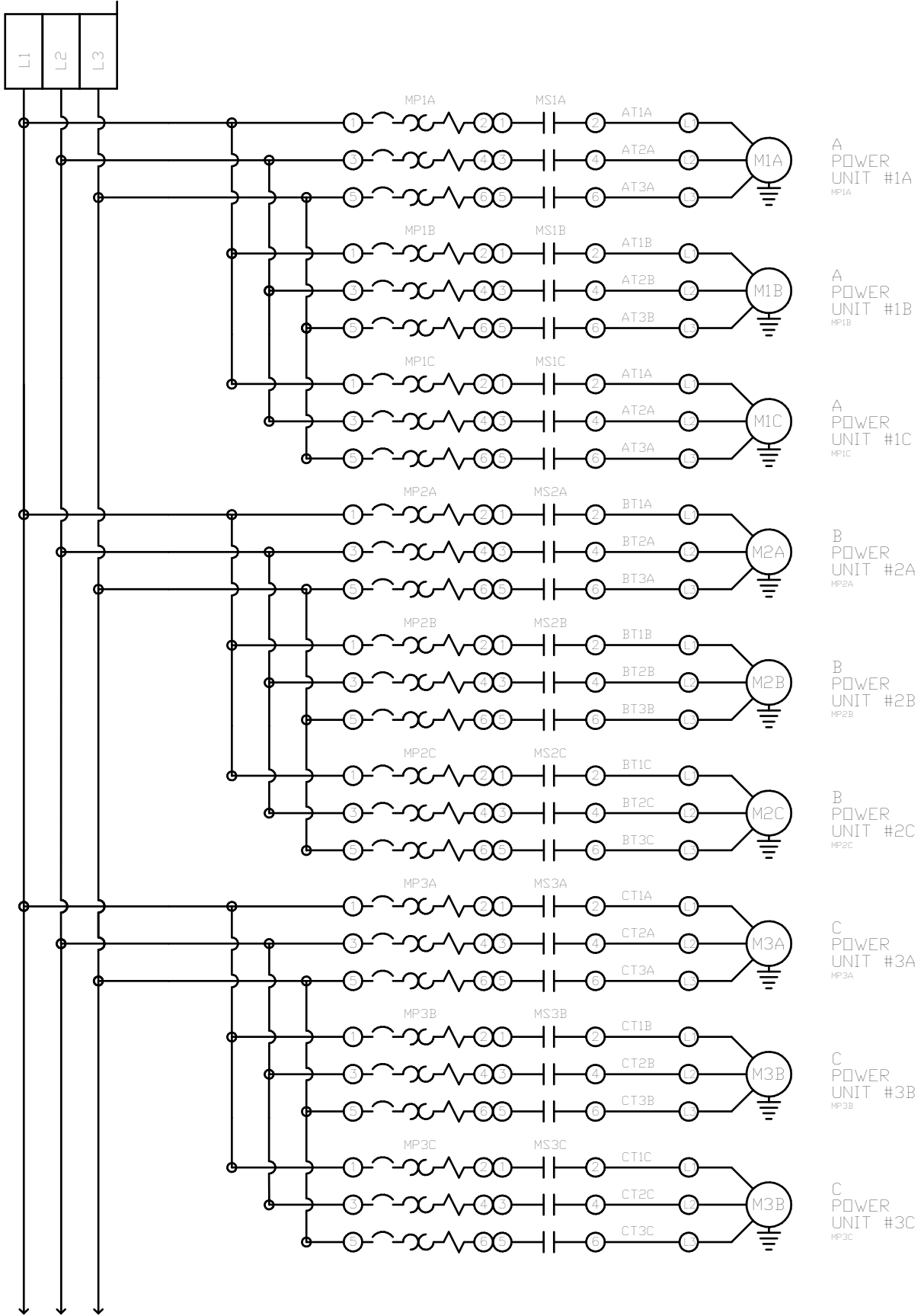


SEE TABLE 1



SEE TABLE 1 FOR BRANCH
CIRCUIT PROTECTION

REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	05/05/14	PXEC0066	AJL	KMD
C	ADDED FAN WIRING	9/04/18	PXEC0229	JPG	AH

OPTIONAL:

BACNET, WEBSRVR,



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DRAWN BY	BY EXAMINATION CHECKED BY	ENGINEERING APPROVAL
AJL	KMD	KMD
05/05/14	05/05/14	05/05/14

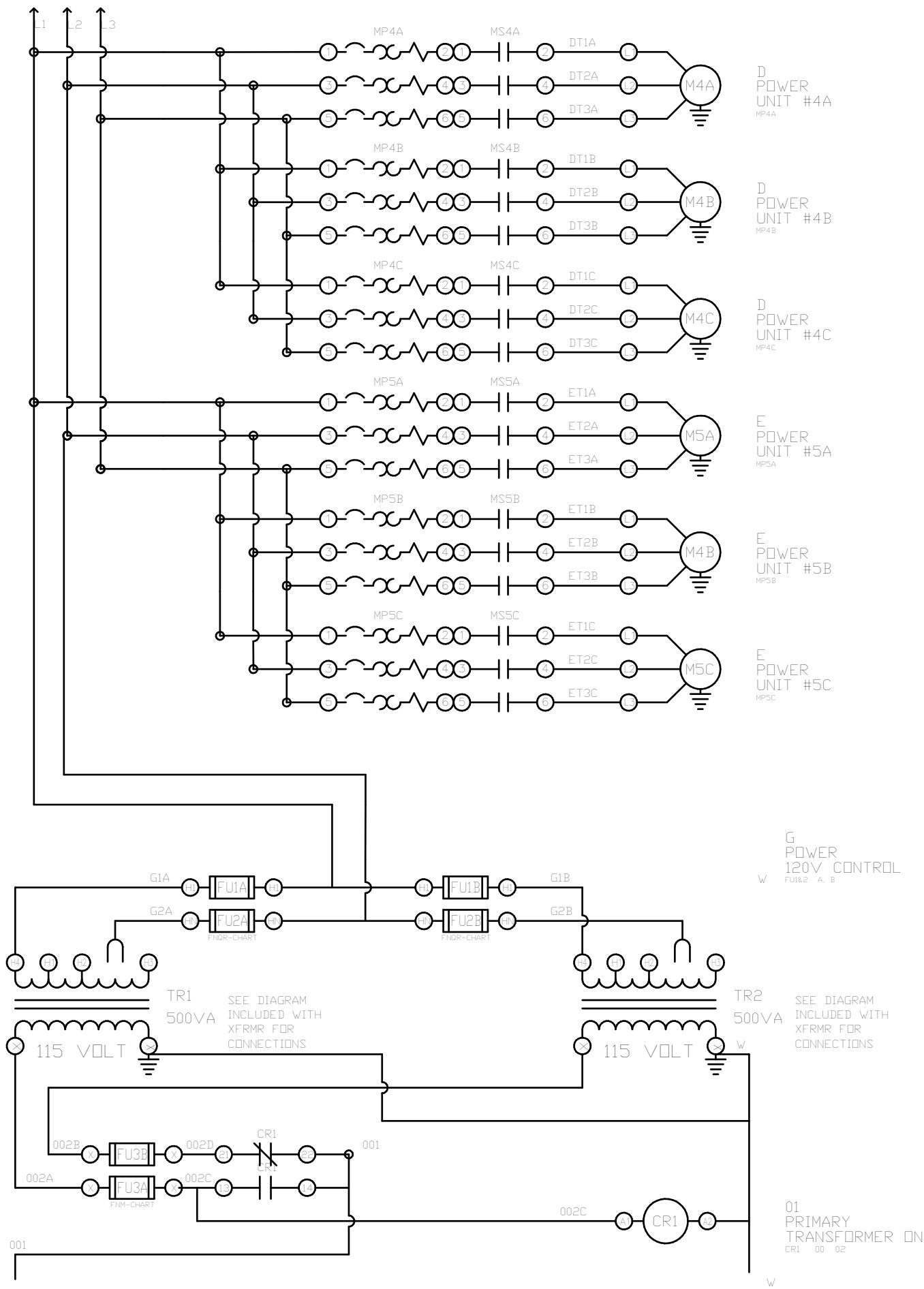
PANEL TYPE
PENTA LAB SCROLL COMP
HMI, NFPA

DWG. TYPE WIRING

DWG. NO.
PXMI-LS516F W

SHEET W-1 SIZE B

REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	05/05/14	PXEC0066	AJL	KMD
C	ADDED FAN WIRING	9/04/18	PXEC0229	JPG	AH



OPTIONAL:
SINGLE CYLINDER AND SCROLLPUMPS
DOUBLE-CYLINDER PUMPS
BACNET, WEBSRVR, TRIPLE-CYLINDER PUMPS



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DRAWN BY	CHECKED BY	ENGINEERING APPROVAL
AJL	KMD	KMD
05/05/14	05/05/14	05/05/14

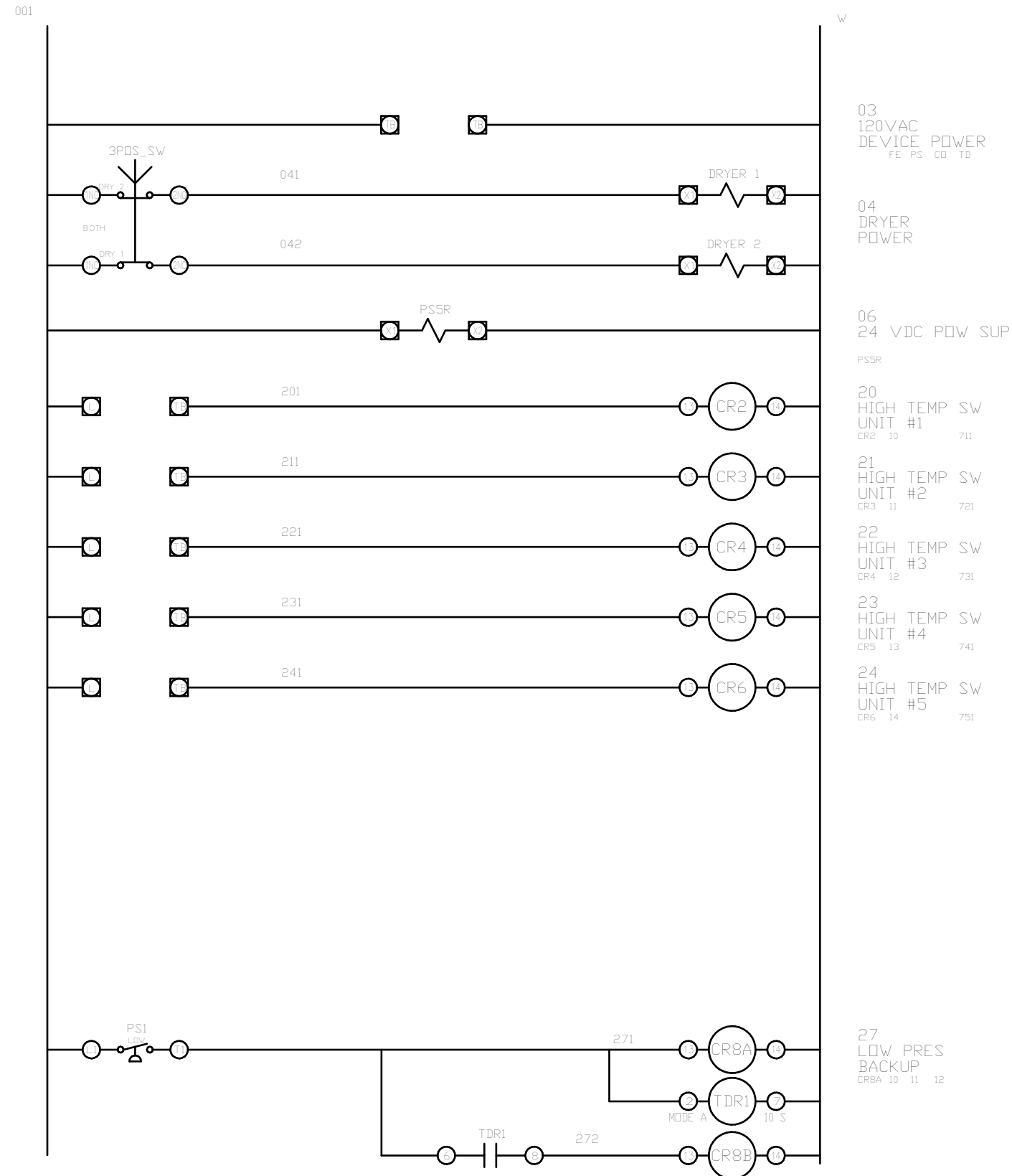
PANEL TYPE
PENTA LAB SCROLL COMP
HMI, NFPA

DWG. TYPE
WIRING

DWG. NO.
PXMI-LS516F W

SHEET	SIZE
W-2	B

REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	05/05/14	PXEC0066	AJL	KMD
C	ADDED FAN WIRING	9/04/18	PXEC0229	JPG	AH



OPTIONAL:
SINGLE CYLINDER
AND SCROLLPUMPS
DOUBLE-CYLINDER
PUMPS
TRIPLE-CYLINDER
PUMPS

BACNET, WEBSVR,



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DRAWN BY	or examination, CHECKED BY	ENGINEERING APPROVAL
AJL	KMD	KMD
05/05/14	05/05/14	05/05/14

PANEL TYPE
PENTA LAB SCROLL COMP
HMI, NFPA

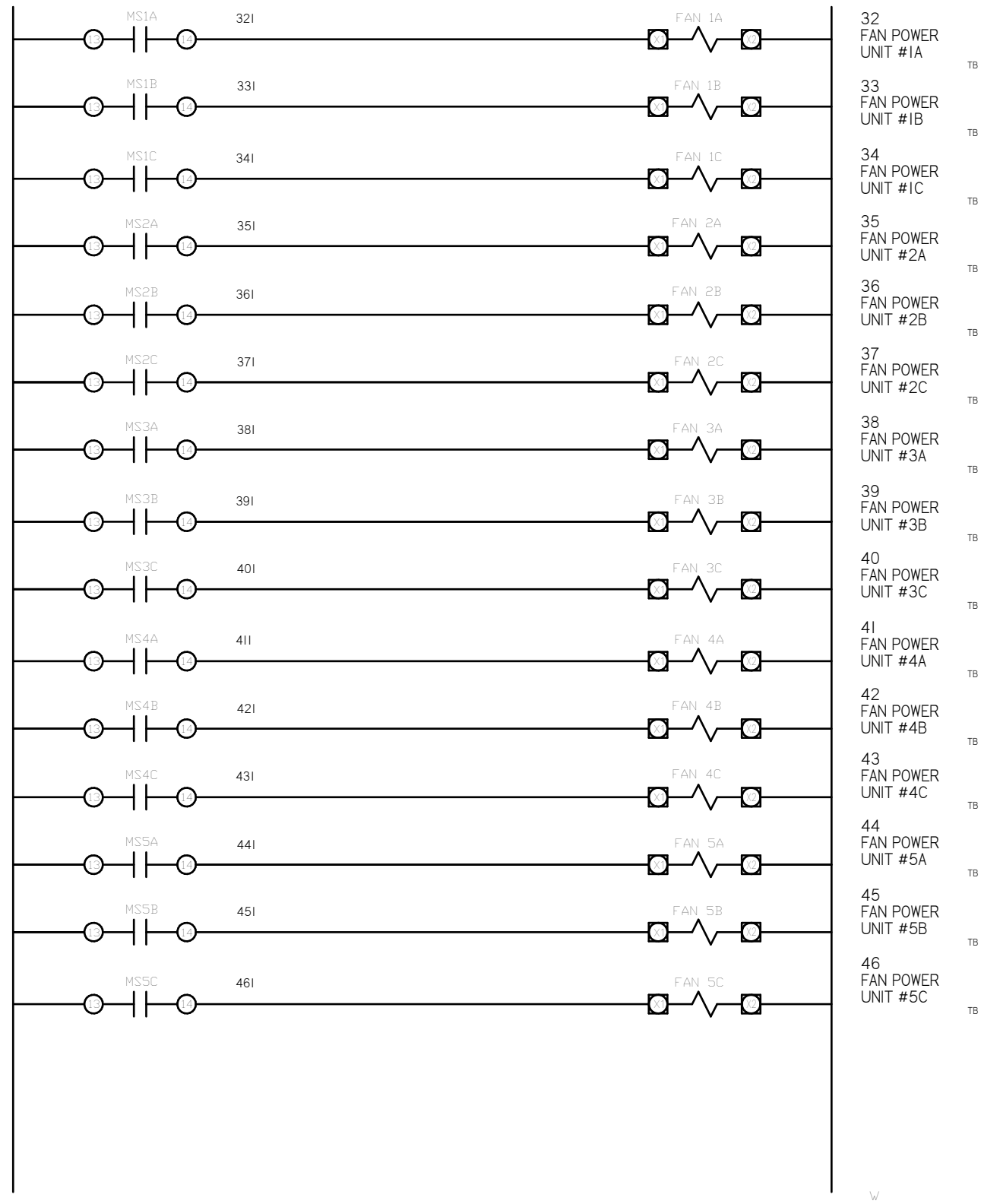
DWG. TYPE WIRING

DWG. NO.
PXMI-LS516F W

SHEET
W-3

SIZE
B

REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	05/05/14	PXEC0066	AJL	KMD
C	ADDED FAN WIRING	9/04/18	PXEC0229	JPG	AH



001

OPTIONAL:

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DRAWN BY	CHECKED BY	ENGINEERING APPROVAL
AJL	KMD	KMD
05/05/14	05/05/14	05/05/14

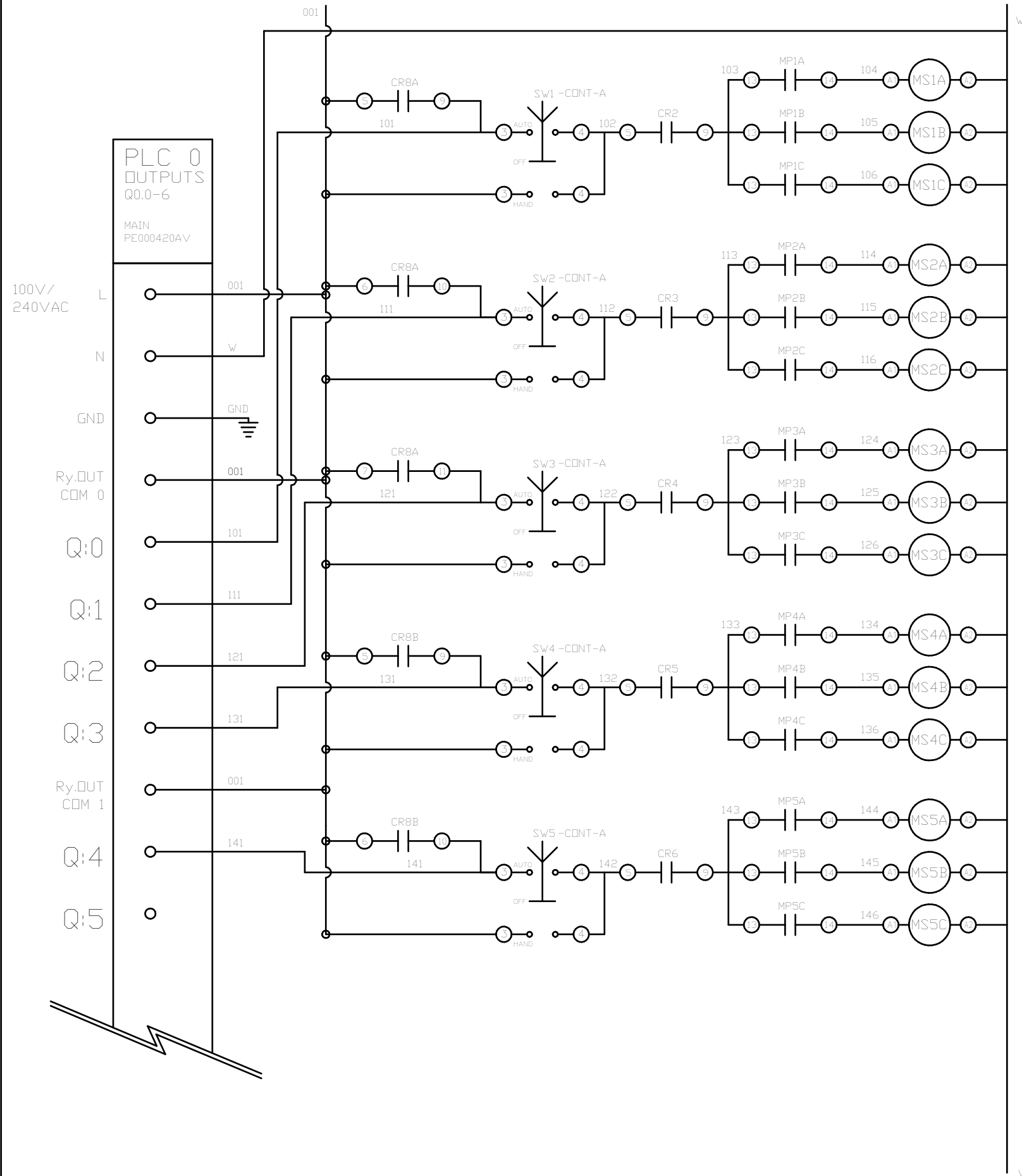
PANEL TYPE
PENTA LAB SCROLL COMP
HMI, NFPA

DWG. TYPE
WIRING

DWG. NO.
PXMI-LS516F W

SHEET	SIZE
W-4	B

REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	05/05/14	PXEC0066	AJL	KMD
C	ADDED FAN WIRING	9/04/18	PXEC0229	JPG	AH



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



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DRAWN BY	CHECKED BY	ENGINEERING APPROVAL
AJL	KMD	KMD
05/05/14	05/05/14	05/05/14

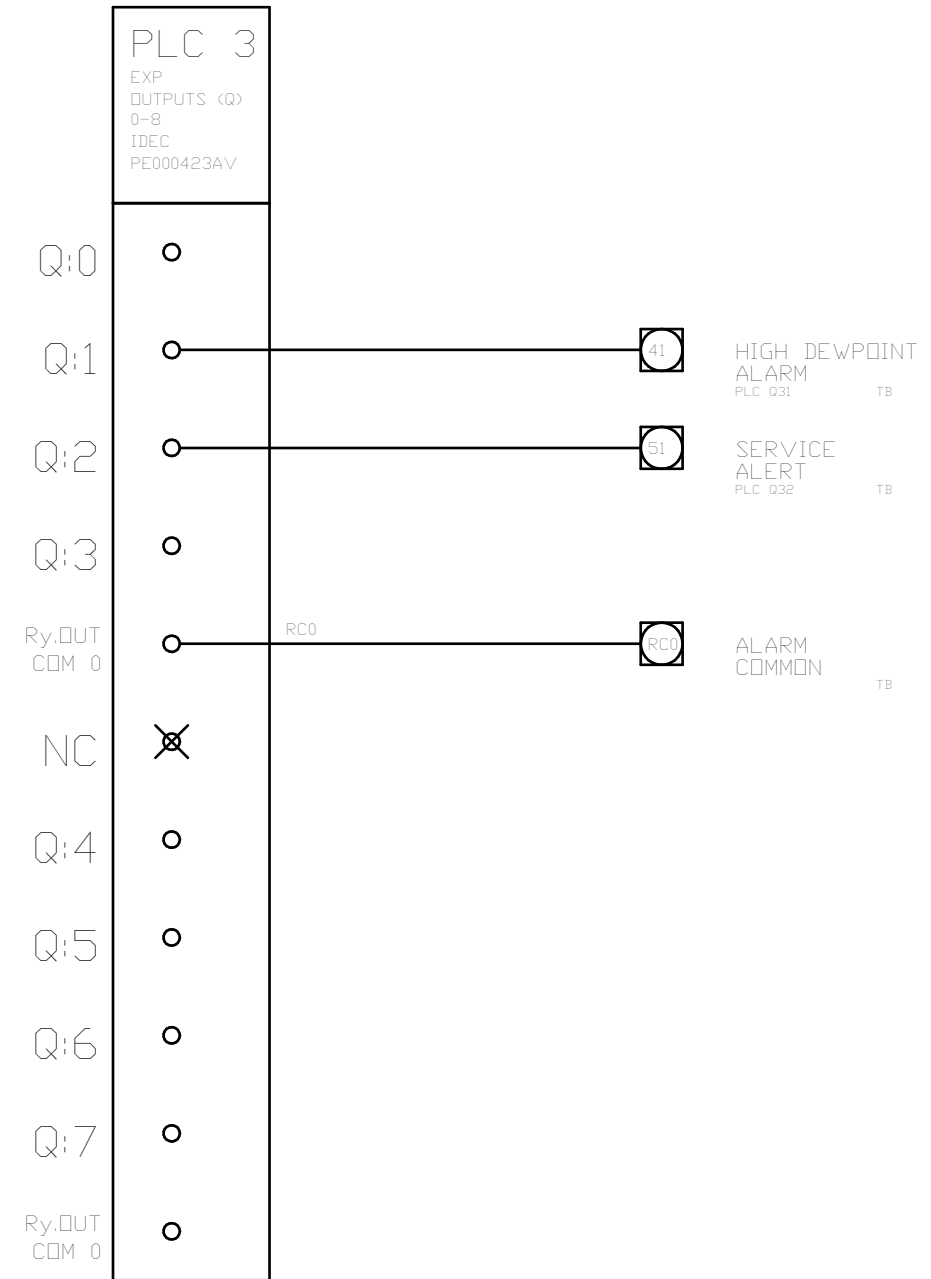
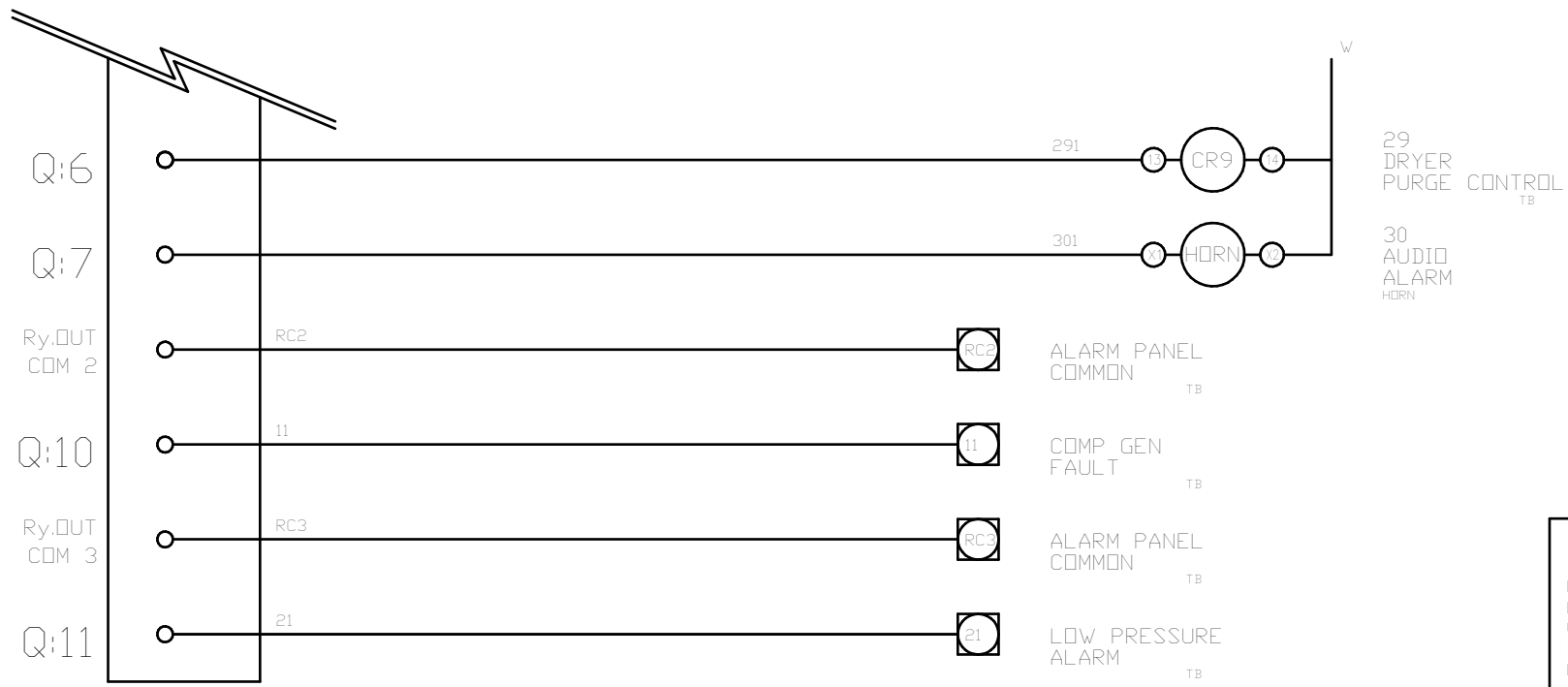
PANEL TYPE
 PENTA LAB SCROLL COMP
 HMI, NFPA

DWG. TYPE WIRING

DWG. NO.
 PXMI-LS516F W

SHEET	SIZE
W-5	B

REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	05/05/14	PXEC0066	AJL	KMD
C	ADDED FAN WIRING	9/04/18	PXEC0225	JPG	AH



OPTIONAL:

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

BACNET, WEBSVR,



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DRAWN BY	CHECKED BY	ENGINEERING APPROVAL
AJL	KMD	KMD
05/05/14	05/05/14	05/05/14

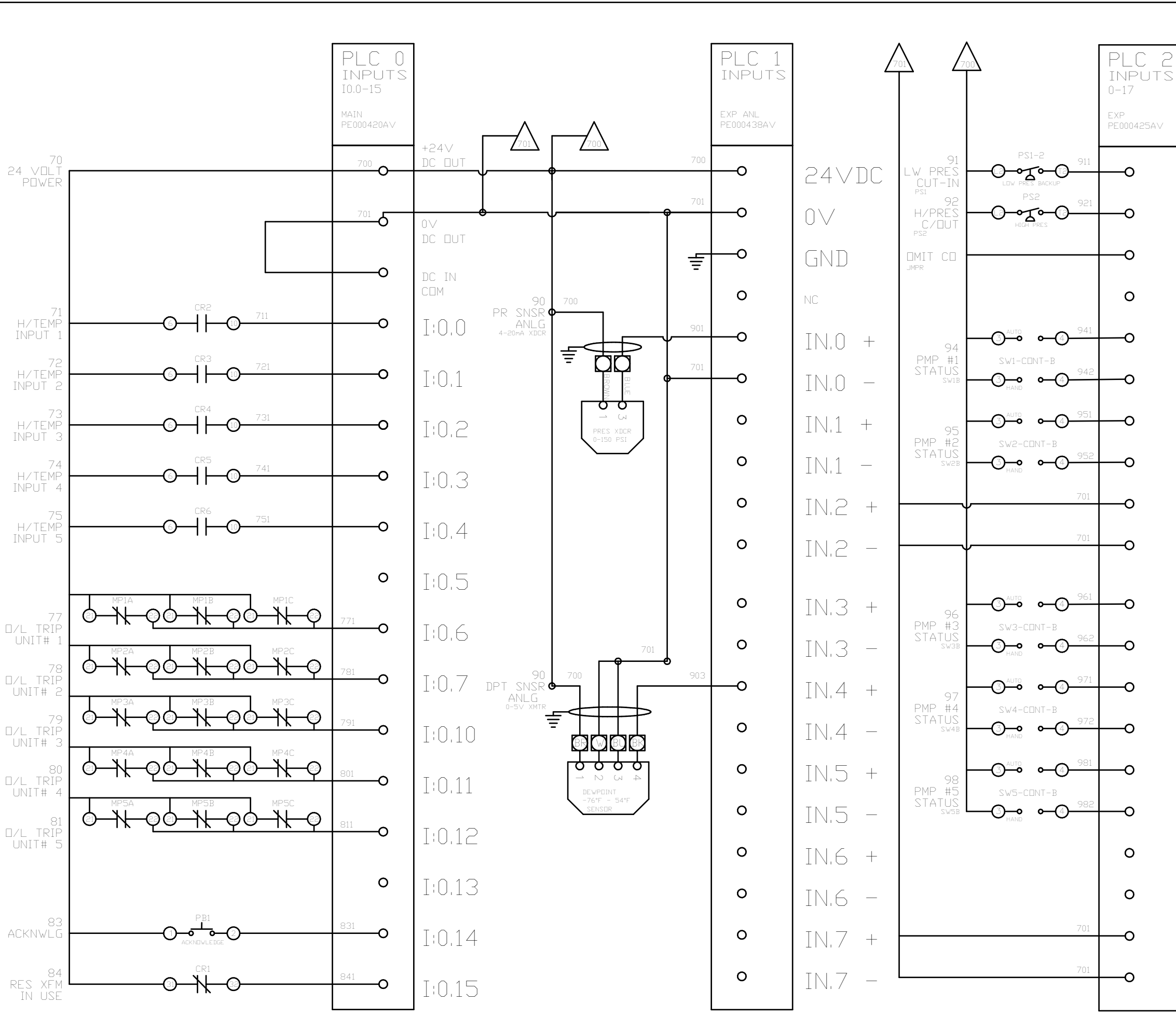
PANEL TYPE
PENTA LAB SCROLL COMP
HMI, NFPA

DWG. TYPE
WIRING

DWG. NO.
PXMI-LS516F W

SHEET	SIZE
W-6	B

REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	05/05/14	PXEC0066	AJL	KMD
C	ADDED FAN WIRING	9/04/18	PXEC0229	JPG	AH



OPTIONAL:
 SINGLE CYLINDER AND SCROLL PUMPS
 DOUBLE-CYLINDER PUMPS
 TRIPLE-CYLINDER PUMPS
 BACNET, WEBSVRV,



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DRAWN BY	CHECKED BY	ENGINEERING APPROVAL
AJL	KMD	KMD
05/05/14	05/05/14	05/05/14

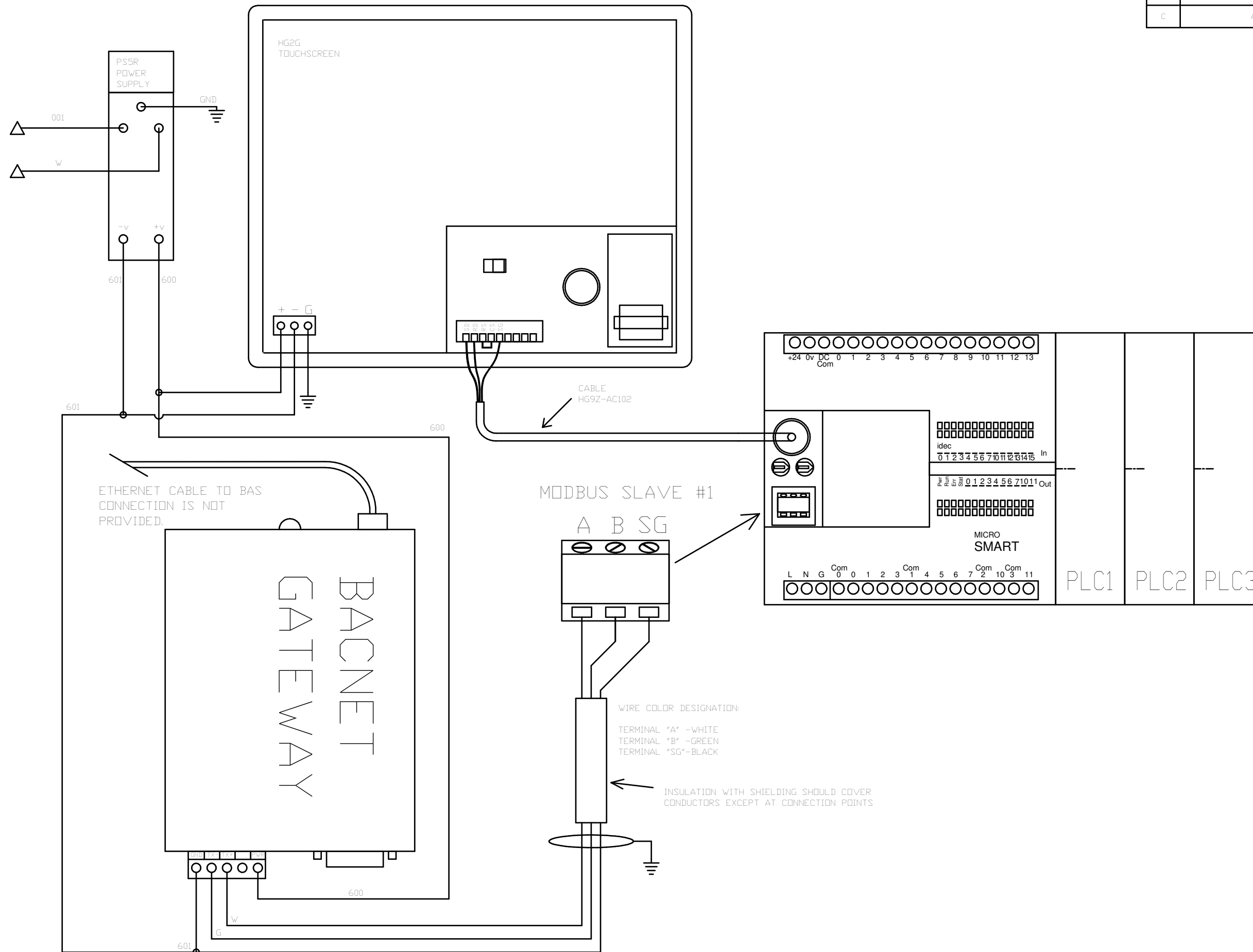
PANEL TYPE
 PENTA LAB SCROLL COMP
 HMI, NFPA

DWG. TYPE
 WIRING

DWG. NO.
 PXMI-LS516F W

SHEET	SIZE
W-7	B

REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	05/05/14	PXEC0066	AJL	KMD
C	ADDED FAN WIRING	9/04/18	PXEC0229	JPG	AH



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



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DRAWN BY	CHECKED BY	ENGINEERING APPROVAL
AJL	KMD	KMD
05/05/14	05/05/14	05/05/14

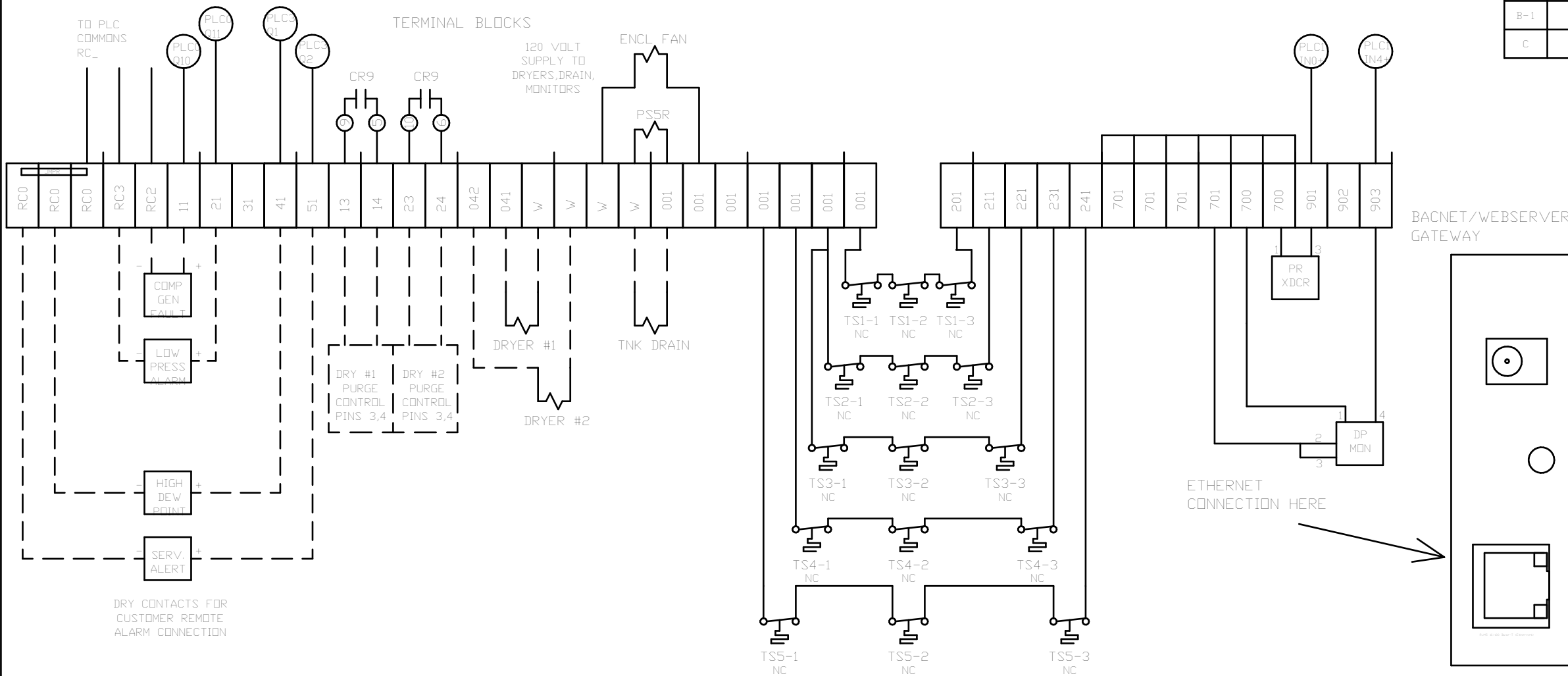
PANEL TYPE
 PENTA LAB SCROLL COMP
 HMI, NFPA

DWG. TYPE
 WIRING

DWG. NO.
 PXMI-LS516F W

SHEET W-8	SIZE B
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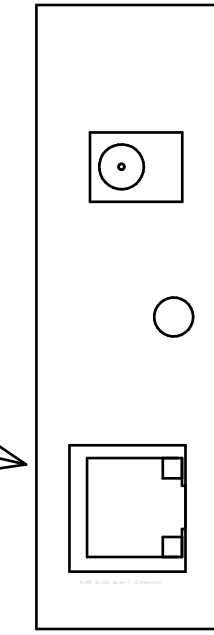
REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	05/05/14	PXEC0066	AJL	KMD
C	ADDED FAN WIRING	9/04/18	PXEC0225	JPG	AH



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.

BACNET/WEBSERVER GATEWAY



TOP VIEW

ETHERNET CONNECTION HERE

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"/>



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- FIELD WIRING NOTES:**
1. PANEL GROUND MUST BE CONNECTED TO EARTH GROUND.
 2. TRANSFORMER IS SIZED FOR LOADS SHOWN ON DRAWING ONLY.
 3. FIELD WIRING INDICATED BY -----. WIRE TO BE COPPER RATED AT 75° C.
 4. ALL ALARM DRY CONTACTS ARE CLOSED FOR NORMAL OPERATION AND OPEN IN ALARM.
 5. DRY CONTACT RATING: 30V DC/2A (resistive load, inductive load L/R = 7 ms)
 6. USE CAT-5 CABLE W/RJ45 CONNECTOR FOR ETHERNET CONNECTION TO COMMUNICATION NETWORK OR BAS SYSTEM



FAN WIRING
SEE RUNGS 32-46 FOR DETAILS

DRAWN BY	CHECKED BY	ENGINEERING APPROVAL
AJL	KMD	KMD
05/05/14	05/05/14	05/05/14

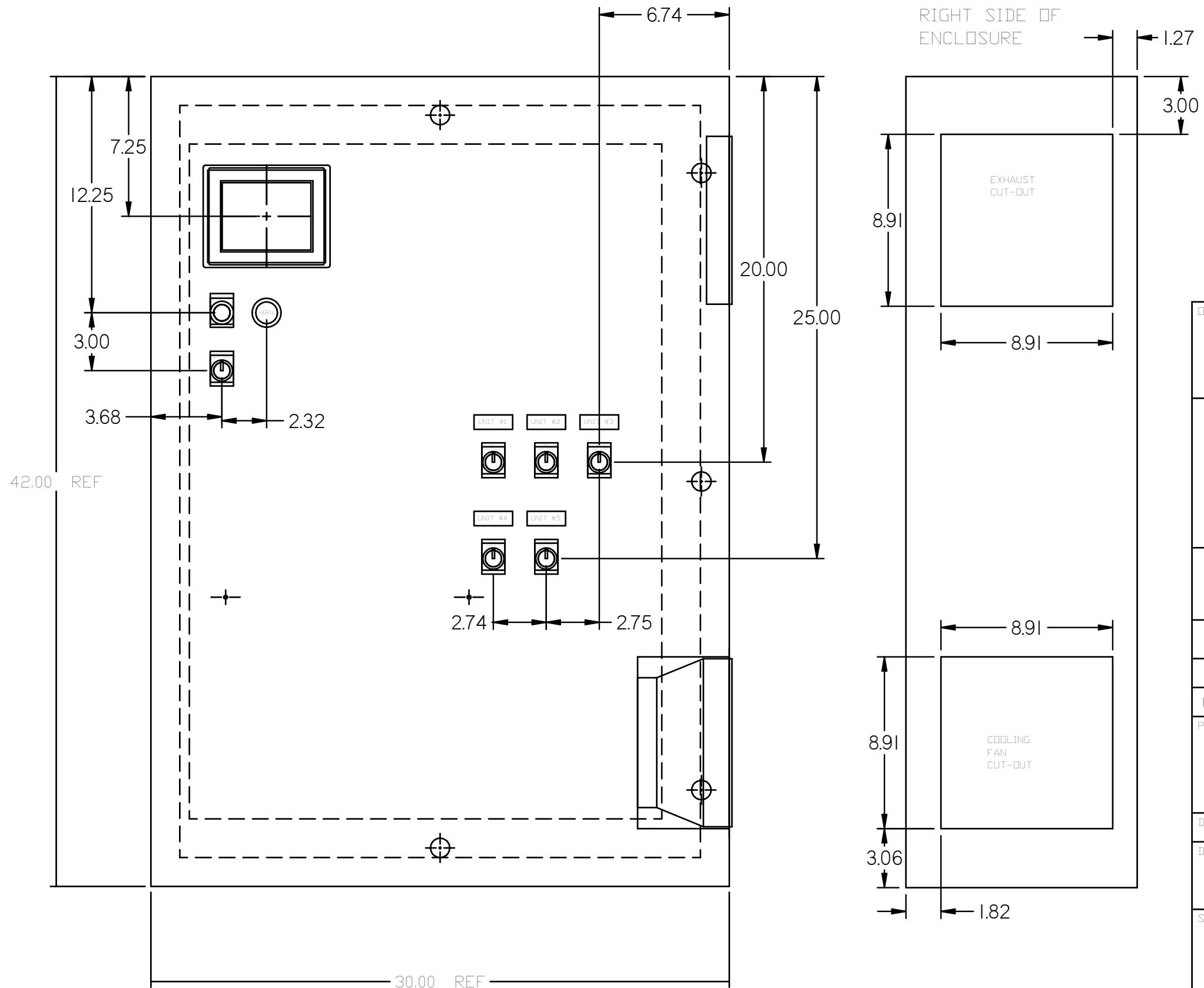
PANEL TYPE
PENTA LAB 15HP SCROLL HMI, NFPA

DWG. TYPE
WIRING

DWG. NO.
PXMI-LS516F W

SHEET	SIZE
W-9	B

REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	05/05/14	PXEC0066	AJL	KMD
C	ADDED FAN WIRING	9/04/18	PXEC0225	JPG	AH



- OPTIONAL:
- SINGLE CYLINDER AND SCROLLPUMPS
 - DOUBLE-CYLINDER PUMPS
 - BACNET, WEBSVR, TRIPLE-CYLINDER PUMPS



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DRAWN BY	EXAMINATION CHECKED BY	ENGINEERING APPROVAL
AJL	KMD	KMD
05/05/14	05/05/14	05/04/14

PANEL TYPE
 PENTA LAB SCROLL COMP
 HMI, NFPA

DWG. TYPE WIRING

DWG. NO.
 PXMI-LS516F W

SHEET	SIZE
L-1	B

REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	05/05/14	PXEC0066	AJL	KMD
C	ADDED FAN WIRING	9/04/18	PXEC0229	JPG	AH

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
PBMILS516F2AJ	5(X3)	208V/3Ø	14.2	215	250A	250A	250A
PBMILS516F3AJ	5(X3)	230V/3Ø	12.8	194	225A	225A	225A
PBMILS516F4AJ	5(X3)	460V/3Ø	6.4	98	125A	110A	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 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-8.

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, WEBSRVR,



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DRAWN BY	or Examination CHECKED BY	ENGINEERING APPROVAL
AJL	KMD	KMD
05/05/14	05/05/14	05/05/14

PANEL TYPE
PENTA LAB 15HP SCROLL
HMI, NFPA

DWG. TYPE DATA

DWG. NO. PXMI-LS516F W

SHEET	SIZE
D-1	B

PXMI-LS516F B1

CONTROL TRANSFORMERS - 500VA					
FUSE		208	230	460	575
TYPE		VOLT	VOLT	3Ø VOLT	VOLT
FU1,2A	FNQR	6A	5A	5A	4A
FU1,2B					
FU3A,B	FNM	7A	7A	7A	7A
SEE XFMR 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