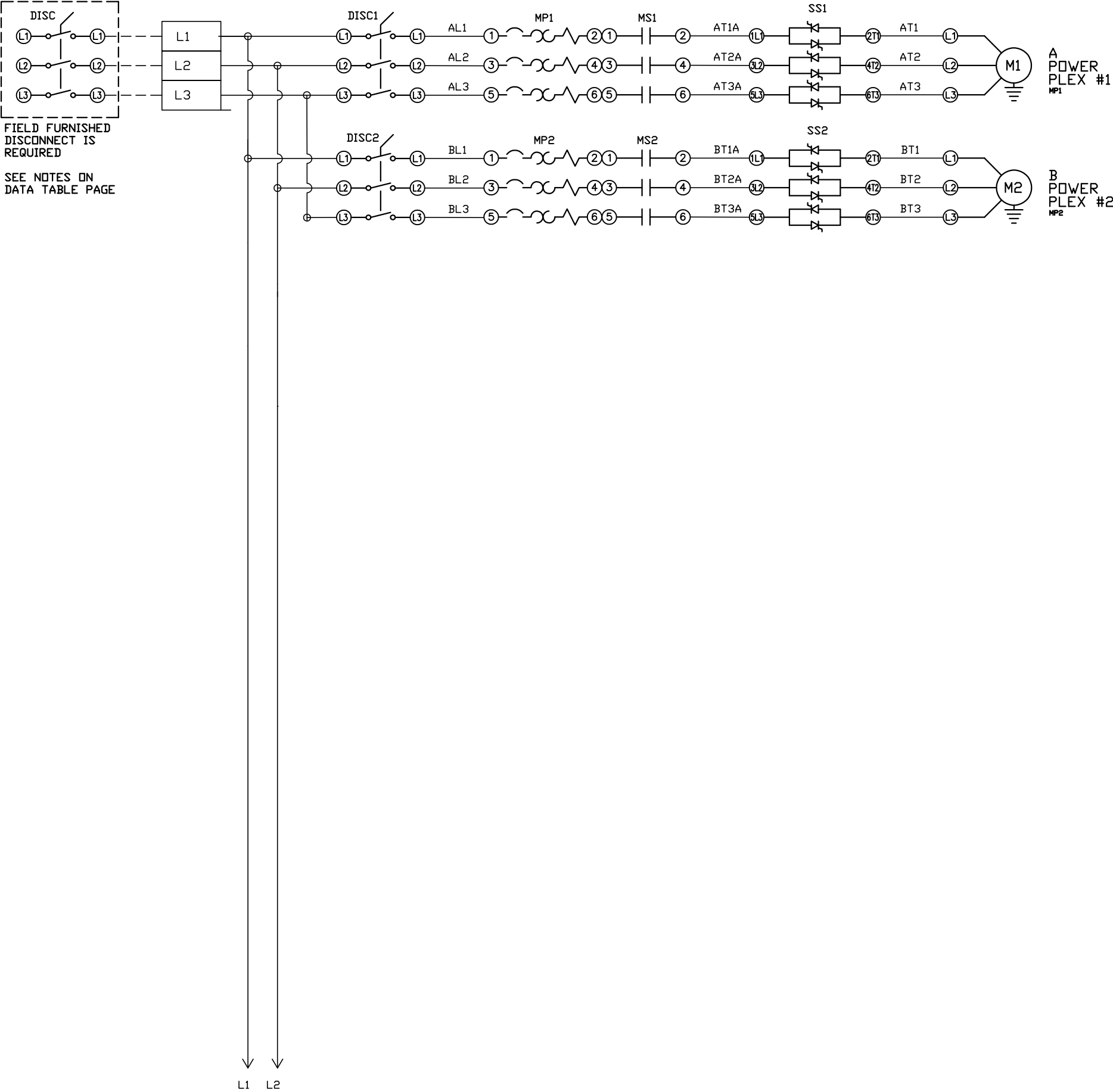


REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	07/23/12	PXEC0667	BTS	SEK



OPTIONAL:

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DRAWN BY	CHECKED BY	ENGINEERING APPROVAL
BTS	SEK	JRD
05/16/25	05/16/25	05/16/25

PANEL TYPE

DUPLEX LAB COMP

HMI, BACNET, WEBSVR, NFPA, SOFT START. PLEX ISO

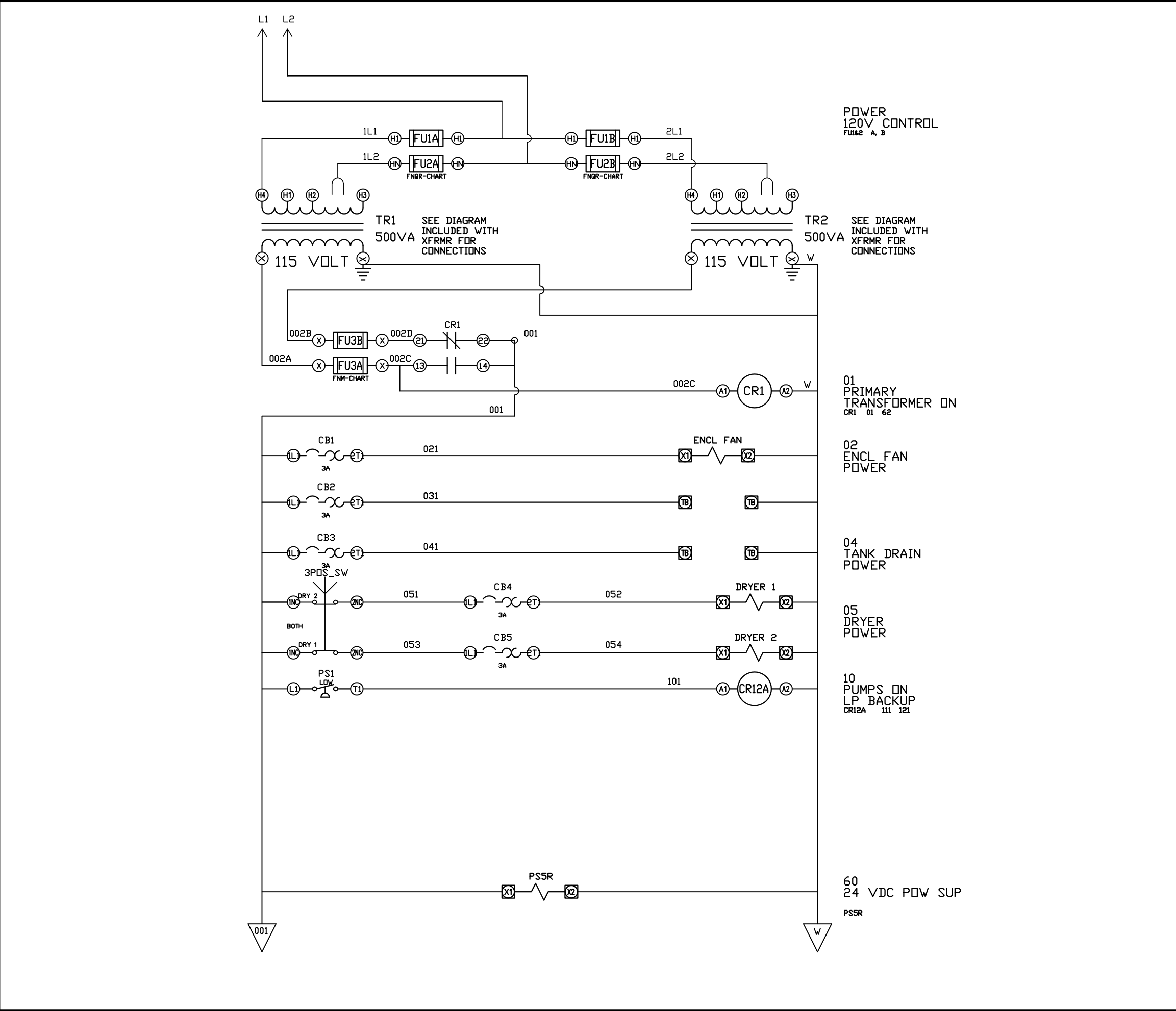
DWG. TYPE WIRING

DWG. NO.

PXMI-LAS216

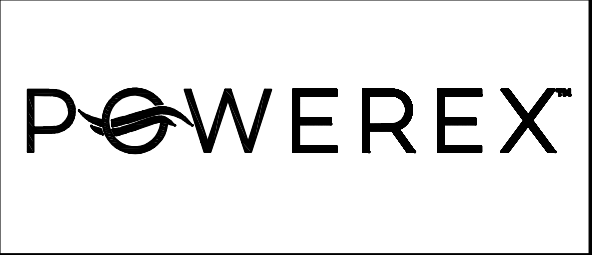
SHEET	SIZE
W-1	B

PXMI-LAS216



REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	05/16/25	PXEC0667	BTS	SEK

OPTIONAL:



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DRAWN BY	CHECKED BY	ENGINEERING APPROVAL
BTS	SEK	JRD
05/16/25	05/16/25	05/16/25

PANEL TYPE

DUPLEX LAB COMP

HMI, BACNET, WEBSVR, NFPA, SOFT START. PLEX ISO

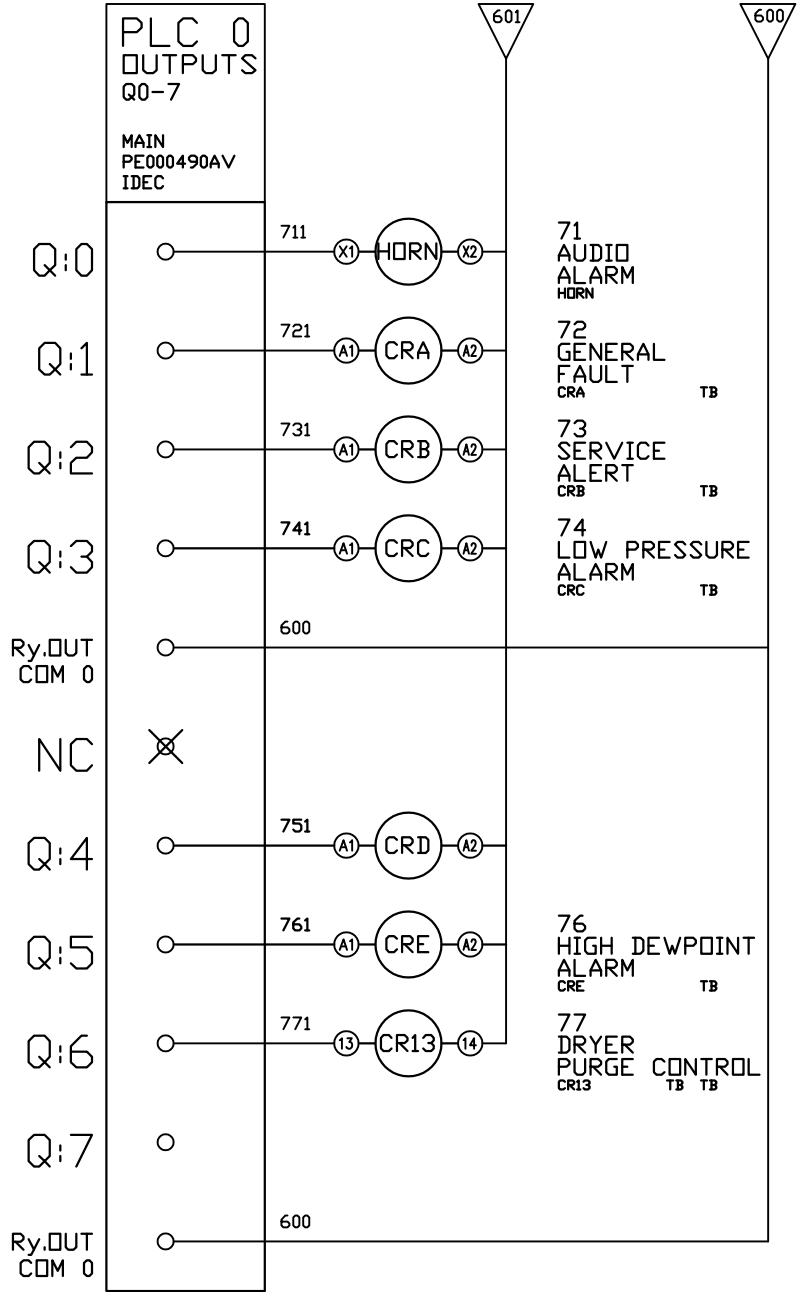
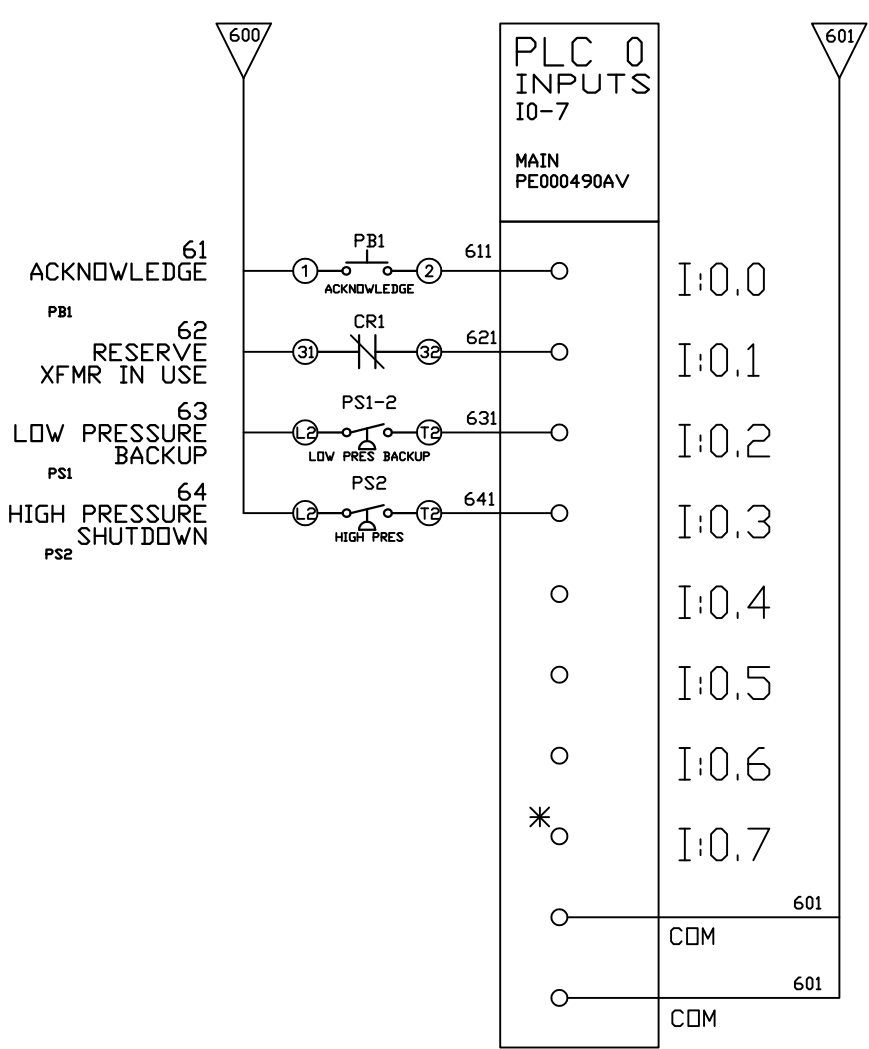
DWG. TYPE WIRING

DWG. NO.

PXMI-LAS216

SHEET	SIZE
W-2	B

REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	05/16/25	PXEC0667	BTS	SEK



* INSTALL JUMPER FOR FACTORY TEST

OPTIONAL:

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DRAWN BY	CHECKED BY	ENGINEERING APPROVAL
BTS	SEK	JRD
05/16/25	05/16/25	05/16/25

PANEL TYPE

DUPLEX LAB COMP

HMI, BACNET, WEBSVR, NFPA, SOFT START. PLEX ISO

DWG. TYPE WIRING

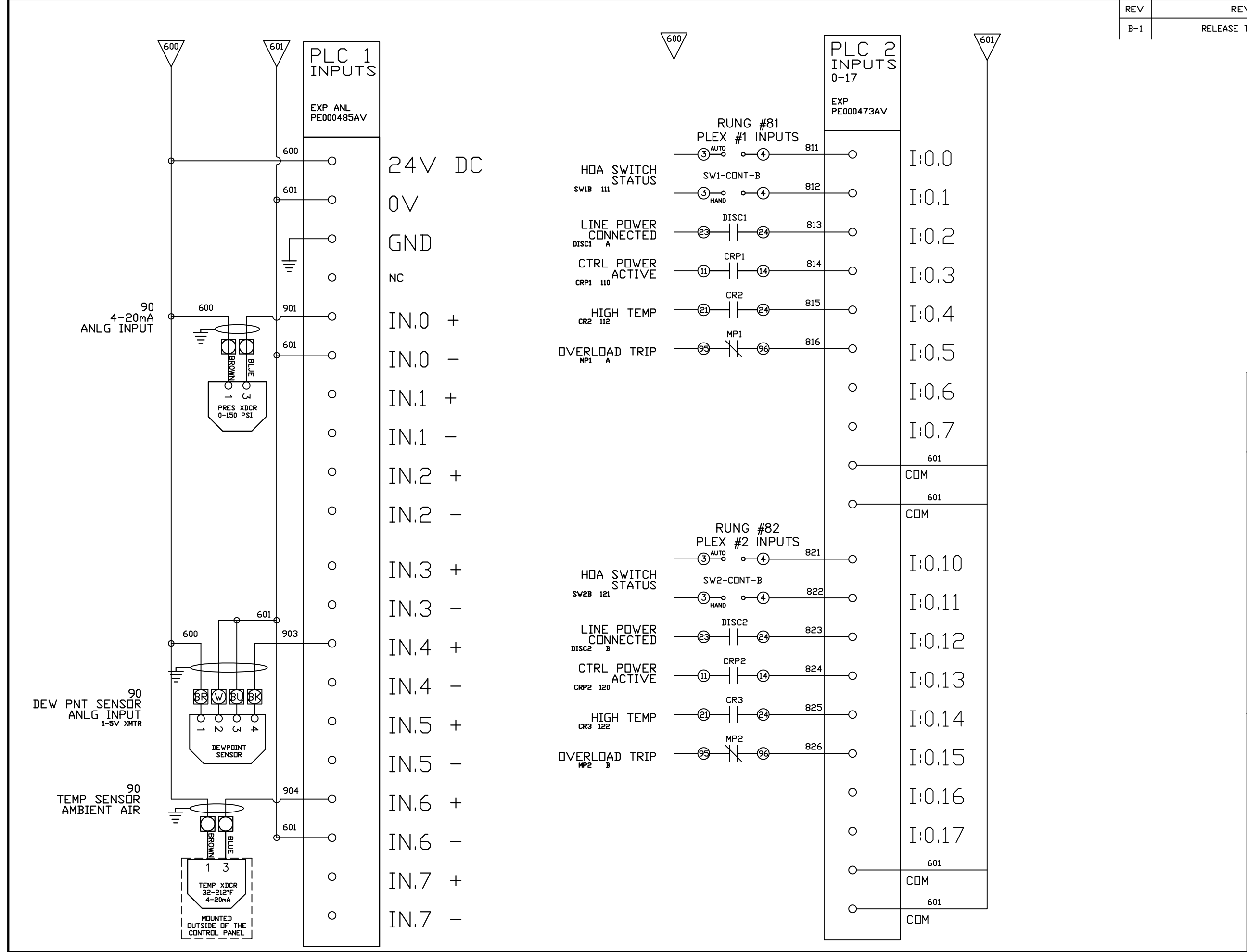
DWG. NO.

PXMI-LAS216

SHEET	SIZE
W-5	B

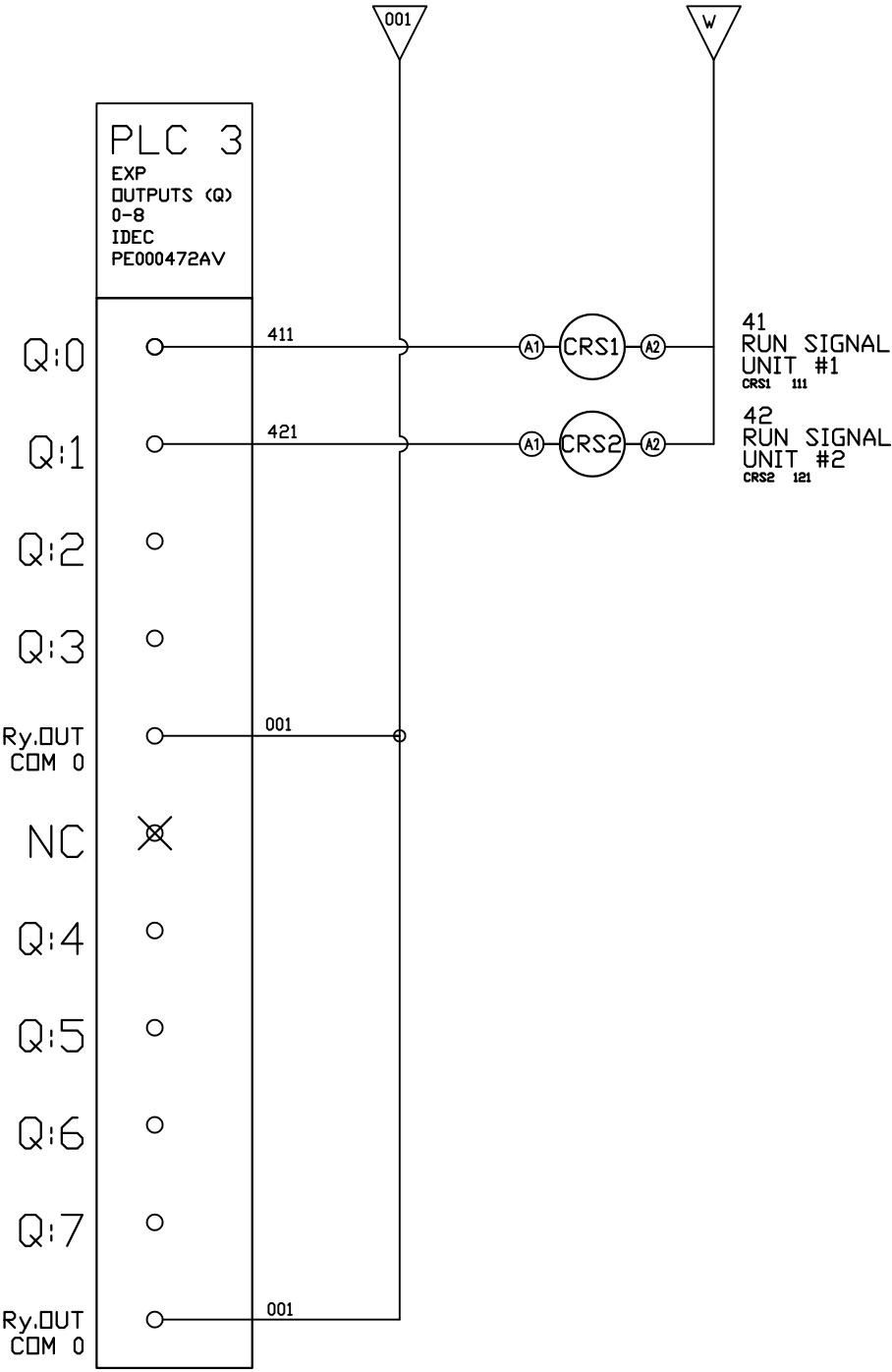
PXMI-LAS216

REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	05/16/25	PXEC0667	BTS	SEK



OPTIONAL:		
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DRAWN BY	CHECKED BY	ENGINEERING APPROVAL
BTS	SEK	JRD
05/16/25	05/16/25	05/16/25
PANEL TYPE		
DUPLEX LAB COMP		
HMI, BACNET, WEBSVR, NFPA, SOFT START, PLEX ISO		
DWG. TYPE WIRING		
DWG. NO. PXMI-LAS216		
SHEET		SIZE
W-6		B

REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	05/16/25	PXEC0667	BTS	SEK



OPTIONAL:

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DRAWN BY	CHECKED BY	ENGINEERING APPROVAL
BTS	SEK	JRD
05/16/25	05/16/25	05/16/25

PANEL TYPE
DUPLEX LAB COMP
HMI, BACNET, WEBSVR, NFPA, SOFT START. PLEX ISO

DWG. TYPE
WIRING

DWG. NO.
PXMI-LAS216

SHEET W-7	SIZE B
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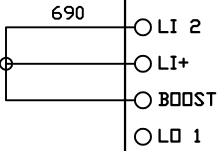
PXMI-LAS216

REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	05/16/25	PXEC0667	BTS	SEK

SET START TIME TO B (3-SEC)
SET INITIAL VOLT SETTING TO D (67%)
SET STOP TIME TO C (5-SEC)

69
MOTOR#1 SOFT START

SS1 690



- ATS01222RT
- ☐ R1A

☐ R1C

☐ COM

☐ LI 1

☐ LI 2

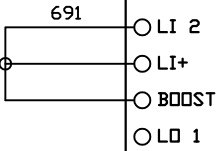
☐ LI+

☐ BOOST

☐ LD 1

69
MOTOR#2 SOFT START

SS2 690



- ATS01222RT
- ☐ R1A

☐ R1C

☐ COM

☐ LI 1

☐ LI 2

☐ LI+

☐ BOOST

☐ LD 1

OPTIONAL:

POWEREX™

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DRAWN BY	CHECKED BY	ENGINEERING APPROVAL
BTS	SEK	JRD
05/16/25	05/16/25	05/16/25

PANEL TYPE

DUPLEX LAB COMP

HMI, BACNET, WEBSVR, NFPA, SOFT START. PLEX ISO

DWG. TYPE WIRING

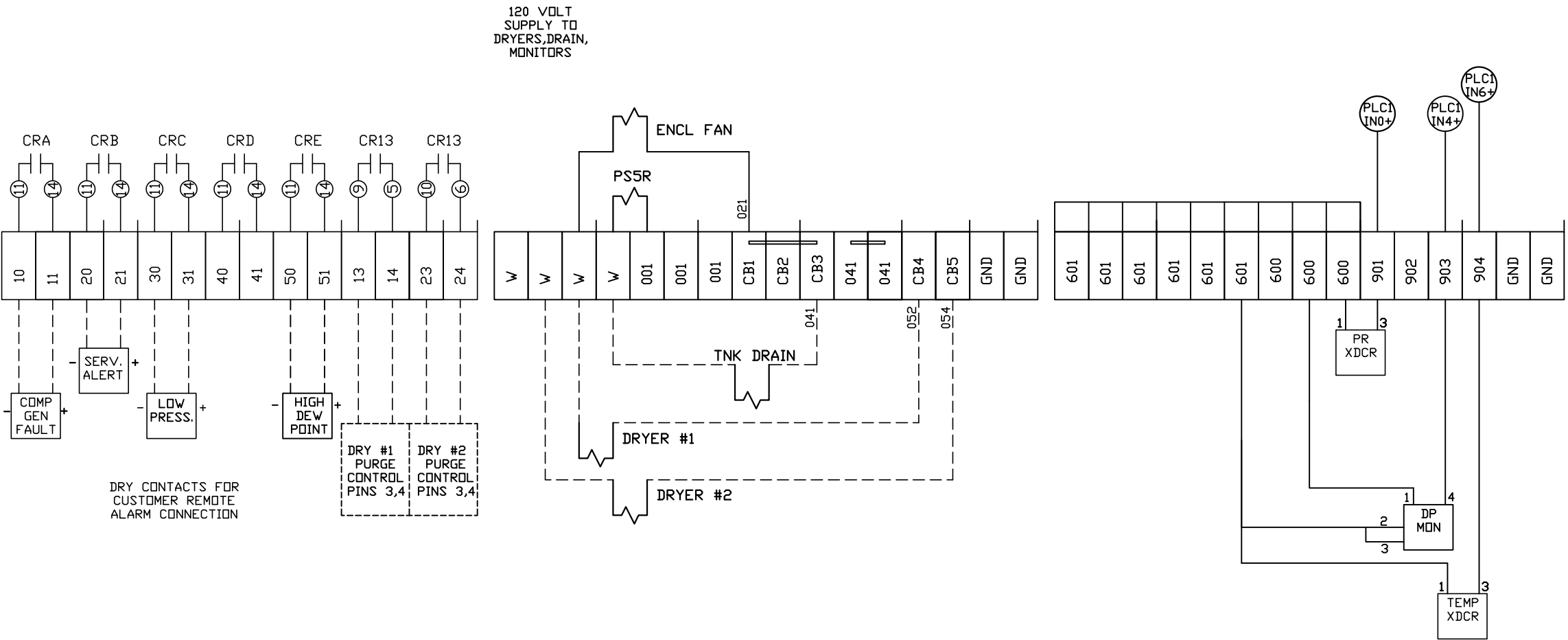
DWG. NO.

PXMI-LAS216

SHEET	SIZE
W-8	B

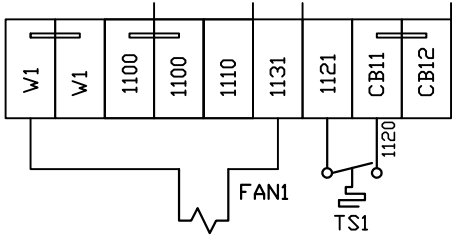
TERMINAL BLOCKS

REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	05/16/25	PXEX0667	BTS	SEK

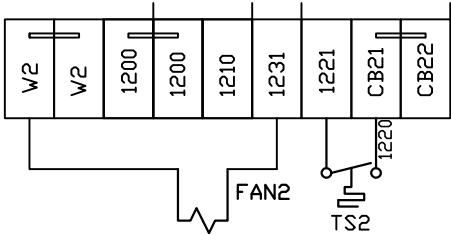


DRY CONTACTS FOR CUSTOMER REMOTE ALARM CONNECTION

PLEX #1 CONNECTIONS



PLEX #2 CONNECTIONS



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
BTS	SEK	JRD
05/16/25	05/16/25	05/16/25

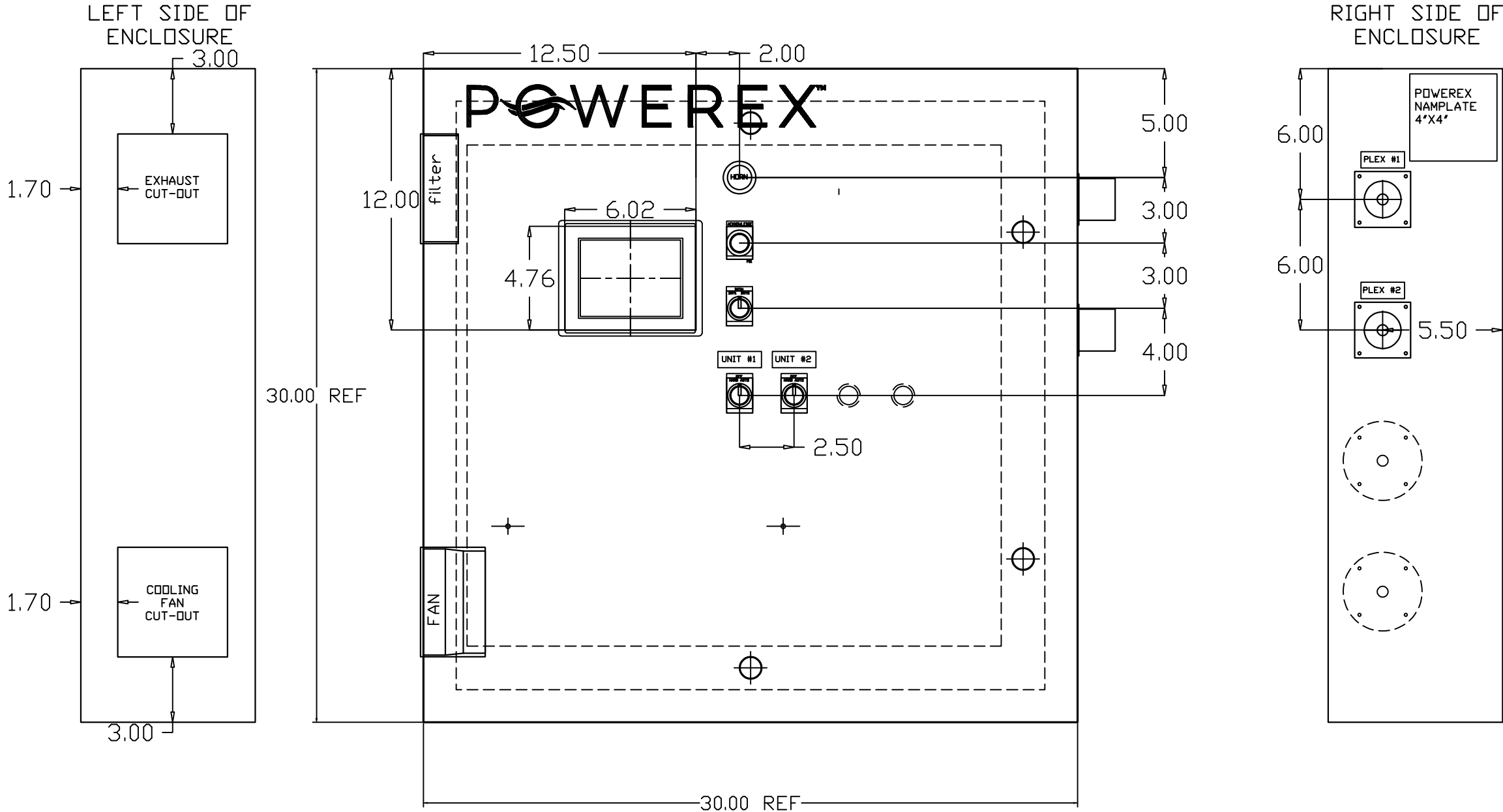
PANEL TYPE
DUPLX LAB COMP
HMI, BACNET, WEBSVR, NFPA, SOFT START. PLEX ISO

DWG. TYPE WIRING

DWG. NO. PXMI-LAS216

SHEET	SIZE
W-9	B

REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	05/16/25	PXEC0667	BTS	SEK



OPTIONAL:

POWEREX™

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DRAWN BY	CHECKED BY	ENGINEERING APPROVAL
BTS	SEK	JRD
05/16/25	05/16/25	05/16/25

PANEL TYPE
DUPLEX LAB COMP
HMI, BACNET, WEBSVR, NFPA, SOFT START. PLEX ISO

DWG. TYPE
LAYOUT

DWG. NO.
PXMI-LAS216

SHEET LA-1	SIZE B
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PXMI-LAS216

TABLE 1	P/N	MOTOR FULL LOAD AMPS	TOTAL FULL LOAD AMPS	NON-TIME DELAY FUSE	TIME DELAY FUSE	INVERSE-TIME CIRCUIT BREAKER
208V (3Ø)	72AJ	21.1	44.2	90	70	80
	A2AJ	26.5	55	110	80	100
230V (3Ø)	73AJ	17.9	37.8	80	60	70
	A3AJ	24	50	100	70	90
460V (3Ø)	74AJ	8.97	19.94	40	30	35
	A4AJ	12	26	50	35	45
380V (3Ø) 50HZ	78AJ	10.7	23.4	45	35	40
	A8AJ	14.5	31	60	45	60

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 (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.

FIELD WIRING NOTES ON PAGE W-7.

CONTROL TRANSFORMERS - 500VA					
REPLACEMENT	208	230	460 380	575	
FUSE TYPE	VOLT	VOLT	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

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: 208V/230V/460V/380V/575V		
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DRAWN BY	CHECKED BY	ENGINEERING APPROVAL
KMD	DMS	DMS
07/24/14	07/24/14	07/24/14
PANEL TYPE 7. 5/10 SCROLL DATA DUPLEX PANEL DATA		
DWG. TYPE MISC		
DWG. NO. DATA TABLE		
SHEET D-1		SIZE B
SCROLL 7-10 DUPLEX		