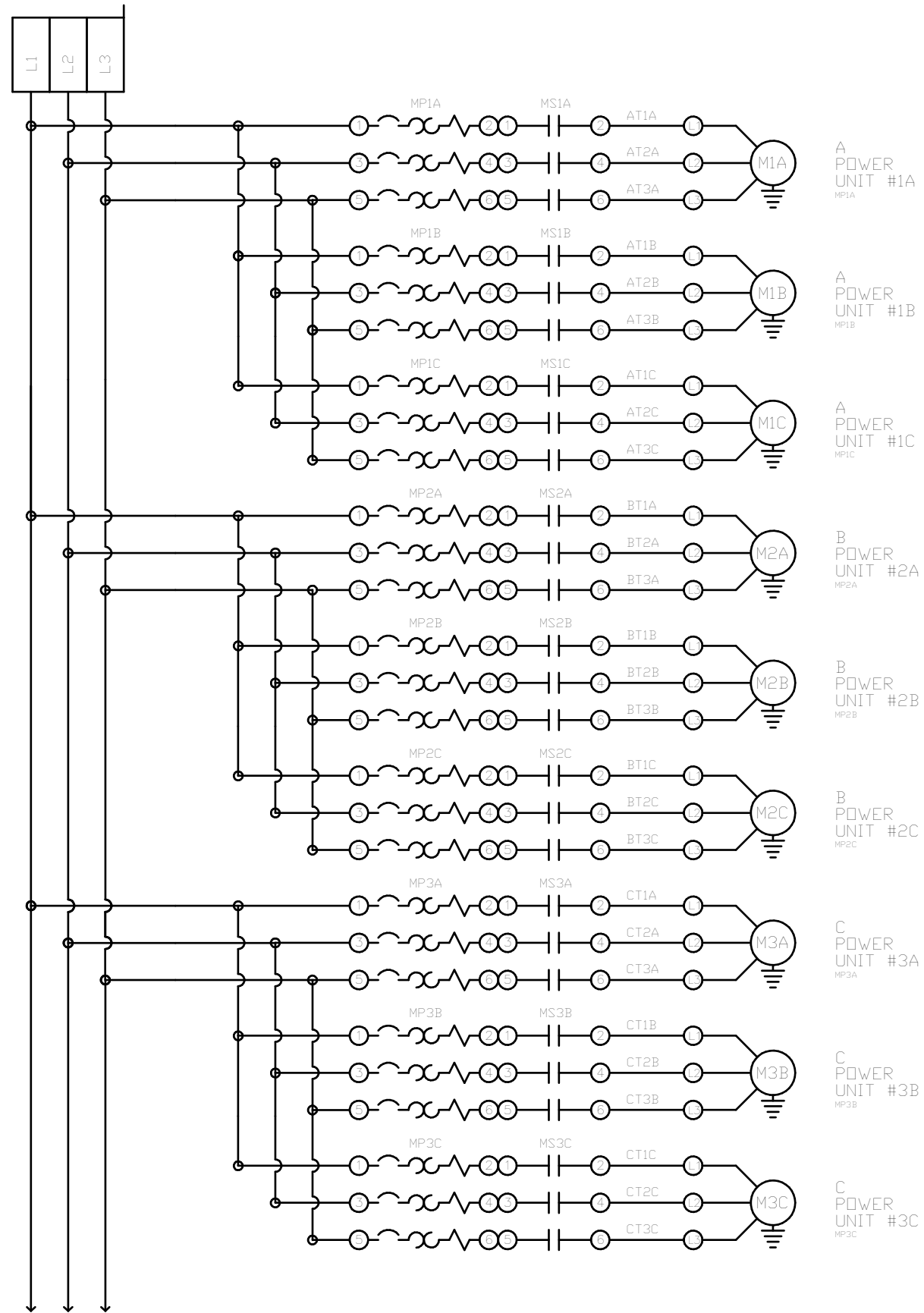


REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	01/15/14	PXEC0066	AJL	KMD
C-1	BACNET CARD UPDATE ADD ISOLATION RELAYS	1/13/16	PXEC0110	AJL	KMD
D	ADDED FAN WIRING	9/04/18	PXEC0229	JPG	AH



ALL NOTES AND DATA
ARE LISTED ON D-1

OPTIONAL:

SINGLE CYLINDER PUMPS	<input type="checkbox"/>
DOUBLE-CYLINDER PUMPS	<input type="checkbox"/>
TRIPLE-CYLINDER PUMPS	<input type="checkbox"/>
SCROLL PUMPS	<input checked="" type="checkbox"/>

BACNET, WEBSVR,



CONFIDENTIAL DISCLOSURE:
This drawing is the property of the CAMPBELL GROUP of the SCOTT FETZER COMPANY and subject to return on demand. Its contents are confidential and must not be copied or submitted to outside parties for use

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

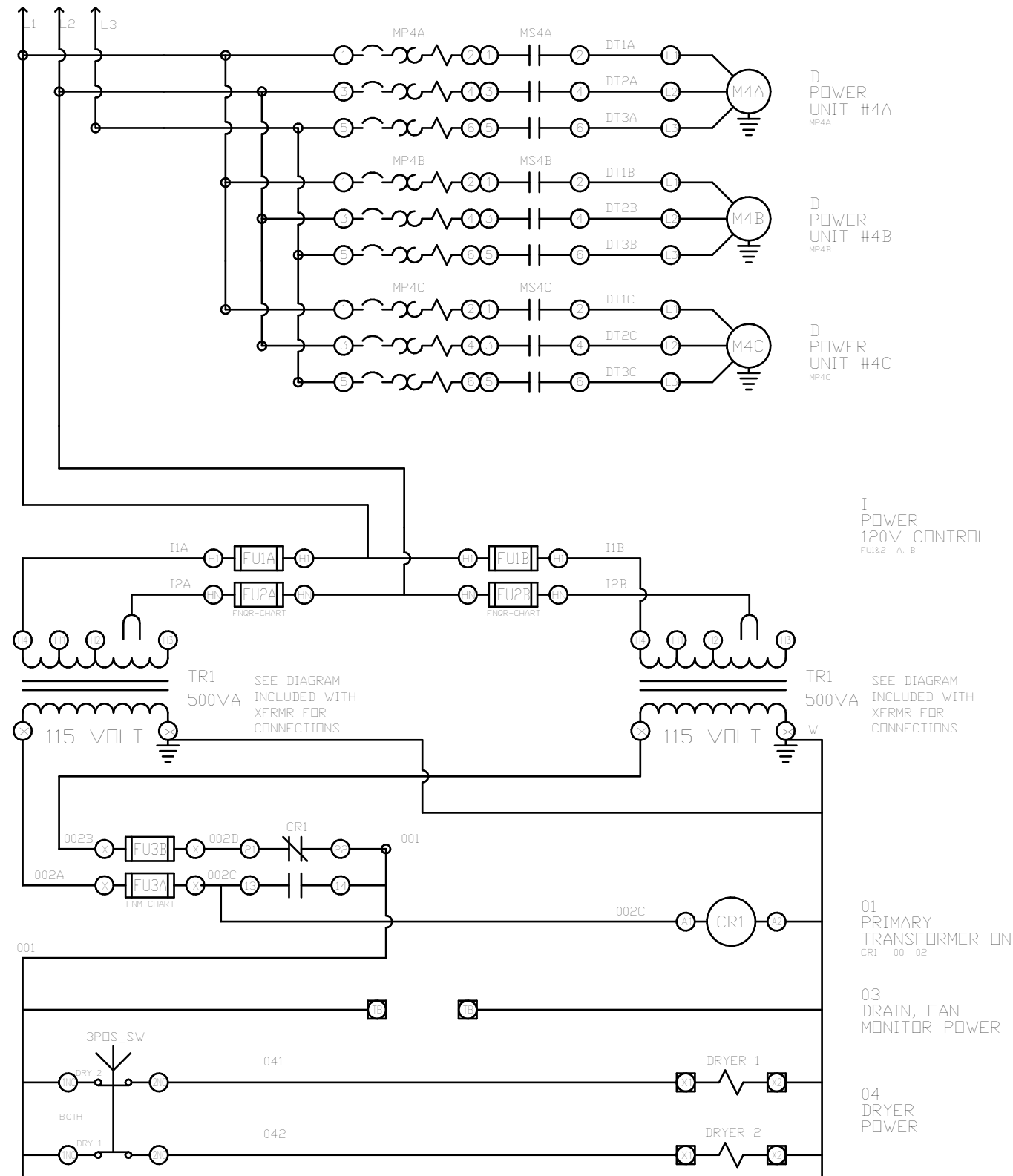
PANEL TYPE
QUAD LAB 15HP SCROLL
HMI, NFPA

DWG. TYPE WIRING

DWG. NO.
PXMI-LS416F W

SHEET W-1	SIZE B
--------------	-----------

REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	01/15/14	PXEC0066	AJL	KMD
C-1	BACNET CARD UPDATE ADD ISOLATION RELAYS	1/13/16	PXEC0110	AJL	KMD
D	ADDED FAN WIRING	9/04/18	PXEC0225	JPG	AH



OPTIONAL:	SINGLE CYLINDER PUMPS	<input type="checkbox"/>
	DOUBLE-CYLINDER PUMPS	<input type="checkbox"/>
	TRIPLE-CYLINDER PUMPS	<input type="checkbox"/>
BACNET, WEBSVR, SCROLL PUMPS		<input checked="" type="checkbox"/>



CONFIDENTIAL DISCLOSURE:
This drawing is the property of the CAMPBELL GROUP of the SCOTT FETZER COMPANY and subject to return on demand. Its contents are confidential and must not be copied or submitted to outside parties for use

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

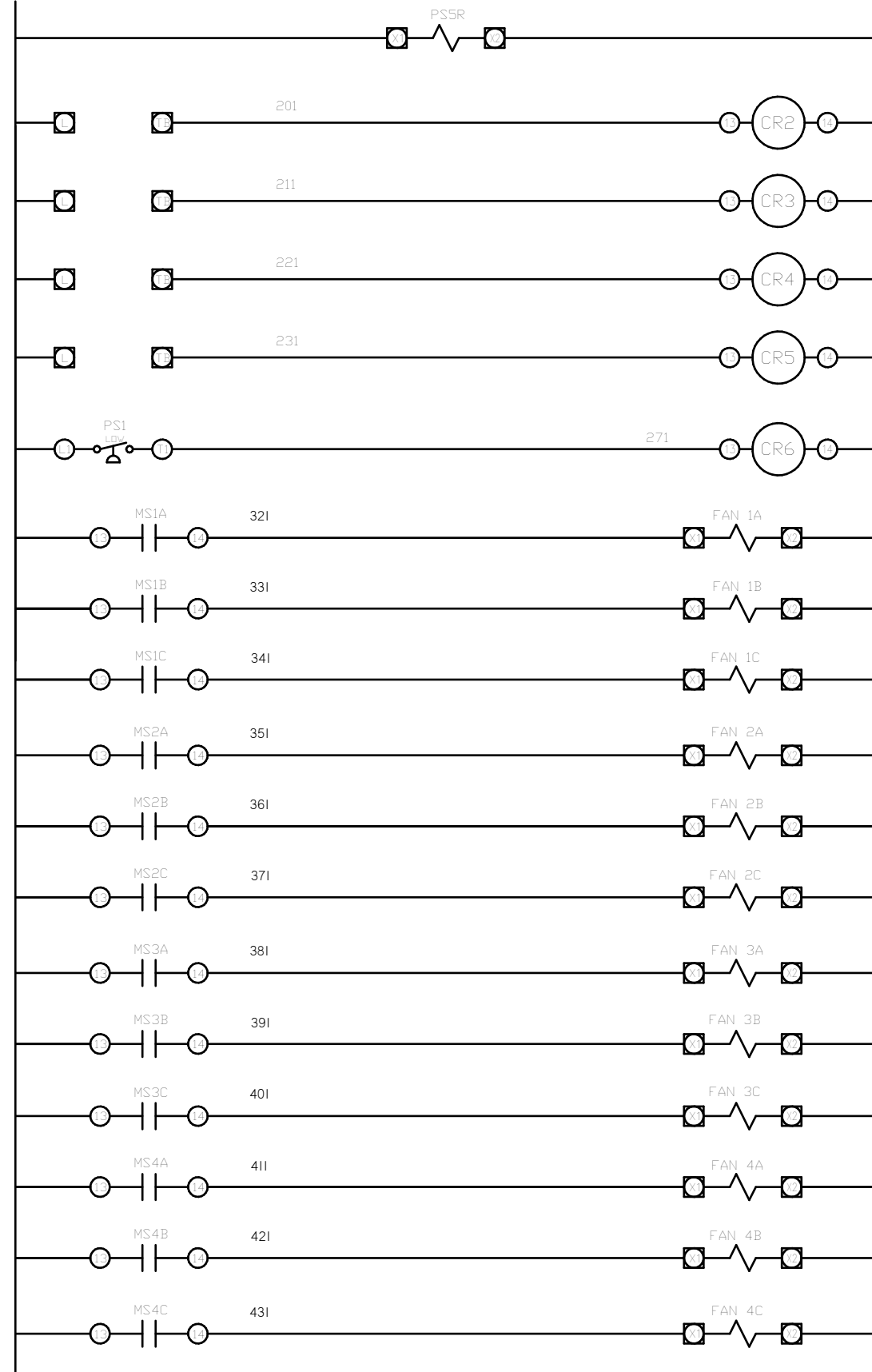
DWG TYPE WIRING

DWG NO. PXMI-LS416F W

SHEET W-2	SIZE B
-----------	--------

001

W



06
24 VDC POW SUP

PS5R

20
HIGH TEMP SW
UNIT #1
CR2 10 711

21
HIGH TEMP SW
UNIT #2
CR3 11 721

22
HIGH TEMP SW
UNIT #3
CR4 12 731

23
HIGH TEMP SW
UNIT #4
CR5 13 741

27
LOW PRES
BACKUP
CR6 10 11 12

32
FAN POWER
UNIT #1A
TB

33
FAN POWER
UNIT #1B
TB

34
FAN POWER
UNIT #1C
TB

35
FAN POWER
UNIT #2A
TB

36
FAN POWER
UNIT #2B
TB

37
FAN POWER
UNIT #2C
TB

38
FAN POWER
UNIT #3A
TB

39
FAN POWER
UNIT #3B
TB

40
FAN POWER
UNIT #3C
TB

41
FAN POWER
UNIT #4A
TB

42
FAN POWER
UNIT #4B
TB

43
FAN POWER
UNIT #4C
TB

W

001

REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	01/15/14	PXEC0066	AJL	KMD
C-1	BACNET CARD UPDATE ADD ISOLATION RELAYS	1/13/16	PXEC0110	AJL	KMD
D	ADDED FAN WIRING	9/04/18	PXEC0225	JPG	AH

OPTIONAL:	SINGLE CYLINDER PUMPS	<input type="checkbox"/>
	DOUBLE-CYLINDER PUMPS	<input type="checkbox"/>
	TRIPLE-CYLINDER PUMPS	<input type="checkbox"/>
BACNET, WEBSRVR,	SCROLL PUMPS	<input checked="" type="checkbox"/>



CONFIDENTIAL DISCLOSURE:
This drawing is the property of the CAMPBELL GROUP of the SCOTT FETZER COMPANY and subject to return on demand. Its contents are confidential and must not be copied or submitted to outside parties for use

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

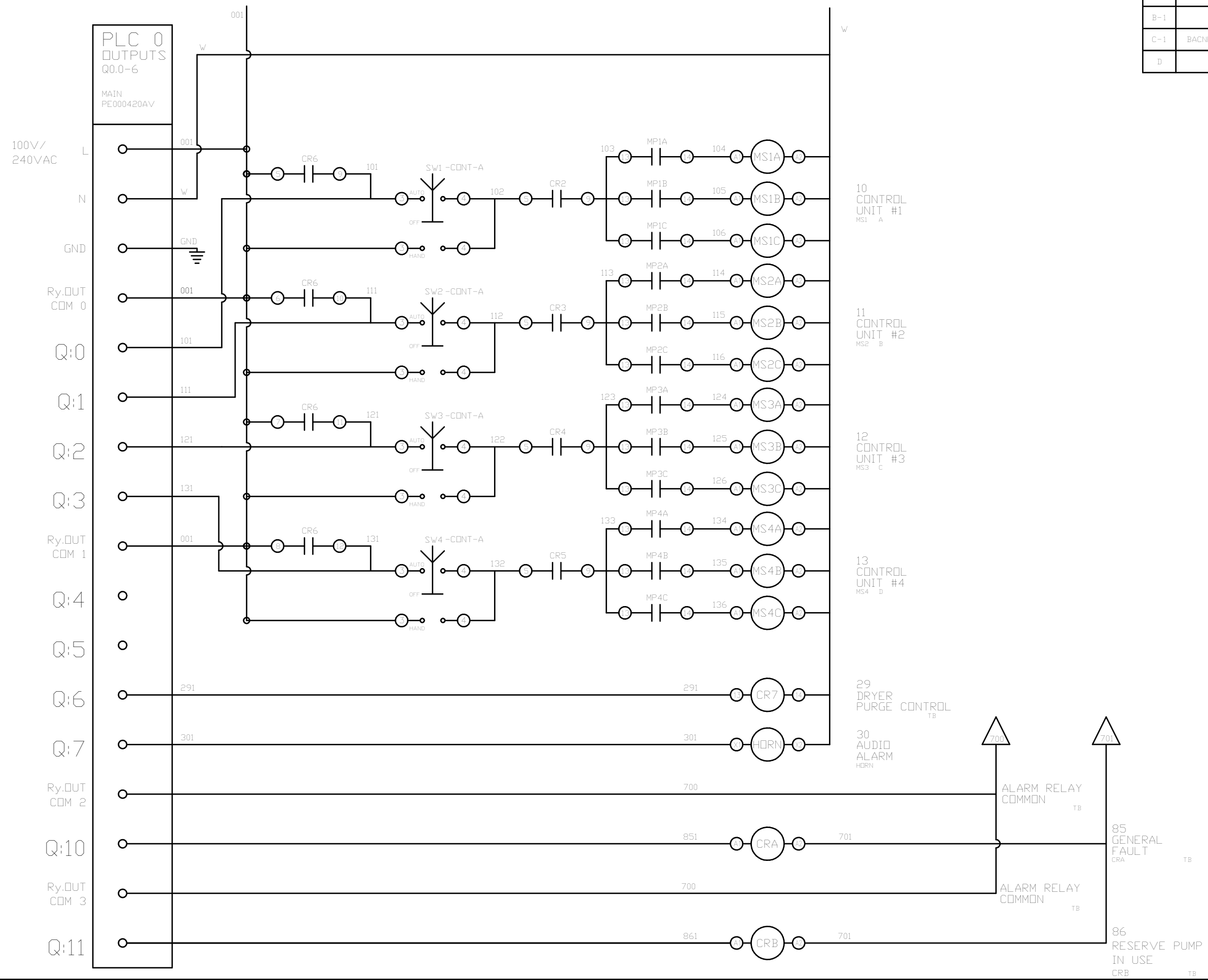
PANEL TYPE
QUAD LAB 15HP SCROLL
HMI, NFPA

DWG. TYPE WIRING

DWG. NO.
PXMI-LS416F W

SHEET W-3	SIZE B
--------------	-----------

REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	01/15/14	PXEC0066	AJL	DMS
C-1	BACNET CARD UPDATE ADD ISOLATION RELAYS	1/13/16	PXEC0110	AJL	KMD
D	ADDED FAN WIRING	9/04/18	PXEC0229	JPG	AH



CONFIDENTIAL DISCLOSURE:
 This drawing is the property of the CAMPBELL GROUP of the SCOTT FETZER COMPANY and subject to return on demand. Its contents are confidential and must not be copied or submitted to outside parties for use or examination.

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

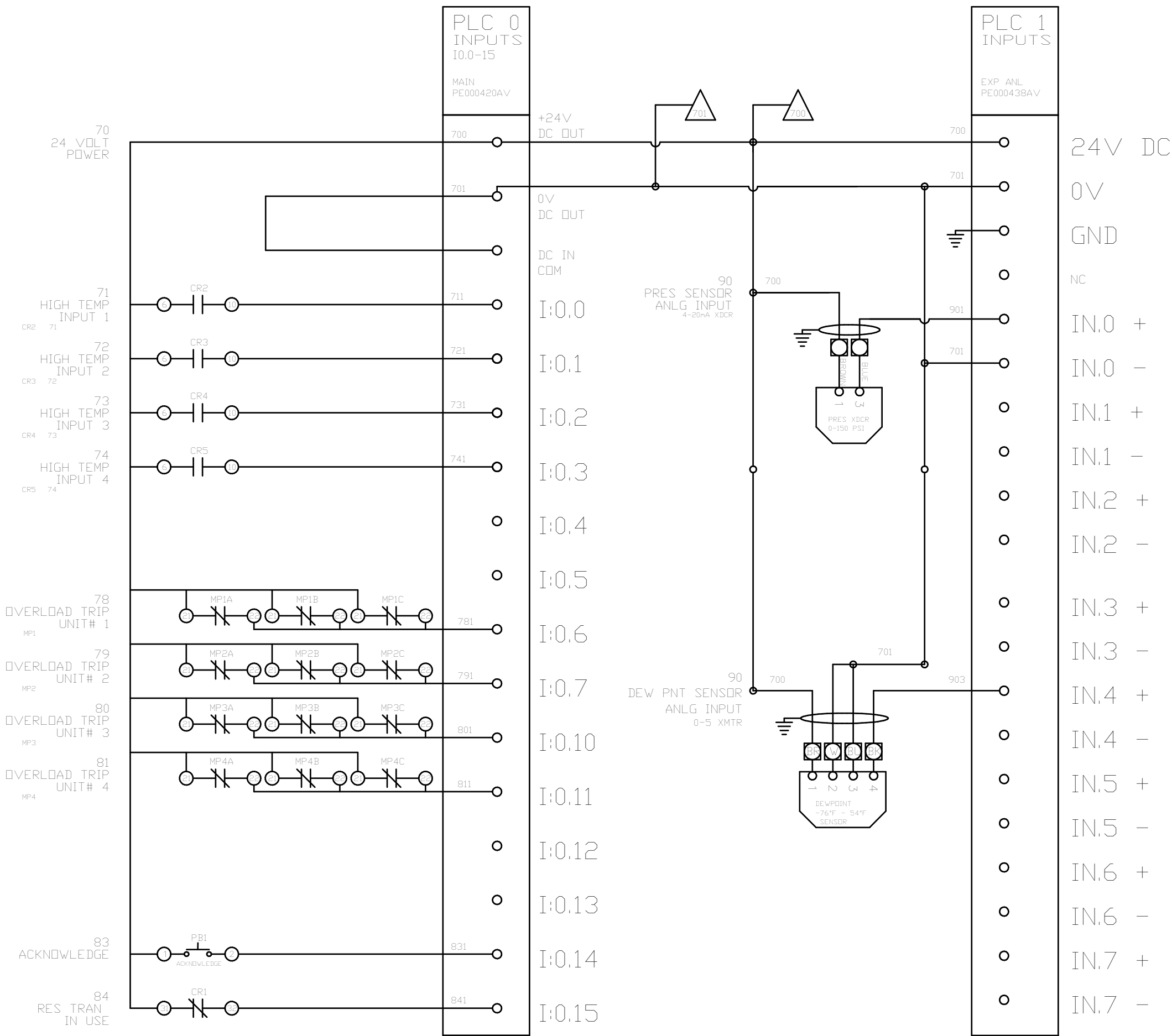
PANEL TYPE
 QUAD LAB 15HP SCROLL HMI, NFPA

DWG. TYPE
 WIRING

DWG. NO.
 PXMI-LS416F W

SHEET	SIZE
W-4	B

REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	01/15/14	PXEC0066	AJL	KMD
C-1	BACNET CARD UPDATE ADD ISOLATION RELAYS	1/13/16	PXEC0110	AJL	KMD
D	ADDED FAN WIRING	9/04/18	PXEC0229	JPG	AH



OPTIONAL:	
SINGLE CYLINDER PUMPS	<input type="checkbox"/>
DOUBLE-CYLINDER PUMPS	<input type="checkbox"/>
TRIPLE-CYLINDER PUMPS	<input type="checkbox"/>
SCROLL PUMPS	<input checked="" type="checkbox"/>



CONFIDENTIAL DISCLOSURE:
This drawing is the property of the CAMPBELL GROUP of the SCOTT FETZER COMPANY and subject to return on demand. Its contents are confidential and must not be copied or submitted to outside parties for use or examination.

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

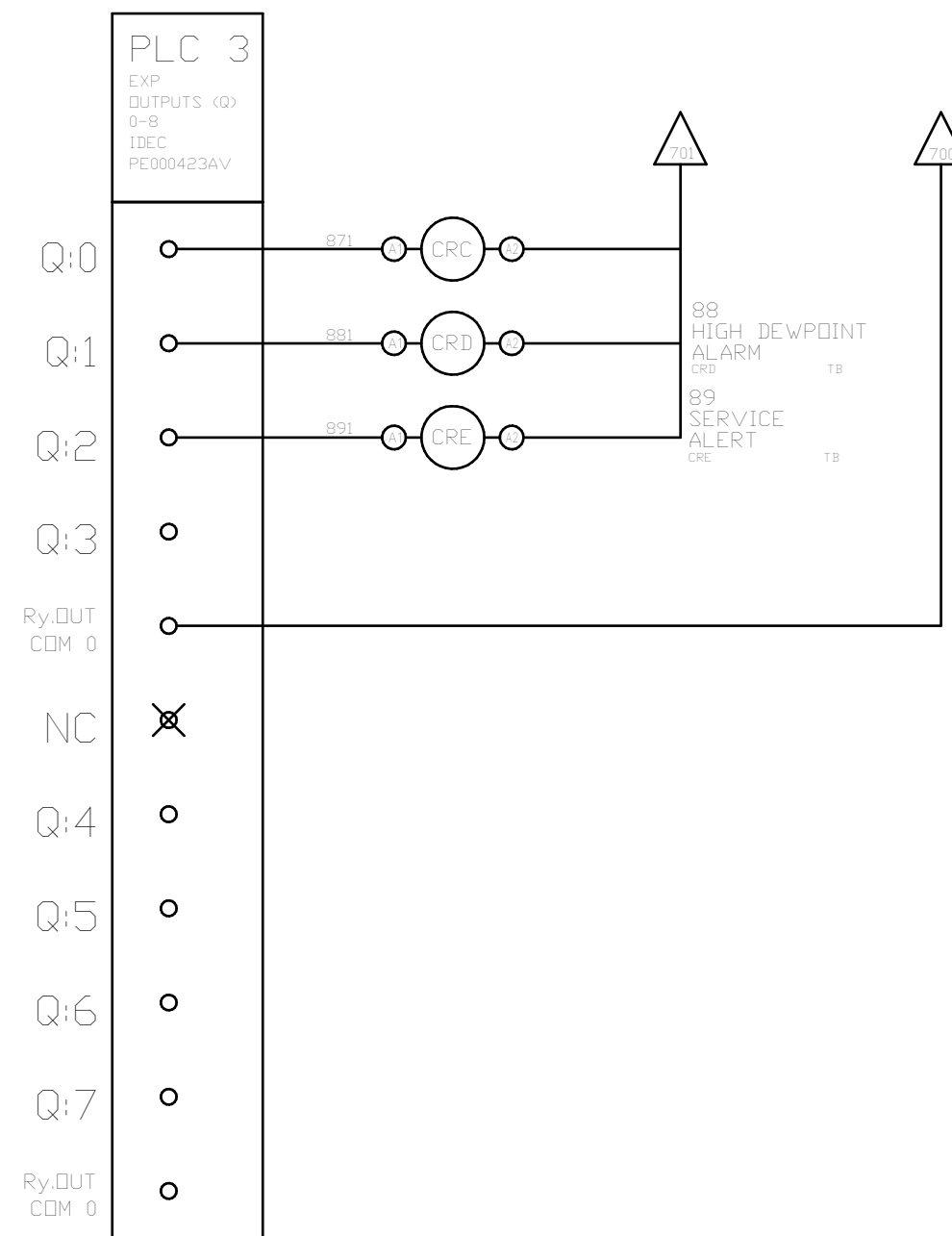
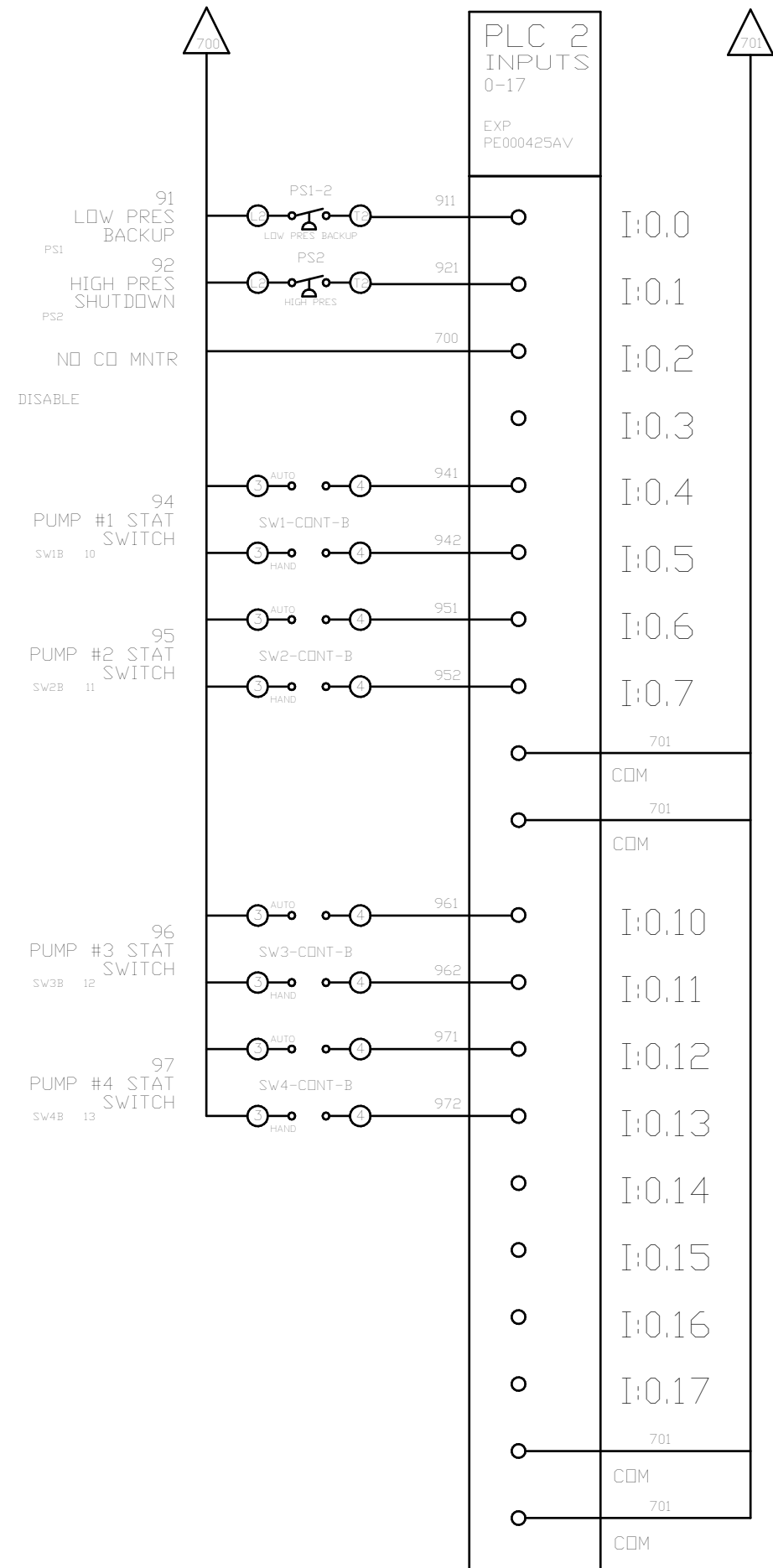
PANEL TYPE
QUAD LAB 15HP SCROLL HMI, NFPA

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
C-1	BACNET CARD UPDATE ADD ISOLATION RELAYS	1/13/16	PXEC0110	AJL	KMD
D	ADDED FAN WIRING	9/04/18	PXEC0229	JPG	AH



OPTIONAL:	SINGLE CYLINDER PUMPS	<input type="checkbox"/>
	DOUBLE-CYLINDER PUMPS	<input type="checkbox"/>
	TRIPLE-CYLINDER PUMPS	<input type="checkbox"/>
BACNET, WEBSRVR,	SCROLL PUMPS	<input checked="" type="checkbox"/>



CONFIDENTIAL DISCLOSURE:
This drawing is the property of the CAMPBELL GROUP of the SCOTT FETZER COMPANY and subject to return on demand. Its contents are confidential and must not be copied or submitted to outside parties for use

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

PANEL TYPE
QUAD LAB 15HP SCROLL HMI, NFPA

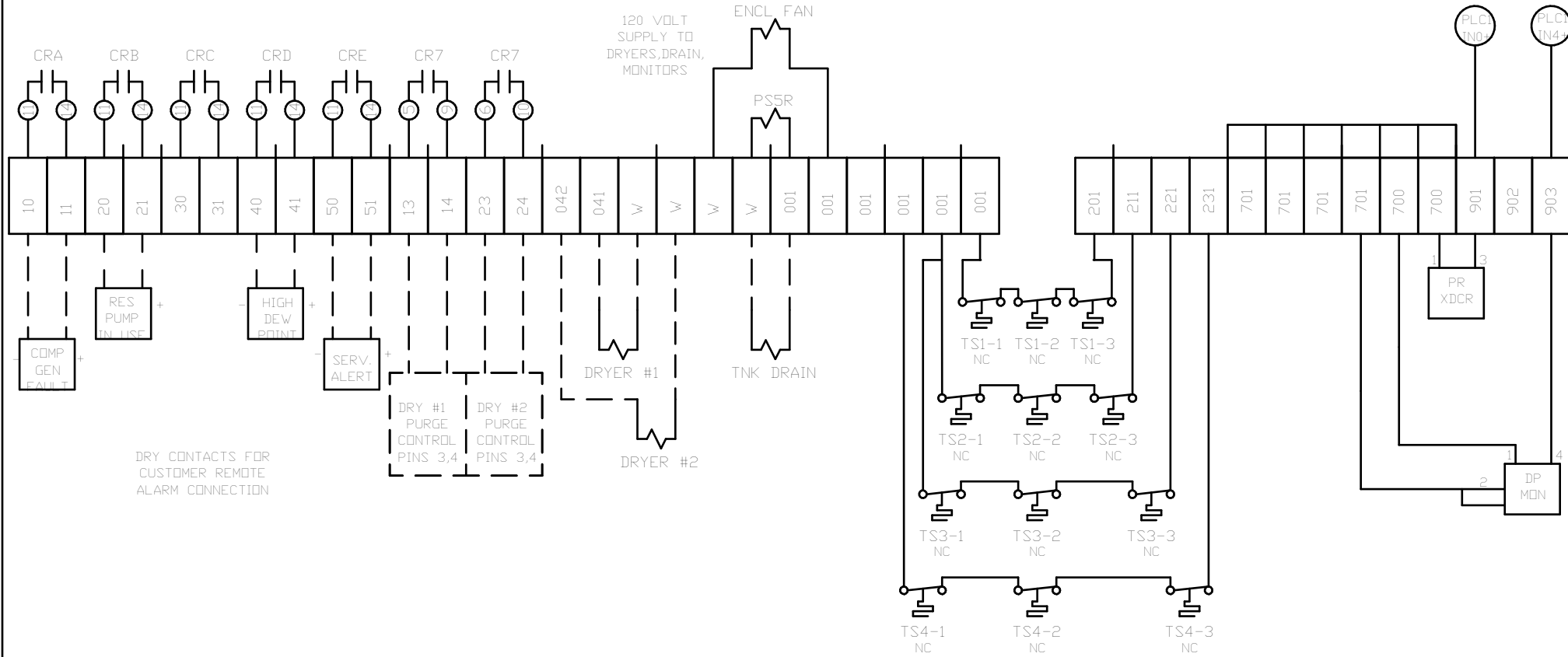
DWG. TYPE WIRING

DWG. NO.
PXMI-LS416F W

SHEET W-6
SIZE B

REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	01/15/14	PXEC0066	AJL	KMD
C-1	BACNET CARD UPDATE ADD ISOLATION RELAYS	1/13/16	PXEC0110	AJL	KMD
D	ADDED FAN WIRING	9/04/18	PXEC0229	JPG	AH

TERMINAL BLOCKS



ASSEMBLY NOTE:

USE SHIELDED CABLE BETWEEN TERMINAL BLOCKS AND PLC. CONNECT GROUND LOOPS TO GROUND BLOCK. CABLE IS NOT TO BE ROUTED WITHIN A PROXIMITY OF 2" OF ANY 3-PHASE POWER CONDUCTORS.

OPTIONAL:

SINGLE CYLINDER PUMPS	<input type="checkbox"/>
DOUBLE-CYLINDER PUMPS	<input type="checkbox"/>
TRIPLE-CYLINDER PUMPS	<input type="checkbox"/>
SCROLL PUMPS	<input checked="" type="checkbox"/>

BACNET, WEBSRV.



CONFIDENTIAL DISCLOSURE:
This drawing is the property of the CAMPBELL GROUP of the SCOTT FETZER COMPANY and subject to return on demand. Its contents are confidential and must not be copied or submitted to outside parties for use

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

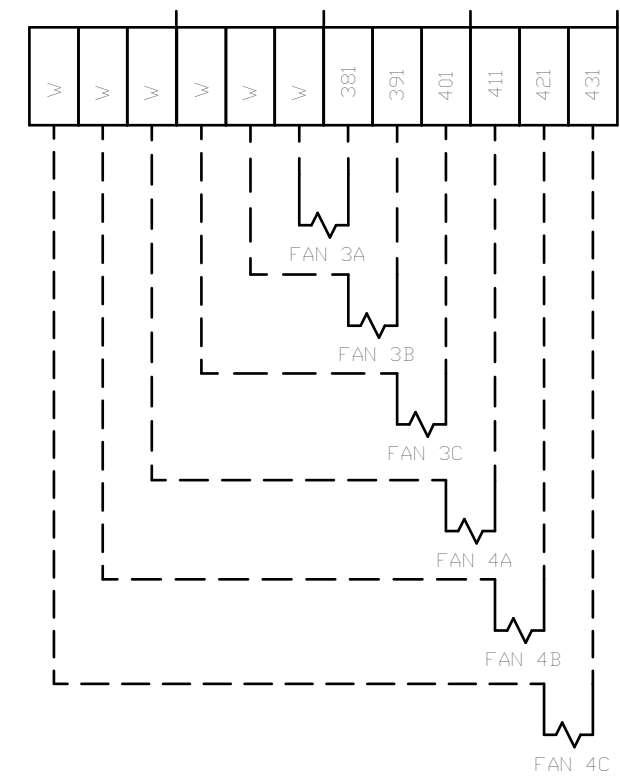
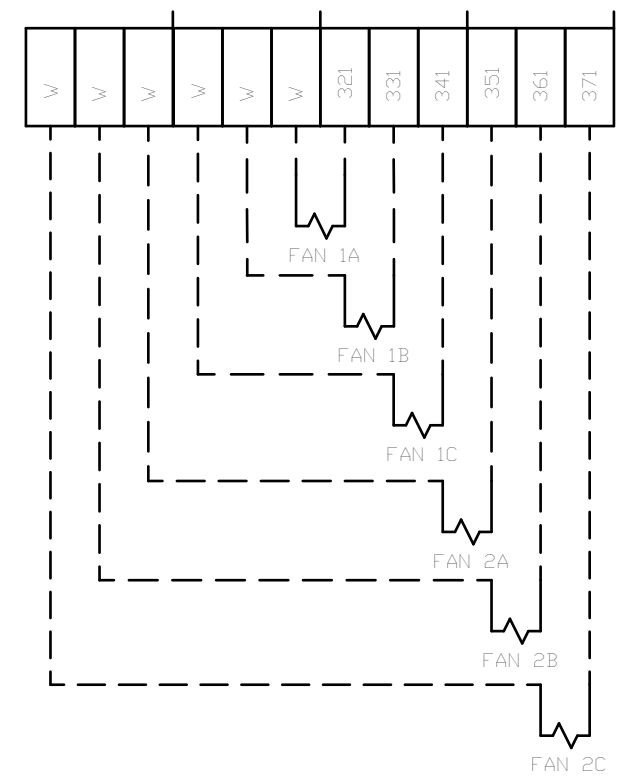
PANEL TYPE
QUAD LAB 15HP SCROLL
HMI, NFPA

DWG. TYPE WIRING

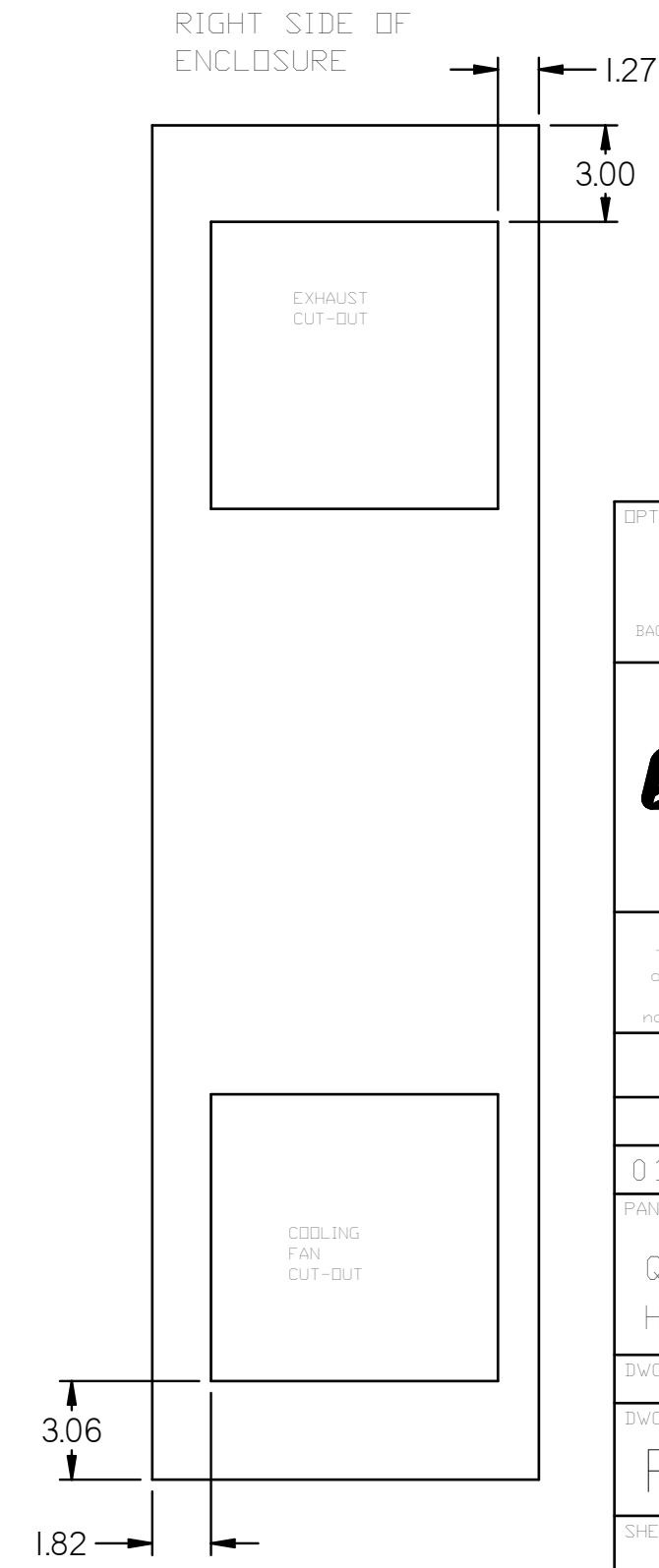
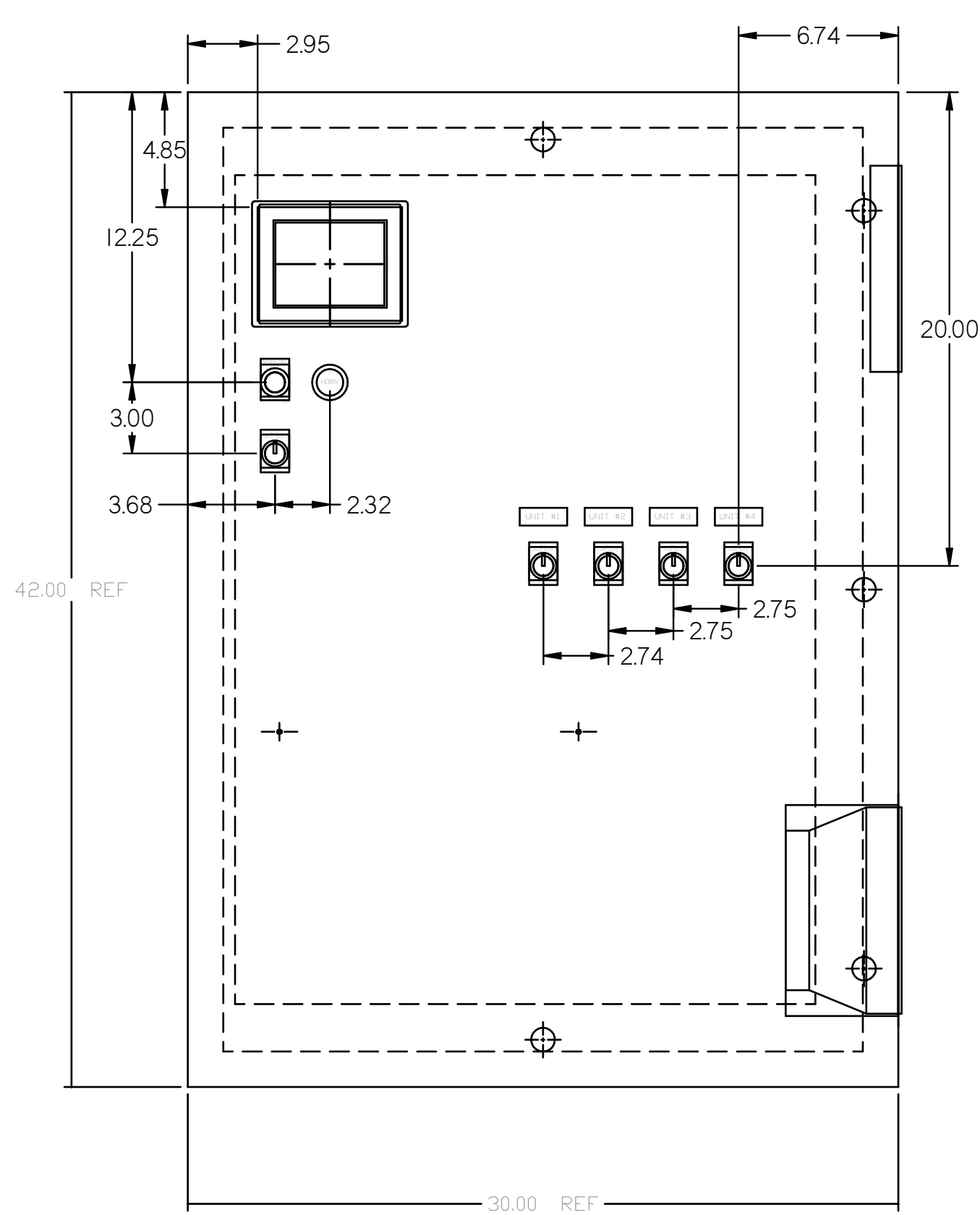
DWG. NO. PXMI-LS416F W

SHEET	SIZE
W-8	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
C-1	BACNET CARD UPDATE ADD ISOLATION RELAYS	1/13/16	PXEC0110	AJL	KMD
D	ADDED FAN WIRING	9/04/18	PXEC0229	JPG	AH



- OPTIONAL:
- SINGLE CYLINDER PUMPS
 - DOUBLE-CYLINDER PUMPS
 - TRIPLE-CYLINDER PUMPS
 - SCROLL PUMPS
- BACNET, WEBSVR.



CONFIDENTIAL DISCLOSURE:
 This drawing is the property of the CAMPBELL GROUP of the SCOTT FETZER COMPANY and subject to return on demand. Its contents are confidential and must not be copied or submitted to outside parties for use.

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

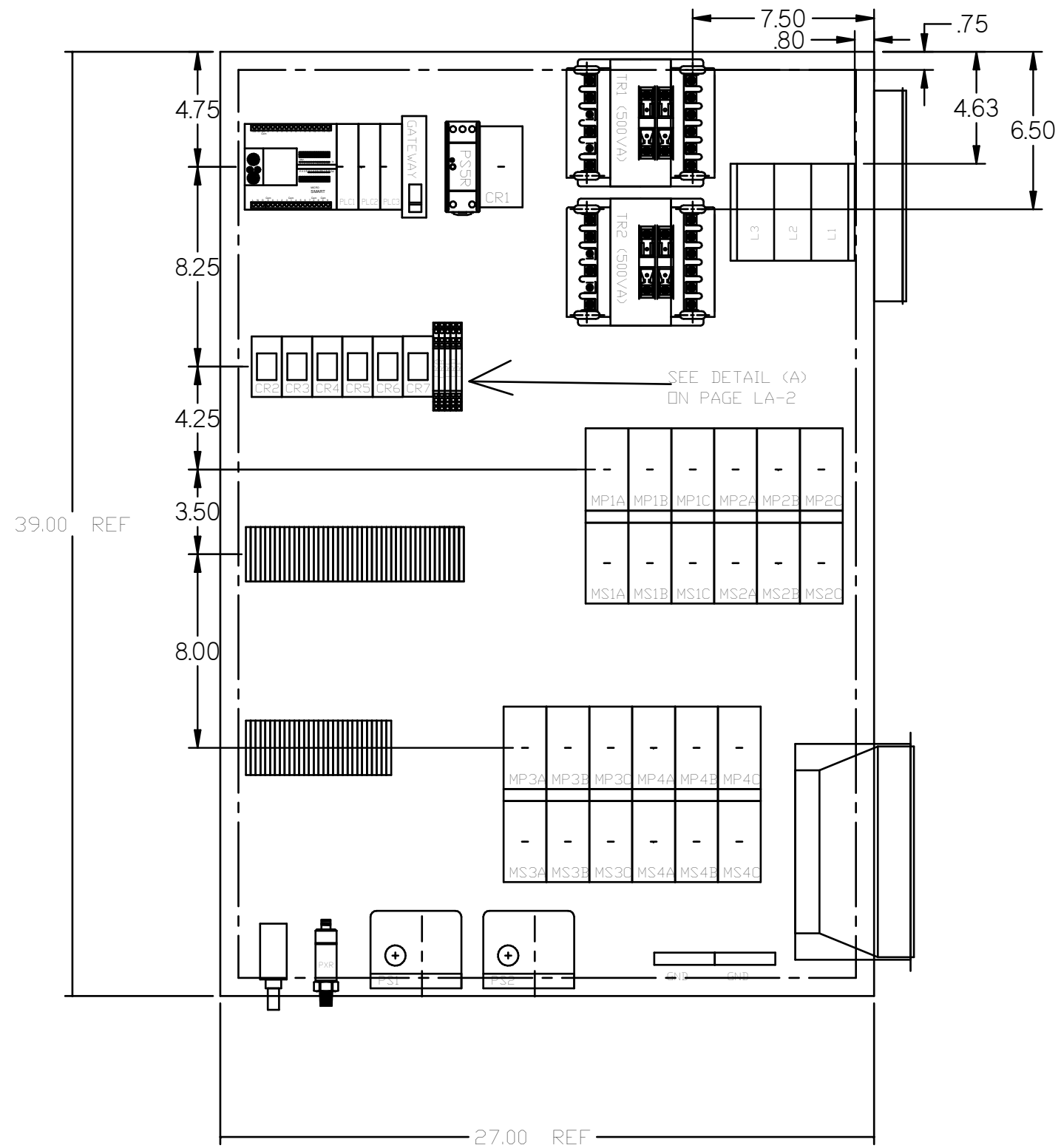
PANEL TYPE
 QUAD LAB 15HP SCROLL
 HMI, NFPA

DWG. TYPE LAYOUT

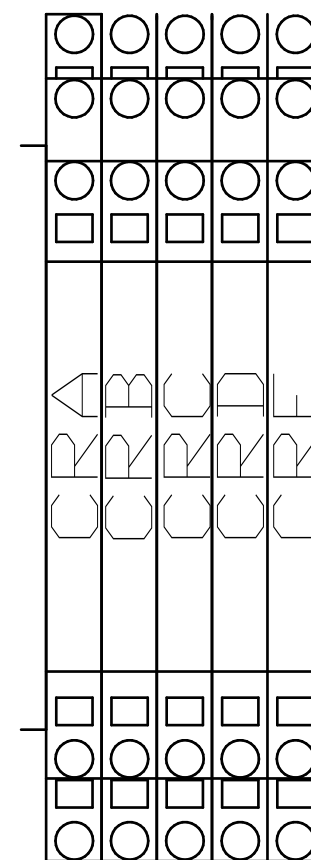
DWG. NO.
 PXMI-LS416F W

SHEET	SIZE
L-1	B

REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	01/15/14	PXEC0066	AJL	KMD
C-1	BACNET CARD UPDATE ADD ISOLATION RELAYS	1/13/16	PXEC0110	AJL	KMD
D	ADDED FAN WIRING	9/04/18	PXEC0225	JPG	AH



DETAIL (A)



OPTIONAL:

SINGLE-CYLINDER PUMPS	<input type="checkbox"/>
DOUBLE-CYLINDER PUMPS	<input type="checkbox"/>
TRIPLE-CYLINDER PUMPS	<input type="checkbox"/>
SCROLL PUMPS	<input checked="" type="checkbox"/>

BACNET, WEBSVR,



CONFIDENTIAL DISCLOSURE:
This drawing is the property of the CAMPBELL GROUP of the SCOTT FETZER COMPANY and subject to return on demand. Its contents are confidential and must not be copied or submitted to outside parties for use or examination.

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 L-2	SIZE B
--------------	-----------

REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	01/15/15	PXEC0066	AJL	KMD
C-1	BACNET CARD UPDATE ADD ISOLATION RELAYS	1/13/16	PXEC0110	AJL	KMD
D	ADDED FAN WIRING	9/04/18	PXEC0229	JPG	AH

TABLE 1

PANEL DATA 3Ø - 60 Hz 500VA CONTROL CIRCUIT					(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)	NON-TIME	TIME-DELAY	INVERSE-TIME
					DELAY FUSE	FUSE	CIRCUIT BREAKER
PXMILS416F2AJ	5(X3) 208V/3Ø	14.2	172.4	225A	200A	200A	
PXMILS416F3AJ	5(X3) 230V/3Ø	12.8	155.6	200A	175A	175A	
PXMILS416F4AJ	5(X3) 460V/3Ø	6.4	78.8	100A	90A	90A	

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 WITH SHORT CIRCUIT PROTECTION FOR THIS ELECTRICAL ASSEMBLY. SEE TABLE 1 FOR REQUIREMENTS.
- 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.

FIELD WIRING NOTES ON PAGE W-7.

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.

OPTIONAL:

BACNET, WEBSRV, R,



CONFIDENTIAL DISCLOSURE:
This drawing is the property of the CAMPBELL GROUP of the SCOTT FETZER COMPANY and subject to return on demand. Its contents are confidential and must not be copied or submitted to outside parties for use

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
D-1
SIZE
B

CONTROL TRANSFORMERS - 500VA

FUSE	208	230	460	575
TYPE	VOLT	VOLT	380 VOLT	VOLT
FU1,2A	6A	5A	5A	4A
FU1,2B				
FU3A,B	7A	7A	7A	7A

SEE XFRMR FOR CONNECTIONS

WIRE TYPE TABLE

VOLTAGE	WIRE NUMBERS	GAUGE	COLOR
120VAC	001-599	16-18AWG	RED/BLK
24VAC	W	16-18AWG	WHT/BLK
24VDC	600-999	16-18AWG	PURPLE
24VDC	701	16-18AWG	PURPLE
GND	-	VARIES	GREEN
CUSTOMER SUPPLY	01-99	16-18AWG	YELLOW