VARIES	PURPLE GREEN
SEE XFRMR FOR CONNECTIONS						CUSTOMER SUPPLY	01-99	16-18AWG	YELLOW

REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	10/18/12	22722	BFH	CHR
E-1	SWAP PLC TO FC6A	02/08/19	PXEC0200	JLM	AJL
F-1	REMOVED RUNGS 73–76 HIGH TEMP INPUTS	05/17/21	PXEC0414	KMD	AJL
G-1	ADD CB TO EXTERNAL DEVICES & DISCONNECT TO INPUT POWER	05/20/24	PXEC0628	SEK	JRD
G-2	ADDED MORE TERMINAL BLOCKS	03/19/25	PXEC0628	JRD	STK
H-1	ADDED PLEX ISOLATION	05/08/25	PXEC0639	SEK	WMM

OPTIONAL:



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DRAWN BY	CHECKED BY	ENGINEERING APPROVAL
BFH	CHR	CHR
10/18/12	10/23/12	10/23/12

PANEL TYPE

DUPLEX MED 15HP SCROLL
HMI, NFPA

DWG. TYPE DATA

DWG. NO.

PXMI-S216F W

SHEET	SIZE
D-1	B

PXMI-S216F B1

REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	10/18/12	22722	BFH	CHR
E-1	SWAP PLC TO FC6A	02/08/19	PXEC0200	JLM	AJL
F-1	REMOVED RUNGS 73-76 HIGH TEMP INPUTS	05/17/21	PXEC0414	KMD	AJL
G-1	ADD CB TO EXTERNAL DEVICES & DISCONNECT TO INPUT POWER	05/20/24	PXEC0628	SEK	JRD
G-2	ADDED MORE TERMINAL BLOCKS	03/19/25	PXEC0628	JRD	STK
H-1	ADDED PLEX ISOLATION	05/08/25	PXEC0639	SEK	WMM

TABLE 1							
PANEL DATA 3Ø – 50 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
PBMIS216F3AJ (5HPx3)x2	220V/3Ø	13.5	83.0		110A	95A	110A
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.

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					WIRE TYPE TABLE			
REPLACEMENT	208	230	460 380	575	VOLTAGE	WIRE NUMBERS	GAUGE	COLOR
FUSE TYPE	VOLT	VOLT	VOLT	VOLT	120VAC	001-599,1100+	16-18AWG	RED/BLK
FU1,2A	FNQR	6A	5A	5A	0VAC	W	16-18AWG	WHT/BLK
FU1,2B				4A	24VDC	600-1099	16-18AWG	PURPLE
FU3A,B	FNM	7A	7A	7A	0VDC	601	16-18AWG	PURPLE
SEE XFRMR FOR CONNECTIONS					GND	-	VARIES	GREEN
					CUSTOMER	01-99	16-18AWG	YELLOW
					SUPPLY			

OPTIONAL:



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DRAWN BY	CHECKED BY	ENGINEERING APPROVAL
BFH	CHR	CHR
10/18/12	10/23/12	10/23/12

PANEL TYPE

DUPLEX MED 15HP SCROLL
HMI, NFPA

DWG. TYPE DATA

DWG. NO.

PXMI-S216F W

SHEET	SIZE
D-1	B

PXMI-S216F B1