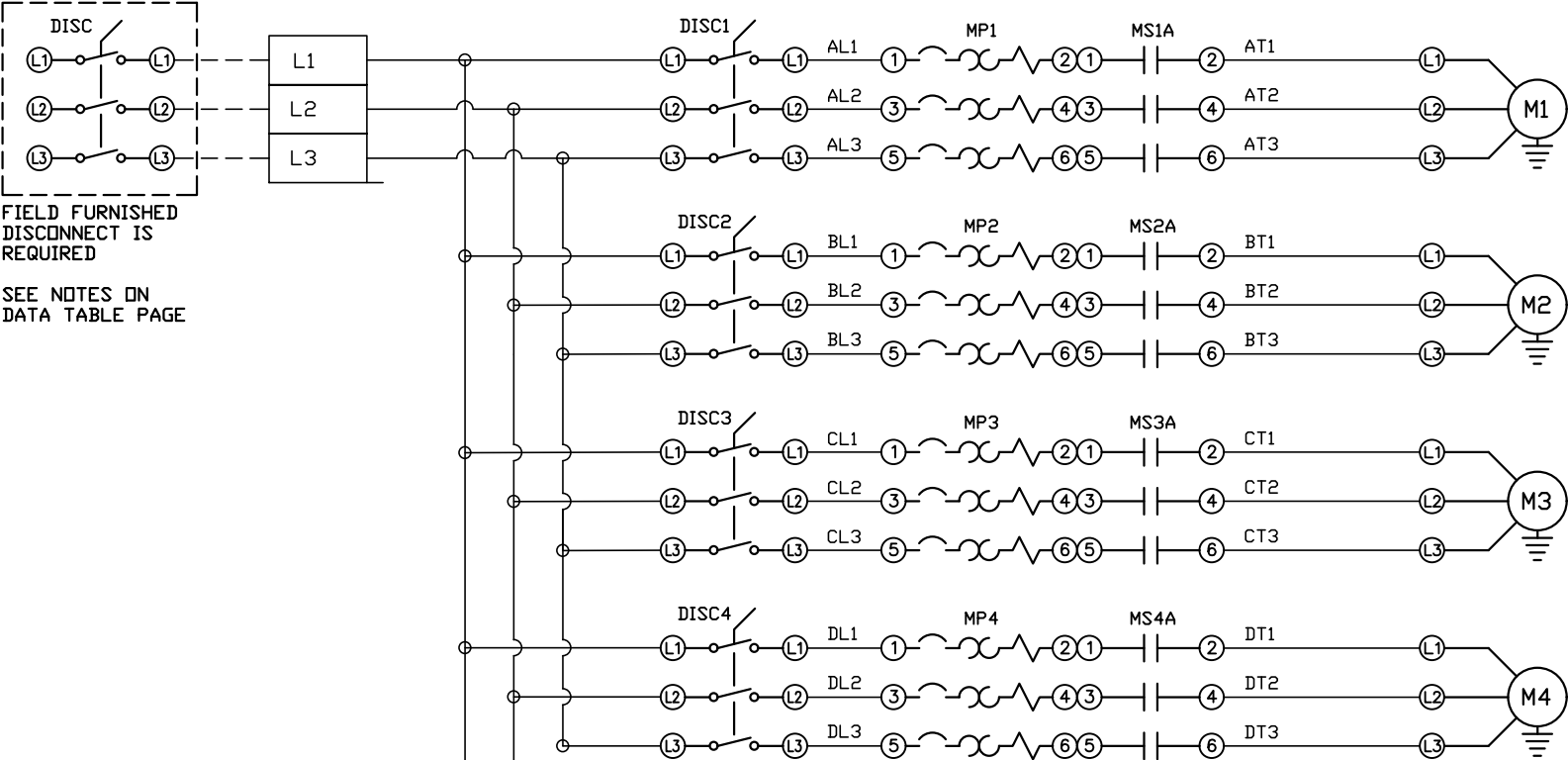




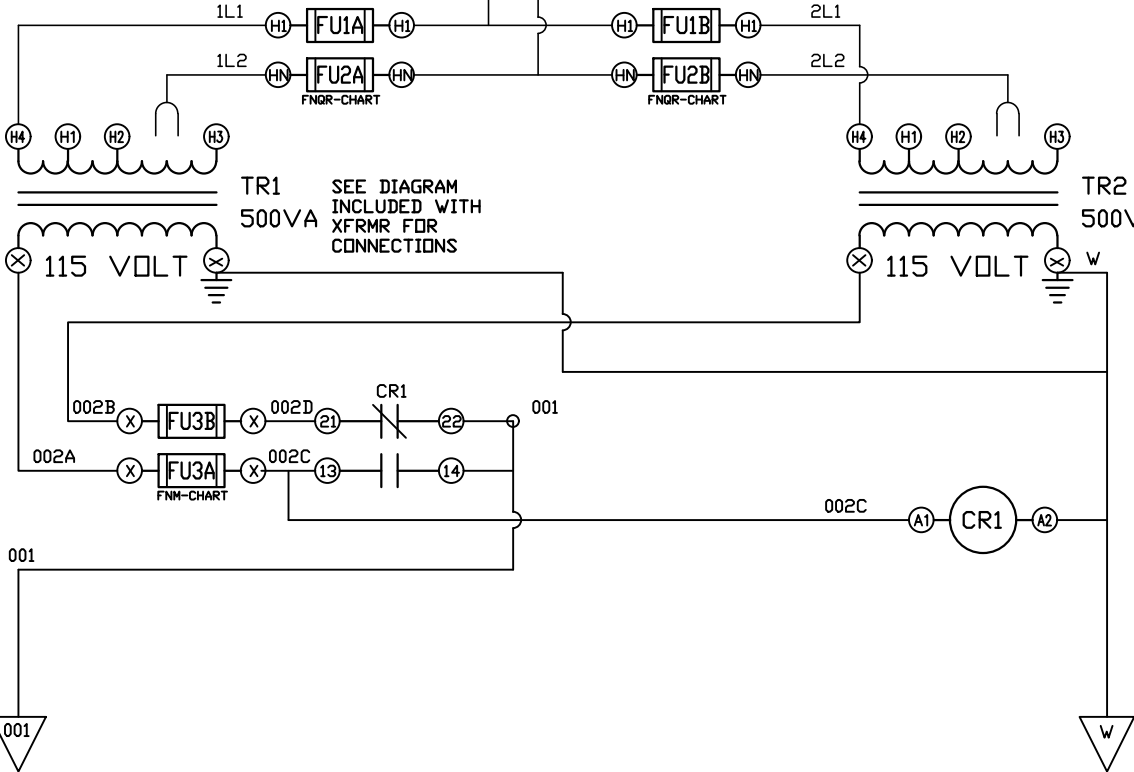
A
POWER
PLEX #1
MP1

B
POWER
PLEX #2
MP2

C
POWER
PLEX #3
MP3

D
POWER
PLEX #4
MP4

POWER
120V CONTROL
FU1&2 A, B



01
PRIMARY
TRANSFORMER ON
CR1 00 62

REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	06/14/12	22722	CHR	DMS
H-1	ADDED GROUND TERMINAL BLOCKS	04/15/25	PXEC0688	JNW	JRD
J-1	ADDED PLEX ISOLATION	06/02/25	PXEC0639	SEK	WMM

OPTIONAL:

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DRAWN BY	CHECKED BY	ENGINEERING APPROVAL
CHR	DMS	DMS
07/20/11	06/14/12	06/14/12

PANEL TYPE
MED AIR QUADRUPLEX
HMI, NFPA

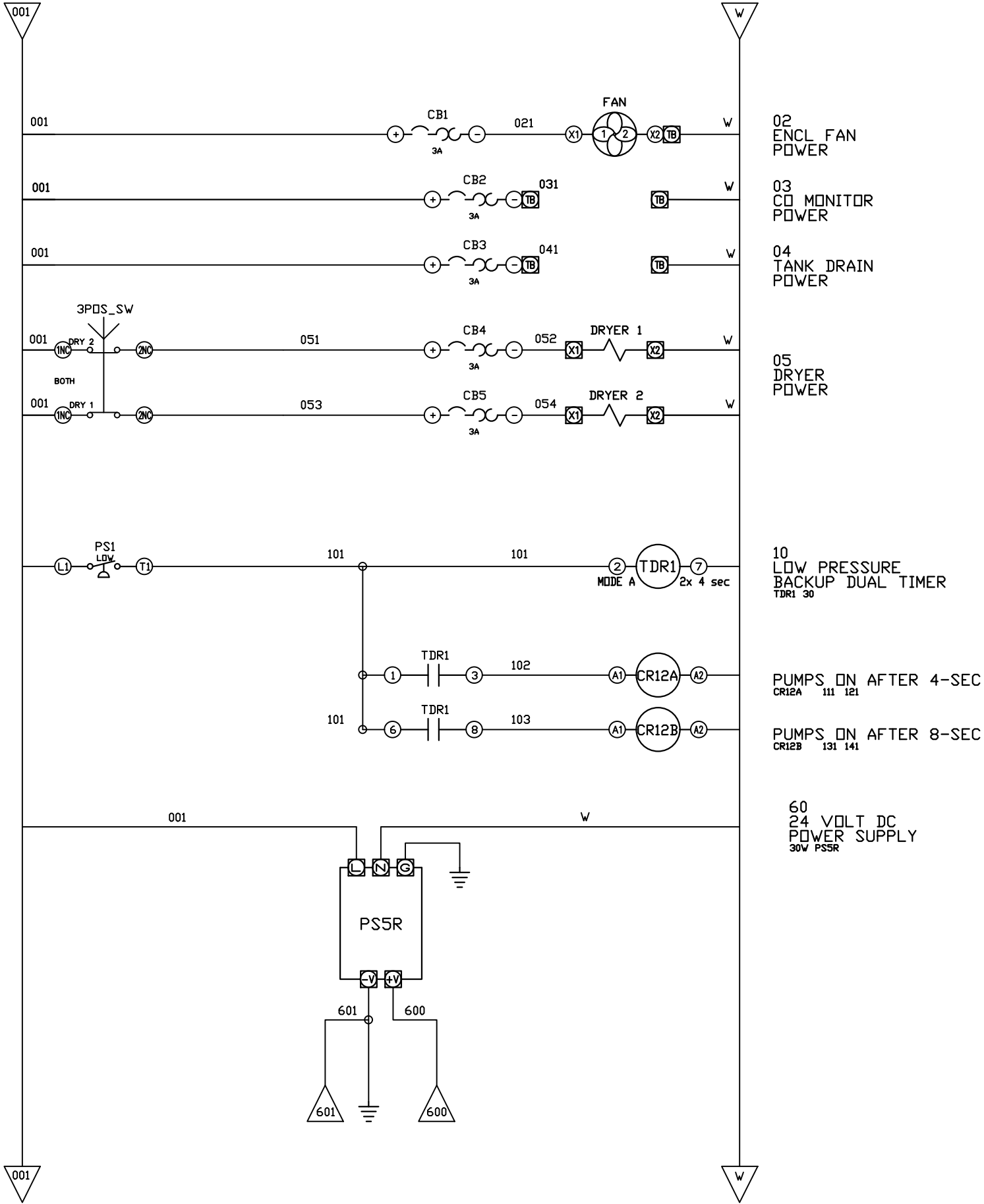
DWG. TYPE WIRING

DWG. NO.
PXMI-A416 W

SHEET
W-1

SIZE
B

REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	07/20/11	22722	CHR	DMS
H-1	ADDED GROUND TERMINAL BLOCKS	04/15/25	PXEC0688	JNW	JRD
J-1	ADDED PLEX ISOLATION	06/02/25	PXEC0639	SEK	WMM



OPTIONAL:

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DRAWN BY	CHECKED BY	ENGINEERING APPROVAL
CHR	DMS	DMS
07/20/11	06/14/12	06/14/12

PANEL TYPE

MED AIR QUADRUPLEX
HMI, NFPA

DWG. TYPE WIRING

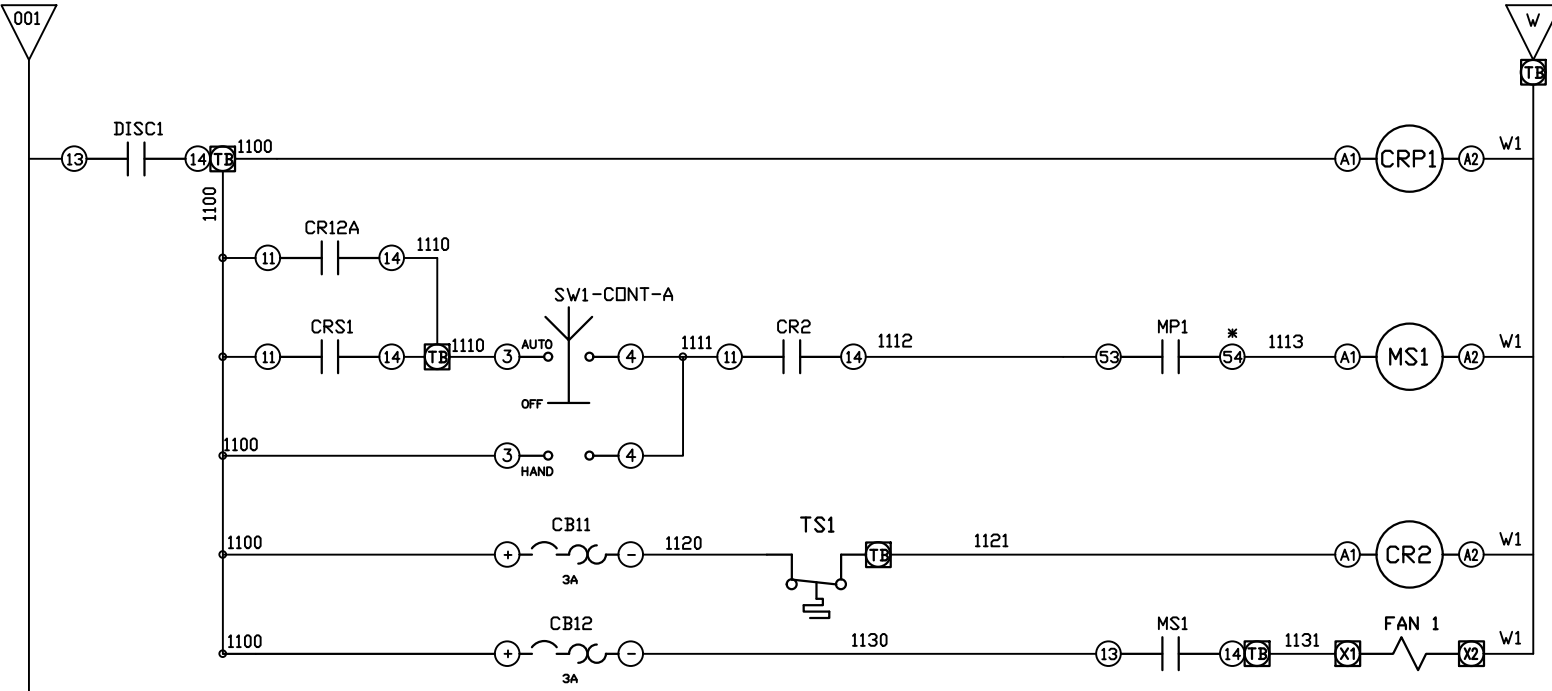
DWG. NO.

PXMI-A416 W

SHEET	SIZE
W-2	B

PXMI-A416 B1

REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	07/20/11	22722	CHR	DMS
H-1	ADDED GROUND TERMINAL BLOCKS	04/15/25	PXEC0688	JNW	JRD
J-1	ADDED PLEX ISOLATION	06/02/25	PXEC0639	SEK	WMM

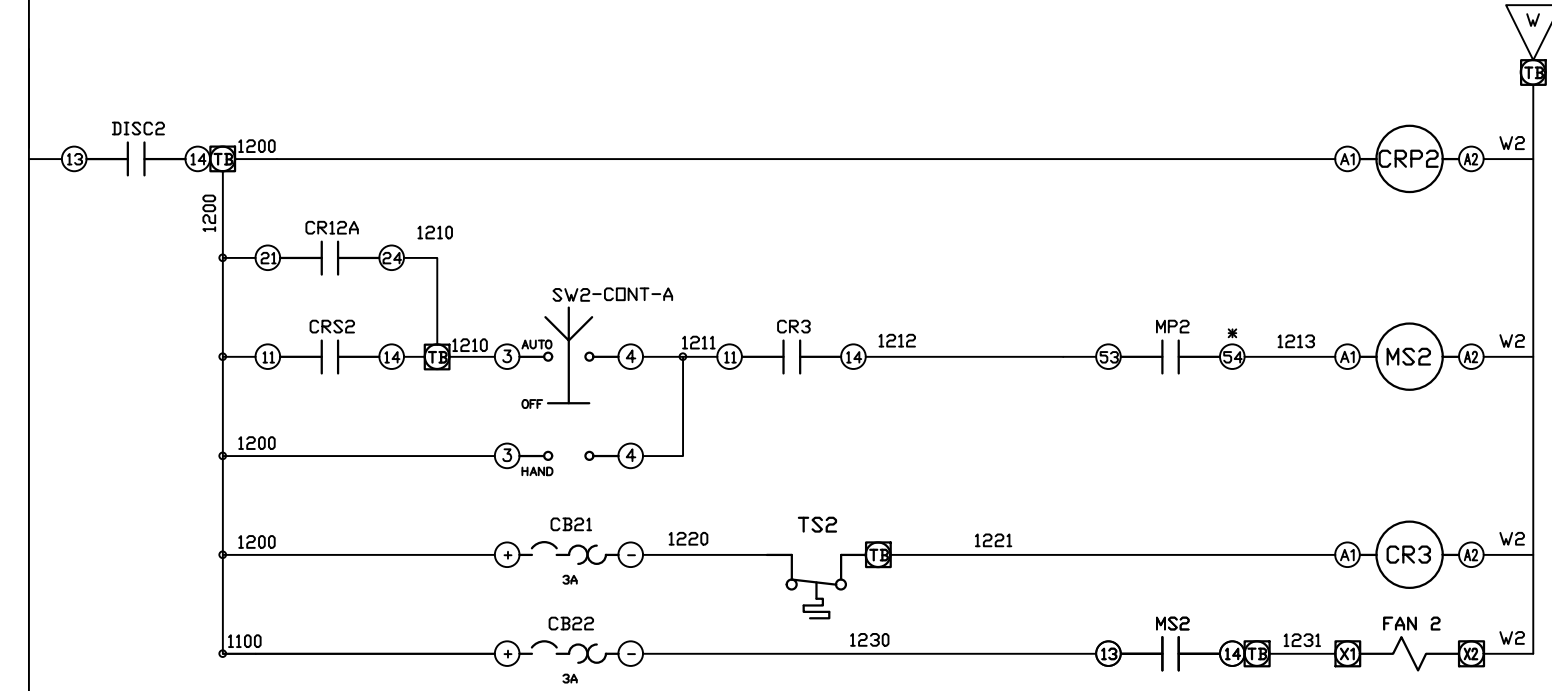


110
CONTROL POWER
PLEX #1
CRP1 81

111
MOTOR START
PLEX #1
MS1 A 81 113

112
HIGH TEMP SW
PLEX #1
CR2 81 111

113
AFTERCOOLER FAN
PLEX #1
PLEX #1 TB



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
PLEX #2
PLEX #2 TB

* FOR LAYOUT-B MOTOR PROTECTORS USE
PINS #1 AND #4 ON AUX CONTACTS

OPTIONAL:

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DRAWN BY	CHECKED BY	ENGINEERING APPROVAL
CHR	DMS	DMS
07/20/11	06/14/12	06/14/12

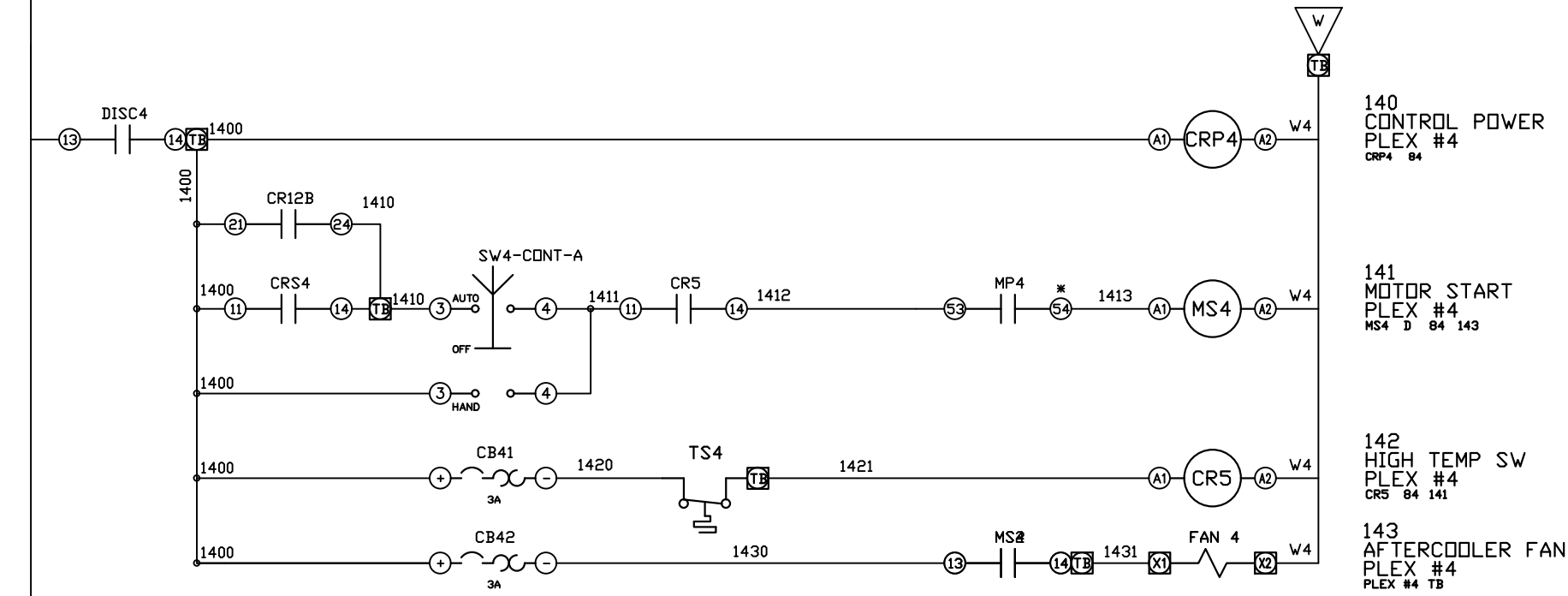
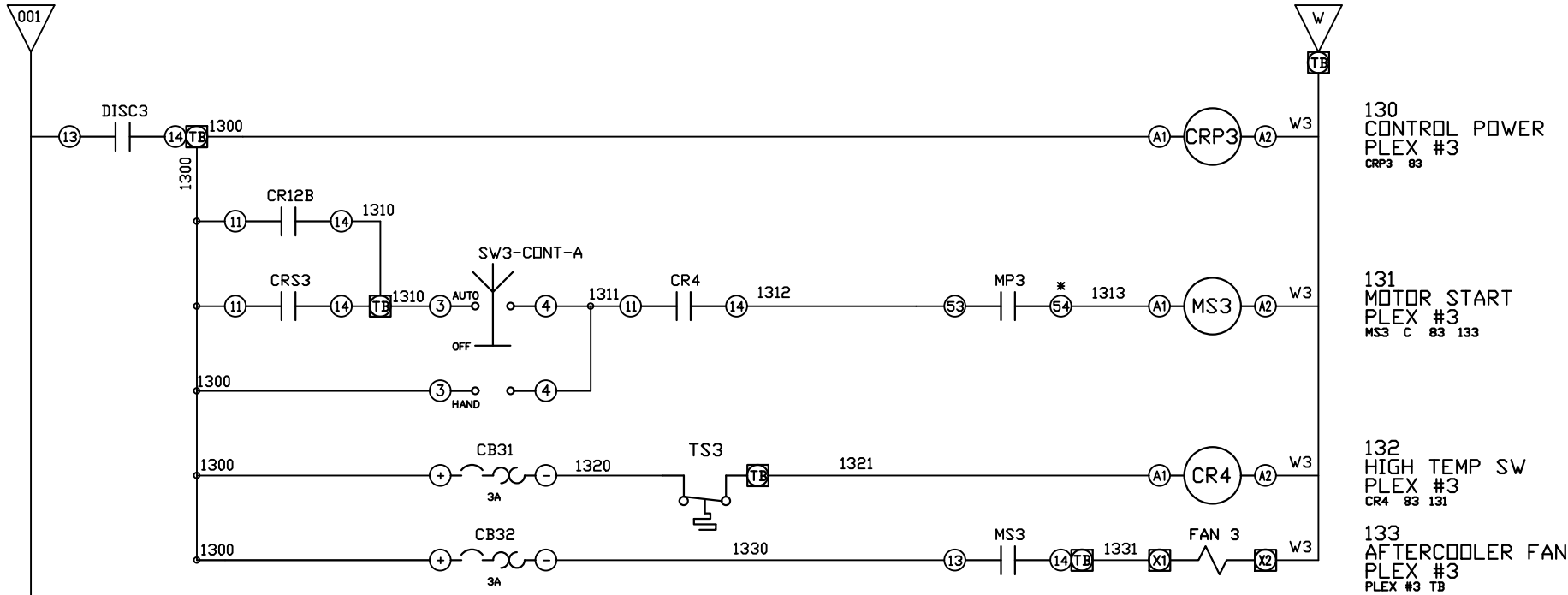
PANEL TYPE
MED AIR QUADRUPLIX
HMI, NFPA

DWG. TYPE WIRING

DWG. NO. PXMI-A416 W

SHEET	SIZE
W-3	B

REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	07/20/11	22722	CHR	DMS
H-1	ADDED GROUND TERMINAL BLOCKS	04/15/25	PXEC0688	JNW	JRD
J-1	ADDED PLEX ISOLATION	06/02/25	PXEC0639	SEK	WMM



* FOR LAYOUT-B MOTOR PROTECTORS USE
PINS #1 AND #4 ON AUX CONTACTS

OPTIONAL:

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DRAWN BY	CHECKED BY	ENGINEERING APPROVAL
CHR	DMS	DMS
07/20/11	06/14/12	06/14/12

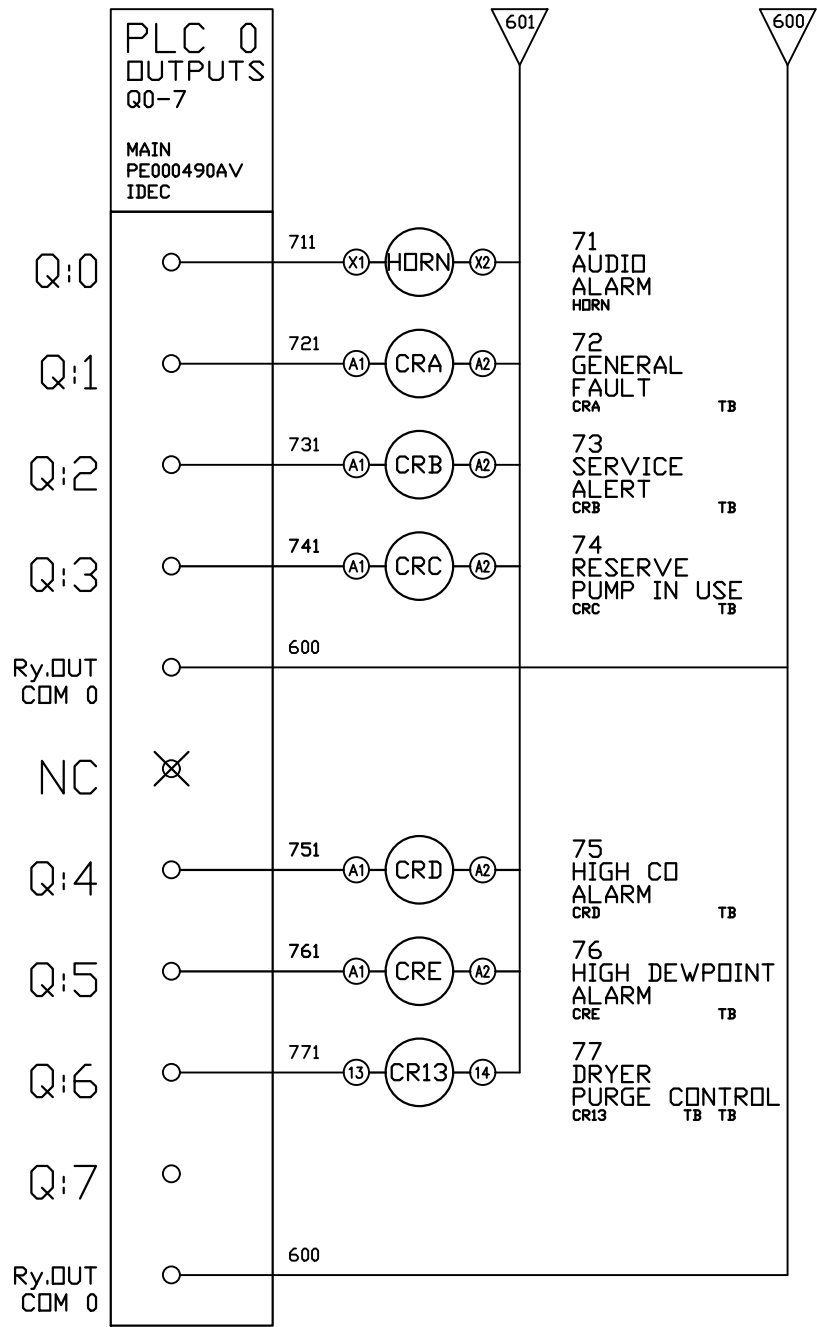
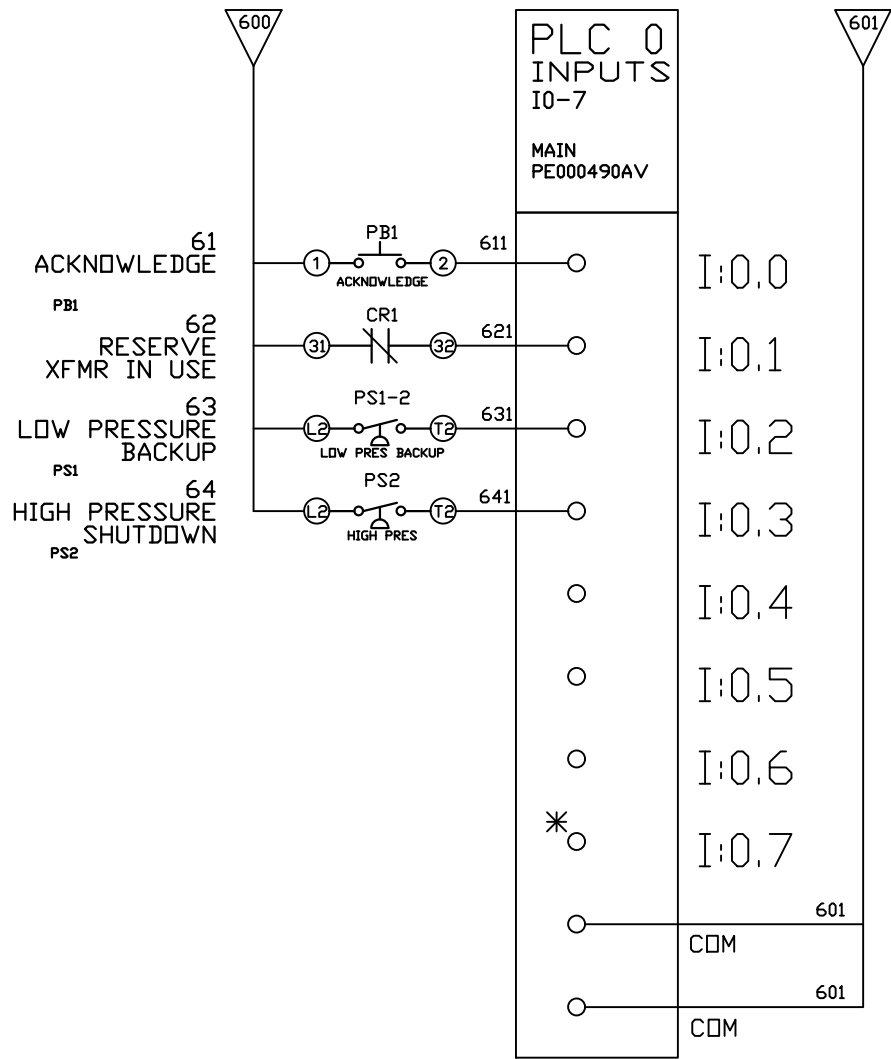
PANEL TYPE
MED AIR QUADRUPLX
HMI, NFPA

DWG. TYPE WIRING

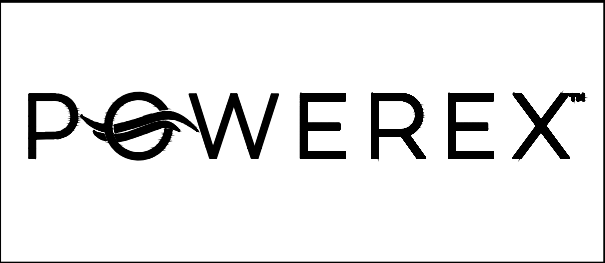
DWG. NO.
PXMI-A416 W

SHEET	SIZE
W-4	B

REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	07/20/11	22722	CHR	DMS
H-1	ADDED GROUND TERMINAL BLOCKS	04/15/25	PXEC0688	JNW	JRD
J-1	ADDED PLEX ISOLATION	06/02/25	PXEC0639	SEK	WMM



OPTIONAL:



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DRAWN BY	CHECKED BY	ENGINEERING APPROVAL
CHR	DMS	DMS
07/20/11	06/14/12	06/14/12

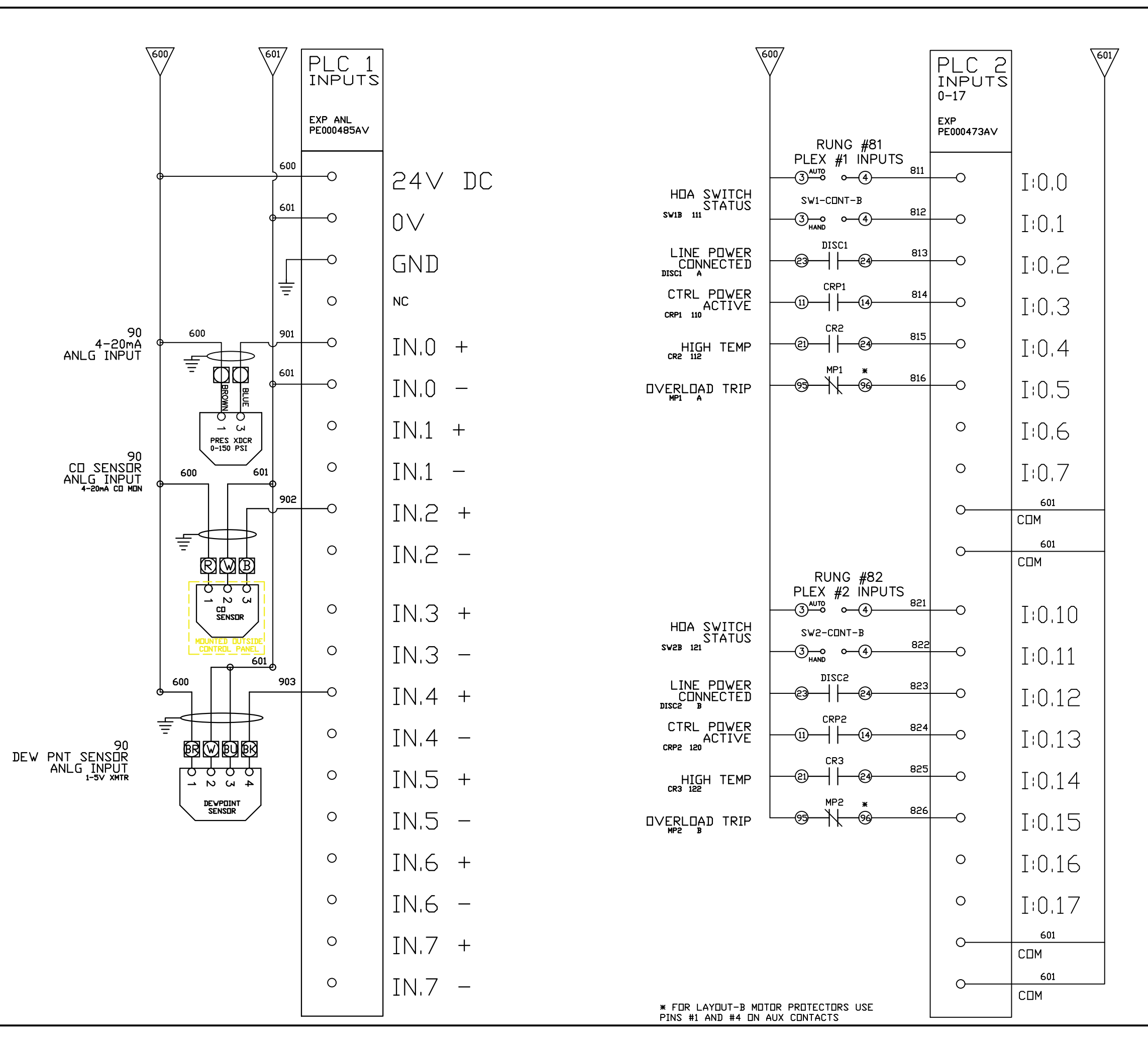
PANEL TYPE
MED AIR QUADRUPLIX
HMI, NFPA

DWG. TYPE WIRING

DWG. NO.
PXMI-A416 W

SHEET	SIZE
W-6	B

* INSTALL JUMPER FOR FACTORY TEST



REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	07/20/11	22722	CHR	DMS
H-1	ADDED GROUND TERMINAL BLOCKS	04/15/25	PXEC0688	JNW	JRD
J-1	ADDED PLEX ISOLATION	06/02/25	PXEC0639	SEK	WMM

OPTIONAL:

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DRAWN BY	CHECKED BY	ENGINEERING APPROVAL
CHR	DMS	DMS
07/20/11	06/14/12	06/14/12

PANEL TYPE
MED AIR QUADRUPLEX
HMI, NFPA

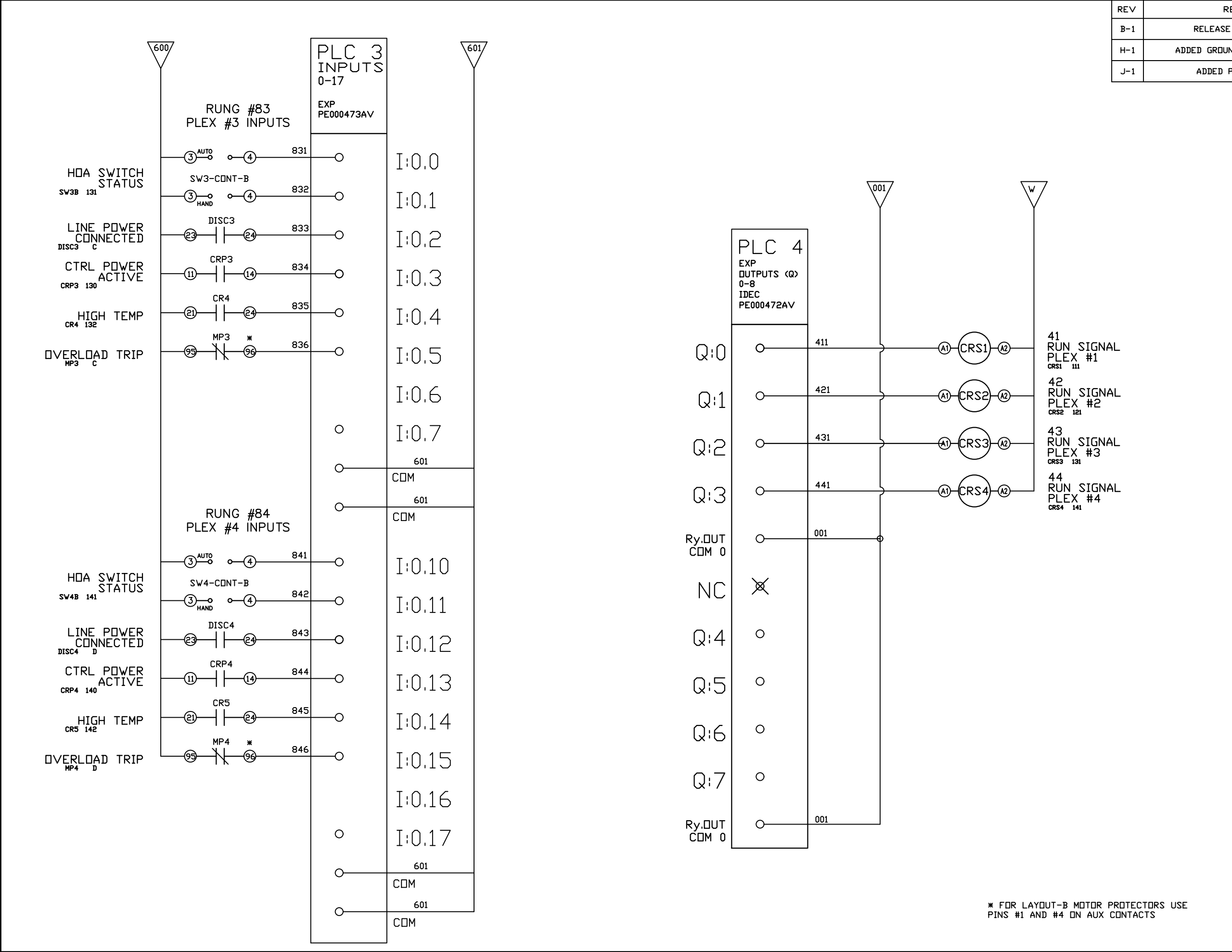
DWG. TYPE
WIRING

DWG. NO.
PXMI-A416 W

SHEET W-7	SIZE B
--------------	-----------

PXMI-A416 B1

REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	07/20/11	22722	CHR	DMS
H-1	ADDED GROUND TERMINAL BLOCKS	04/15/25	PXEC0688	JNW	JRD
J-1	ADDED PLEX ISOLATION	06/02/25	PXEC0639	SEK	WMM



OPTIONAL:

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DRAWN BY	CHECKED BY	ENGINEERING APPROVAL
CHR	DMS	DMS
07/20/11	06/14/12	06/14/12

PANEL TYPE

MED AIR QUADRUPLEX
HMI, NFPA

DWG. TYPE WIRING

DWG. NO.

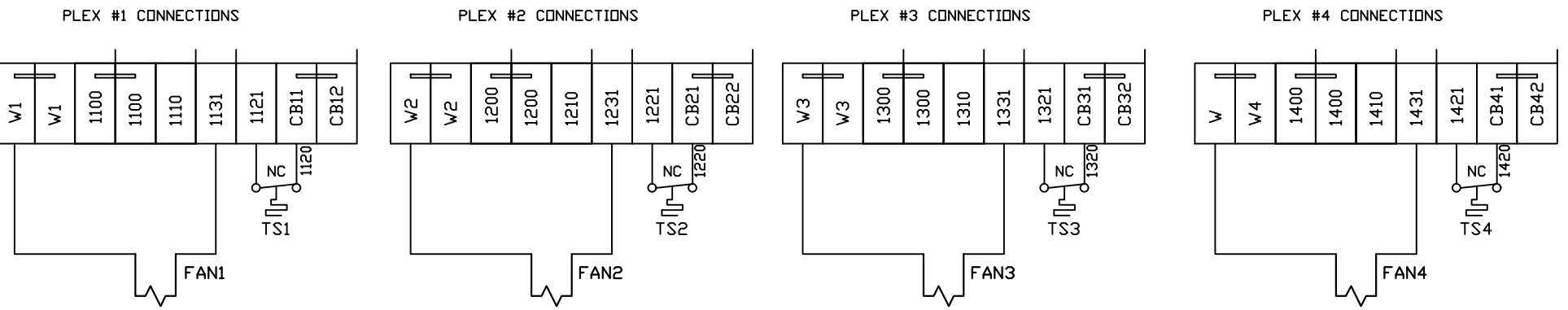
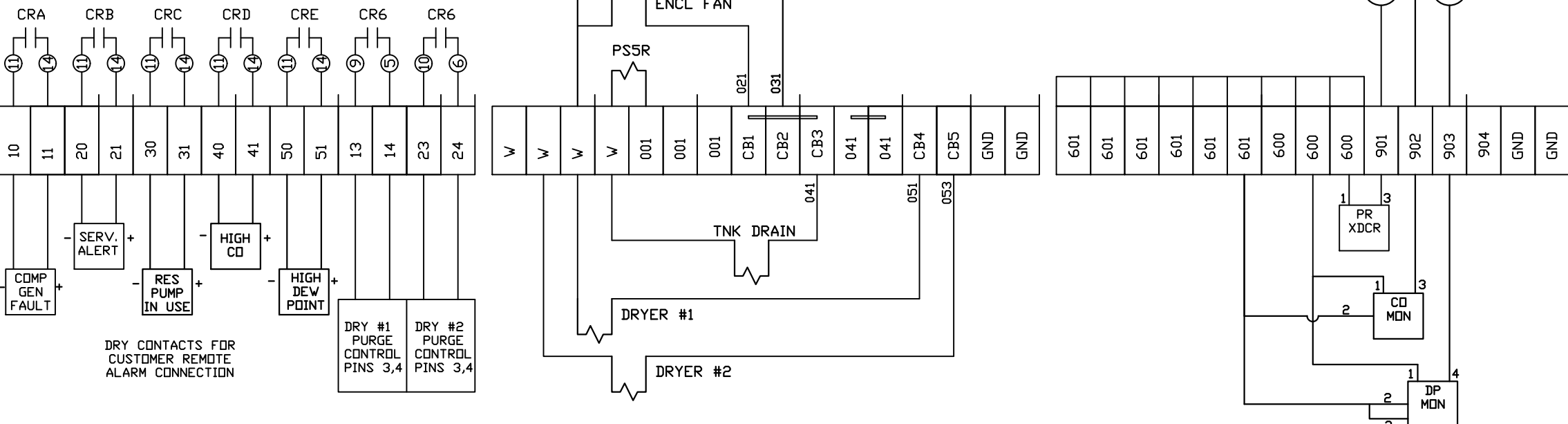
PXMI-A416 W

SHEET	SIZE
W-8	B

PXMI-A416 B1

* FOR LAYOUT-B MOTOR PROTECTORS USE PINS #1 AND #4 ON AUX CONTACTS

TERMINAL BLOCKS



- 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	07/20/11	22722	CHR	DMS
H-1	ADDED GROUND TERMINAL BLOCKS	04/15/25	PXEC0688	JNW	JRD
J-1	ADDED PLEX ISOLATION	06/02/25	PXEC0639	SEK	WMM

OPTIONAL:

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DRAWN BY	CHECKED BY	ENGINEERING APPROVAL
CHR	DMS	DMS
07/20/11	06/14/12	06/14/12

PANEL TYPE

MED AIR QUADRUPLEX
HMI, NFPA

DWG. TYPE

WIRING

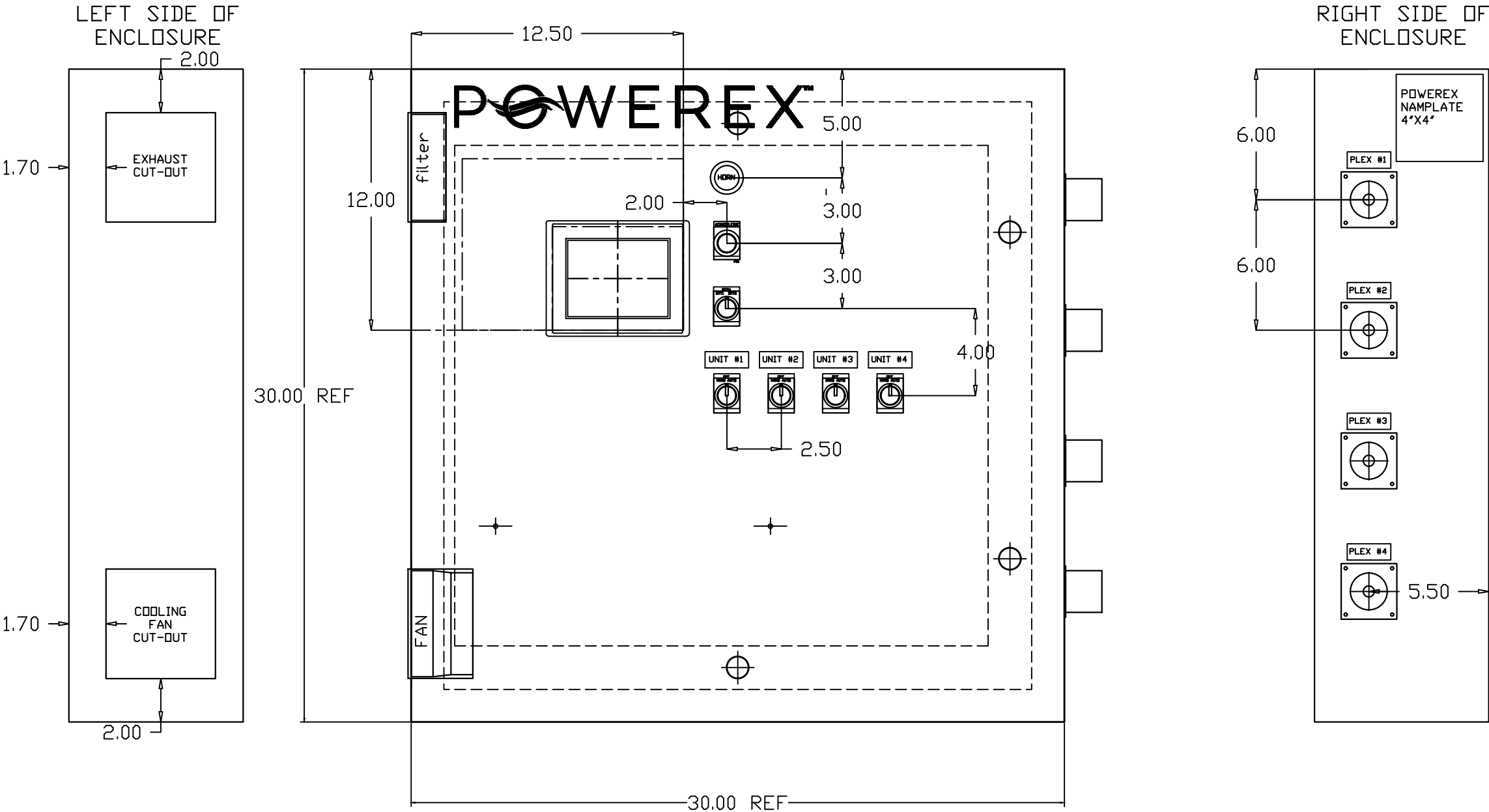
DWG. NO.

PXMI-A416 W

SHEET	SIZE
W-9	B

PXMI-A416 B1

REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	07/20/11	22722	CHR	DMS
H-1	ADDED GROUND TERMINAL BLOCKS	04/15/25	PXEC0688	JNW	JRD
J-1	ADDED PLEX ISOLATION	06/02/25	PXEC0639	SEK	WMM



OPTIONAL:

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DRAWN BY	CHECKED BY	ENGINEERING APPROVAL
CHR	DMS	DMS
07/20/11	06/14/12	06/14/12

PANEL TYPE

MED AIR QUADRUPLIX
HMI, NFPA

DWG. TYPE LAYOUT A

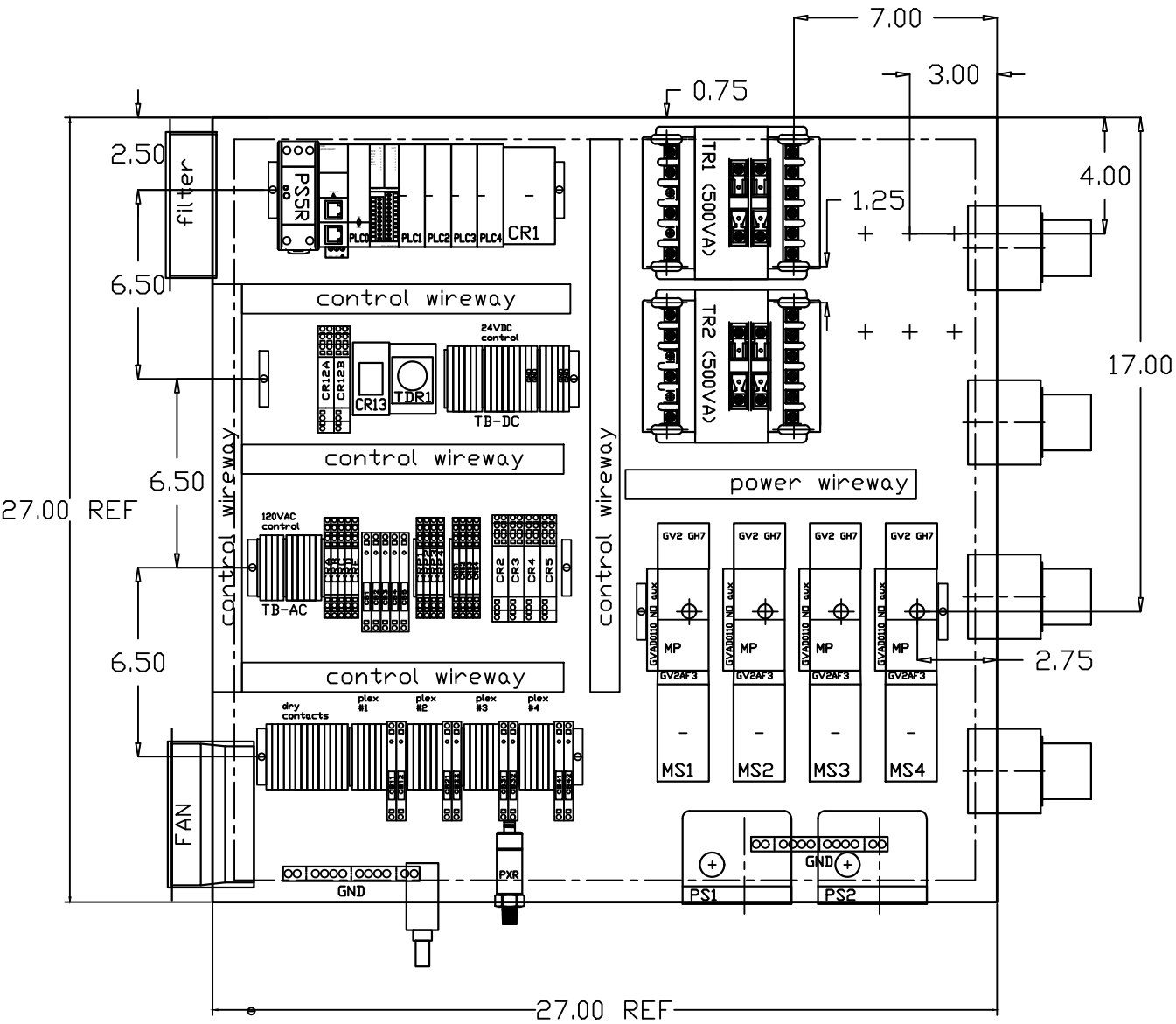
DWG. NO.

PXMI-A416 W

SHEET	SIZE
LA-1	B

PXMI-A416 B1

REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	07/20/11	22722	CHR	DMS
H-1	ADDED GROUND TERMINAL BLOCKS	04/15/25	PXEC0688	JNW	JRD
J-1	ADDED PLEX ISOLATION	06/02/25	PXEC0639	SEK	WMM



OPTIONAL:

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DRAWN BY	CHECKED BY	ENGINEERING APPROVAL
CHR	DMS	DMS
07/20/11	06/14/12	06/14/12

PANEL TYPE

MED AIR QUADRUPLEX
HMI, NFPA

DWG. TYPE LAYOUT A

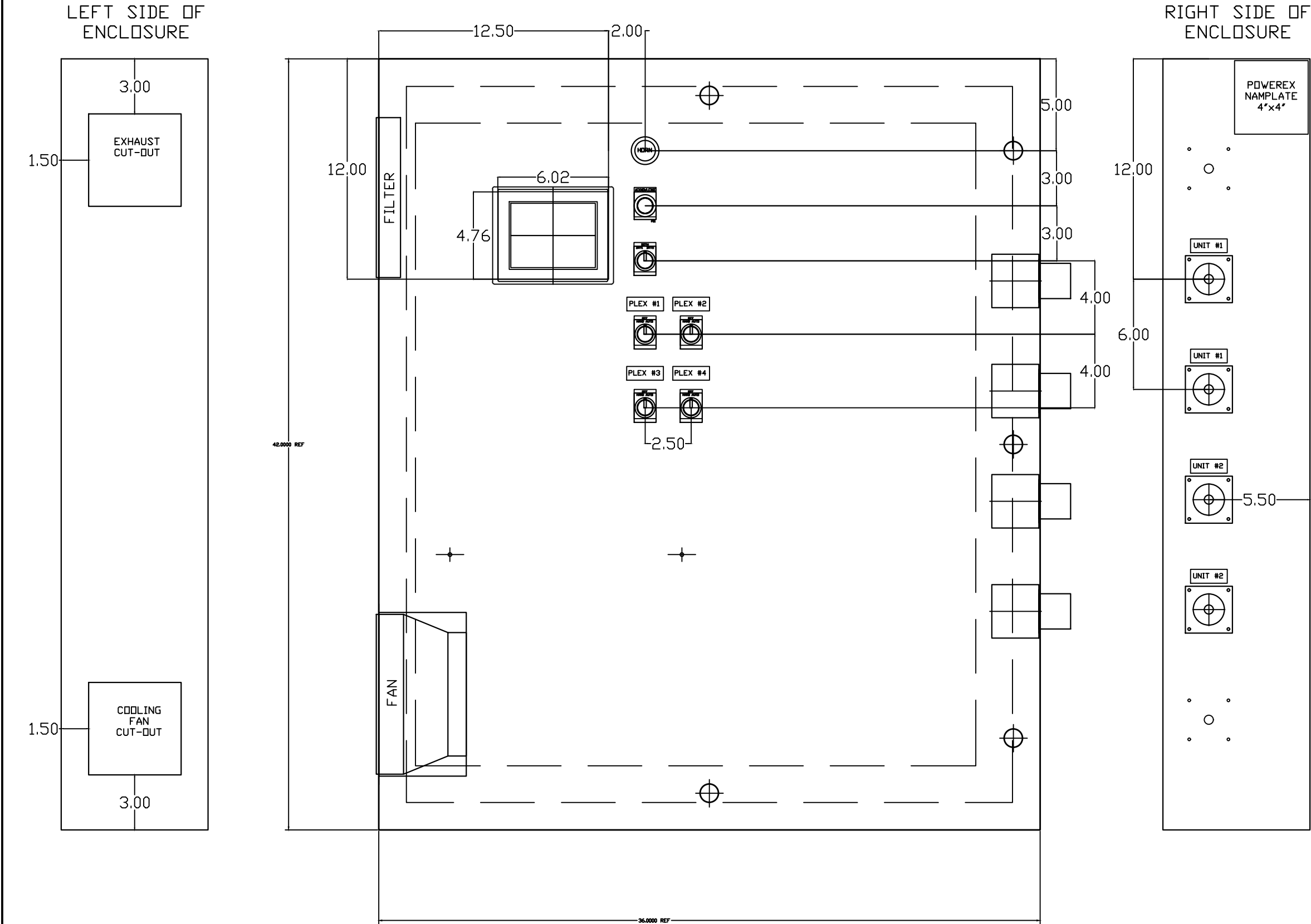
DWG. NO.

PXMI-A416 W

SHEET	SIZE
LA-2	B

PXMI-A416 B1

REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	07/20/11	22722	CHR	DMS
H-1	ADDED GROUND TERMINAL BLOCKS	04/15/25	PXEC0688	JNW	JRD
J-1	ADDED PLEX ISOLATION	06/02/25	PXEC0639	SEK	WMM



OPTIONAL:

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DRAWN BY	CHECKED BY	ENGINEERING APPROVAL
CHR	DMS	DMS
07/20/11	06/14/12	06/14/12

PANEL TYPE

MED AIR QUADRUPLEX
HMI, NFPA

DWG. TYPE

LAYOUT B

DWG. NO.

PXMI-A416 W

SHEET	SIZE
LB-1	B

PXMI-A416 B1

REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	07/20/11	22722	CHR	DMS
H-1	ADDED GROUND TERMINAL BLOCKS	04/15/25	PXEC0688	JNW	JRD
J-1	ADDED PLEX ISOLATION	06/02/25	PXEC0639	SEK	WMM

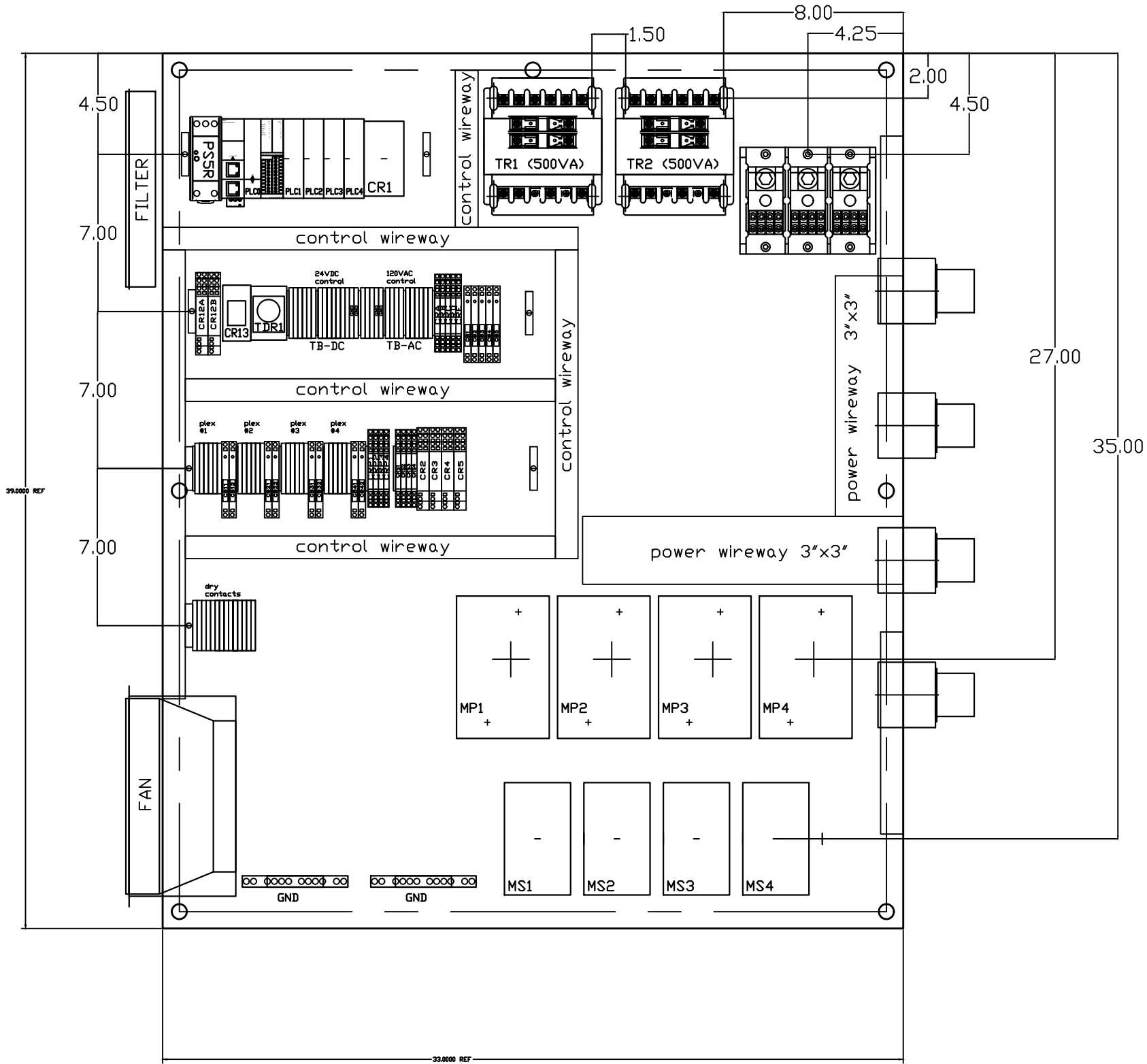


TABLE 1	P/N	MOTOR FULL LOAD AMPS	TOTAL FULL LOAD AMPS	NON-TIM E DELAY FUSE	TIME DELAY FUSE	INVERSE- TIME CIRCUIT BREAKER
208V (3Ø)	02AJ	4.1	18.4	30	25	30
	12AJ	4.5	20	30	25	30
	22AJ	5.6	24.4	40	30	35
	32AJ	8.8	37.2	60	45	60
	52AJ	14.6	60.4	90	80	90
	72AJ	20.5	84	125	100	125
	A2AJ *	27.4	111.6	175	150	175
	F2AJ *	41.1	166.4	250	200	250
230V (3Ø)	03AJ	3.6	16.4	25	20	25
	13AJ	4.4	19.6	30	25	30
	23AJ	5.8	25.2	40	30	35
	33AJ	7.7	32.8	50	40	45
	53AJ	12.7	52.8	80	70	80
	73AJ	18.5	76	125	90	110
	A3AJ	24.8	101.2	175	125	150
	F3AJ *	37.2	150.8	250	200	225
460V (3Ø)	04AJ	1.8	9.2	15	15	15
	14AJ	2.2	10.8	20	15	15
	24AJ	2.7	12.8	20	15	20
	34AJ	3.9	17.6	30	25	25
	54AJ	6.3	27.2	40	35	40
	74AJ	9.3	39.2	60	50	60
	A4AJ	12.4	51.6	80	70	80
	F4AJ	18.6	76.4	125	100	125
380V (3Ø) 50HZ	08AJ					
	18AJ					
	28AJ	3.4	15.6	25	20	25
	38AJ	4.6	20.4	30	25	30
	58AJ	7.7	32.8	50	40	45
	78AJ	11.1	46.4	70	60	70
	A8AJ	14.9	61.6	100	80	90
	F8AJ	22.1	90.4	150	125	125
575V (3Ø)	07AJ	1.1	6.4	10	10	10
	17AJ					
	27AJ	2.3	11.2	20	15	20
	37AJ	3.1	14.4	25	20	20
	57AJ	5.1	22.4	35	30	35
	77AJ	6.9	29.6	45	35	45
	A7AJ	9.9	41.6	70	50	60
	F7AJ	14.9	61.6	100	80	90

* - USE LAYOUT B

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.

CONTROL TRANSFORMERS - 500VA					
REPLACEMENT		208	230	460 380	575
FUSE TYPE		VOLT	VOLT	VOLT	VOLT
FU1,2A	FNQR (CC)	6A	5A	5A	4A
FU1,2B					
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

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	03/12/12	22545	BFH	CHR
C-1	FORMAT UPDATE	03/04/13	PXEC0038	BFH	CHR

OPTIONAL:

208V/230V/460V

POWEREX™

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DRAWN BY
BFH

CHECKED BY
CHR

ENGINEERING APPROVAL
CHR

03/12/1203/12/1203/12/12

PANEL TYPE

COMPRESSOR DATA TABLE
3PH 4-PLEX PANEL DATA

DWG. TYPE
MISC

DWG. NO.

DATA TABLE

SHEET

D-1

SIZE

B

4-PLEX PANEL DATA