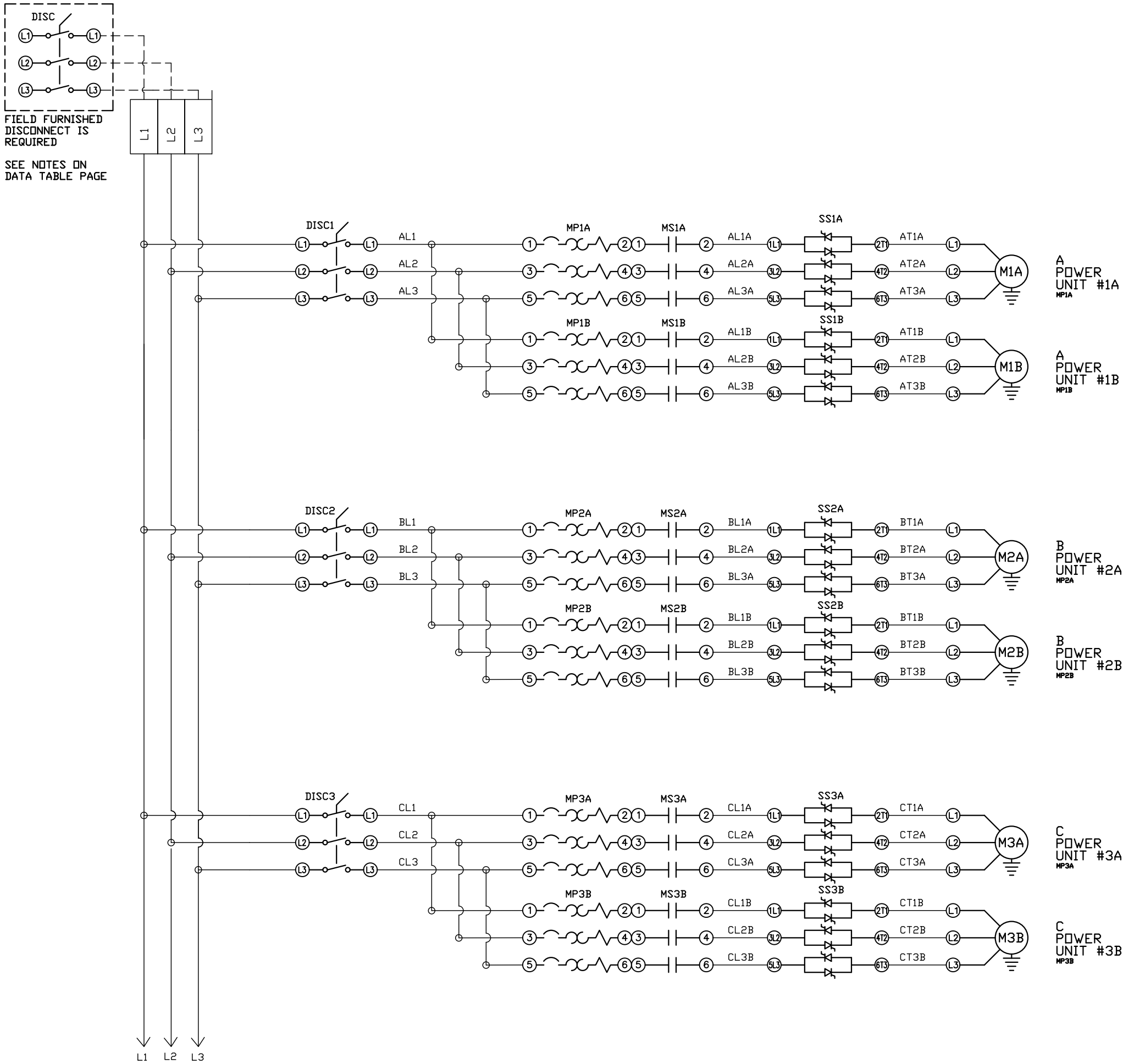
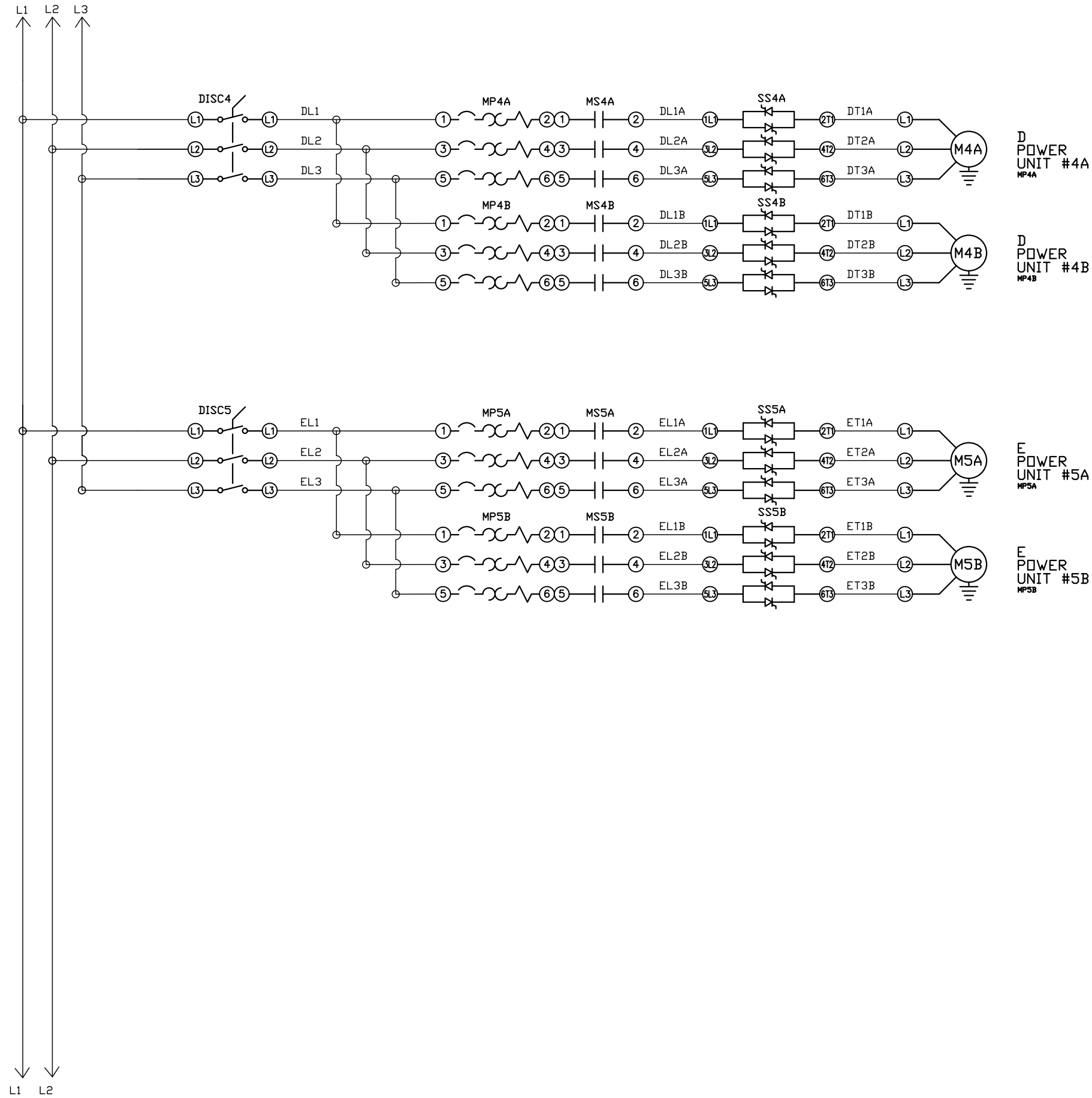


REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	05/14/25	PXEC0667	BTS	SEK



OPTIONAL:		
		
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DRAWN BY	CHECKED BY	ENGINEERING APPROVAL
BTS	SEK	JRD
05/14/25	05/14/25	05/14/25
PANEL TYPE		
PENTAPLEX MEDICAL COMP		
HMI, BACNET, WEBSVR, NFPA, SOFT START. PLEX ISO		
DWG. TYPE WIRING		
DWG. NO. PXMI-SS516X		
SHEET		SIZE
W-1		B
PXMI-SS516X		

REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	05/14/25	PXEC0667	BTS	SEK



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DRAWN BY	CHECKED BY	ENGINEERING APPROVAL
BTS	SEK	JRD
05/14/25	05/14/25	05/14/25

PANEL TYPE

PENTAPLEX MEDICAL COMP

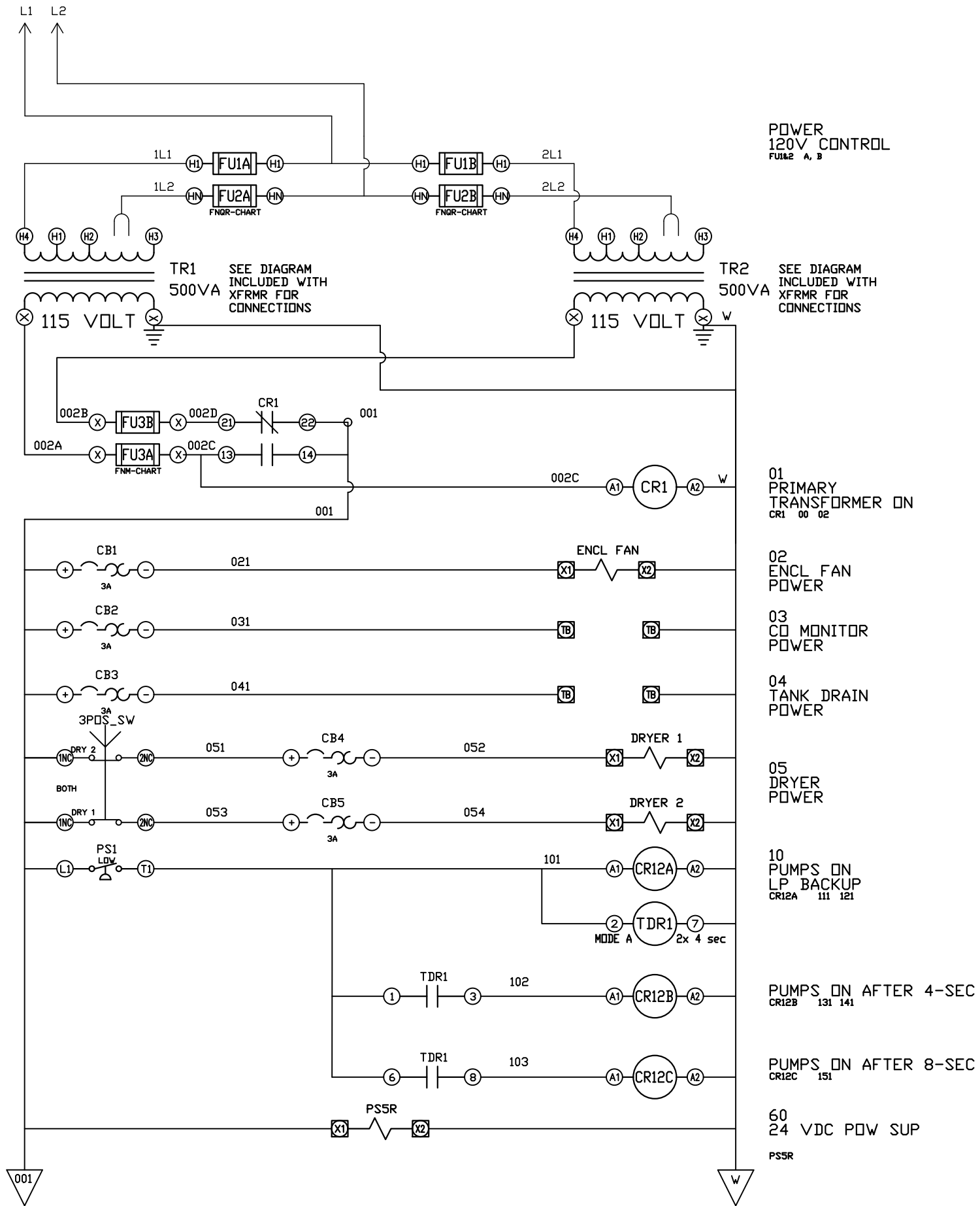
HMI, BACNET, WEBSVR, NFPA, SOFT START. PLEX ISO

DWG. TYPE WIRING

DWG. NO. PXMI-SS516X

SHEET	SIZE
W-2	B

PXMI-SS516X



REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	05/14/25	PXEC0667	BTS	SEK

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DRAWN BY	CHECKED BY	ENGINEERING APPROVAL
BTS	SEK	JRD
05/14/25	05/14/25	05/14/25

PANEL TYPE

PENTAPLEX MEDICAL COMP
HMI, BACNET, WEBSVR, NFPA, SOFT START, PLEX ISO

DWG. TYPE WIRING

DWG. NO.

PXMI-SS516X

SHEET

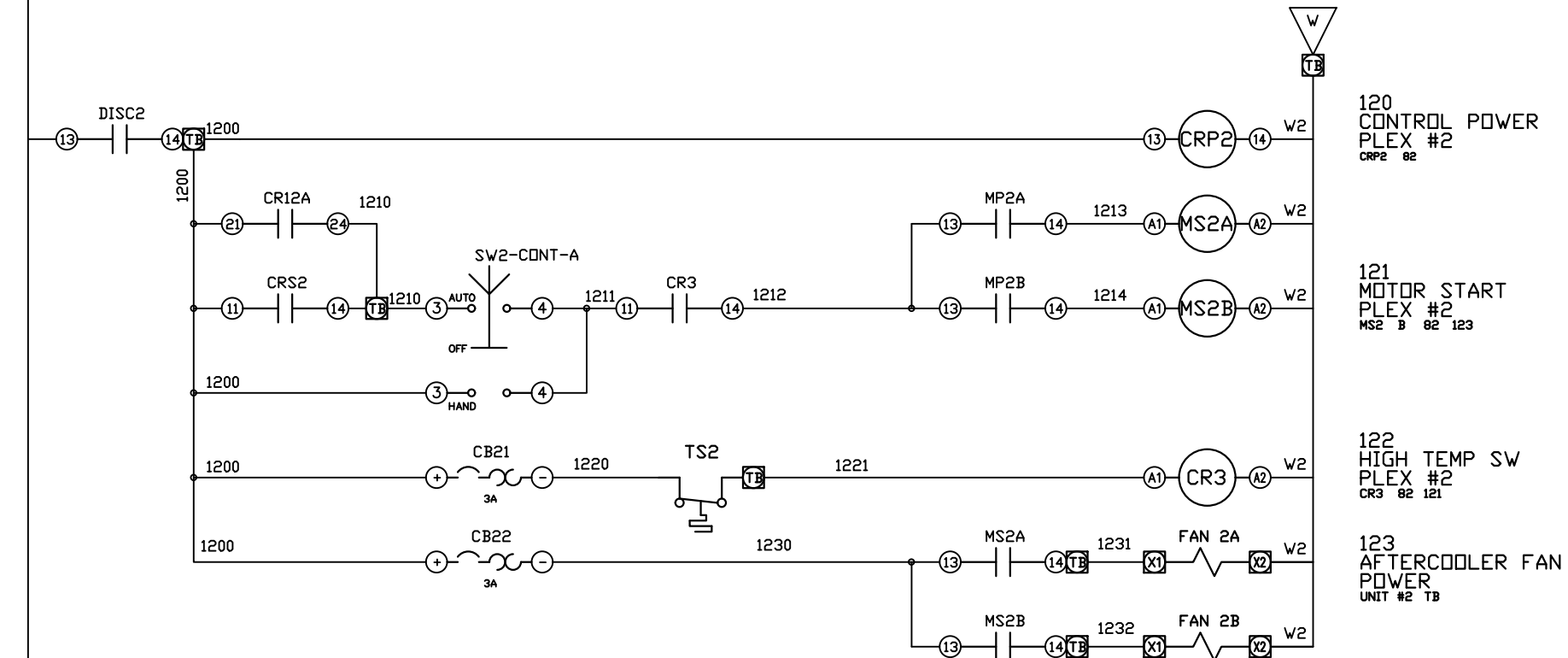
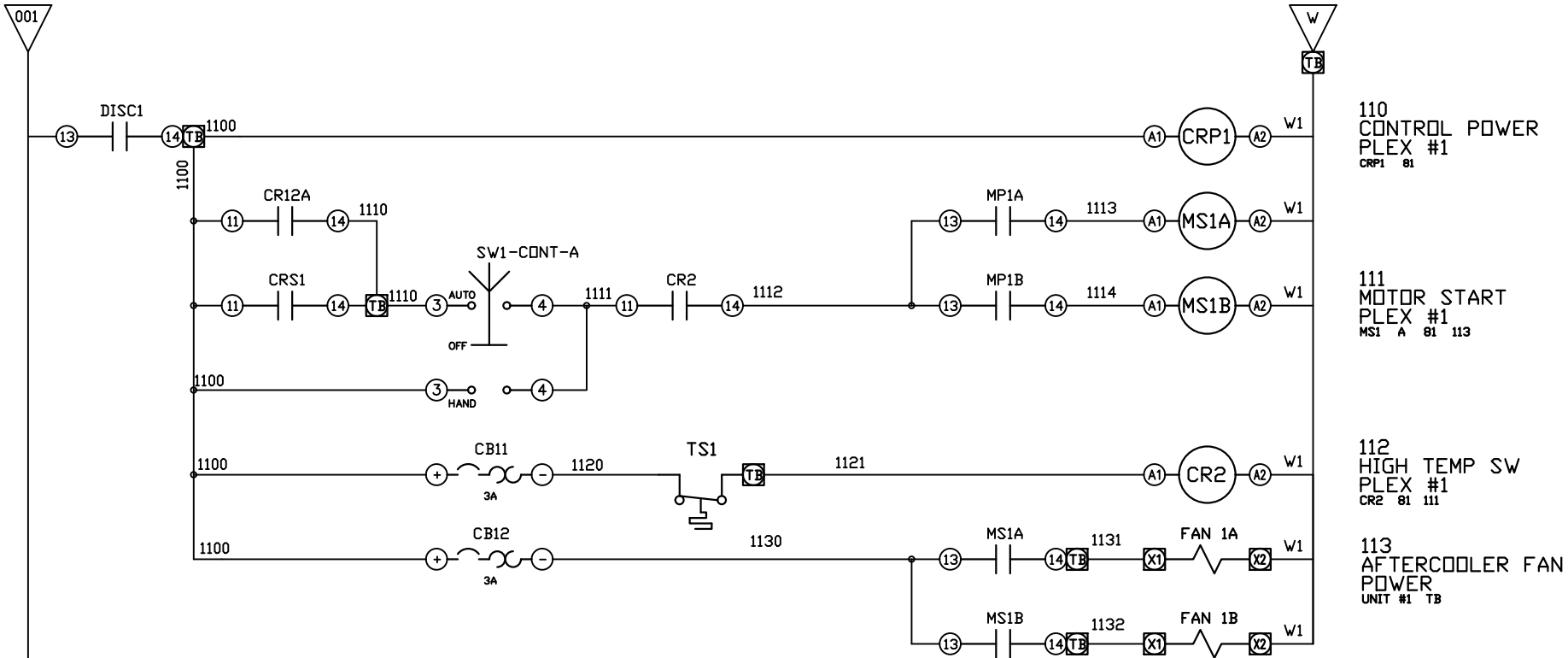
W-3

SIZE

B

PXMI-SS516X

REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	05/14/25	PXEC0667	BTS	SEK



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DRAWN BY	CHECKED BY	ENGINEERING APPROVAL
BTS	SEK	JRD
05/14/25	05/14/25	05/14/25

PANEL TYPE

PENTAPLEX MEDICAL COMP

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

DWG. TYPE

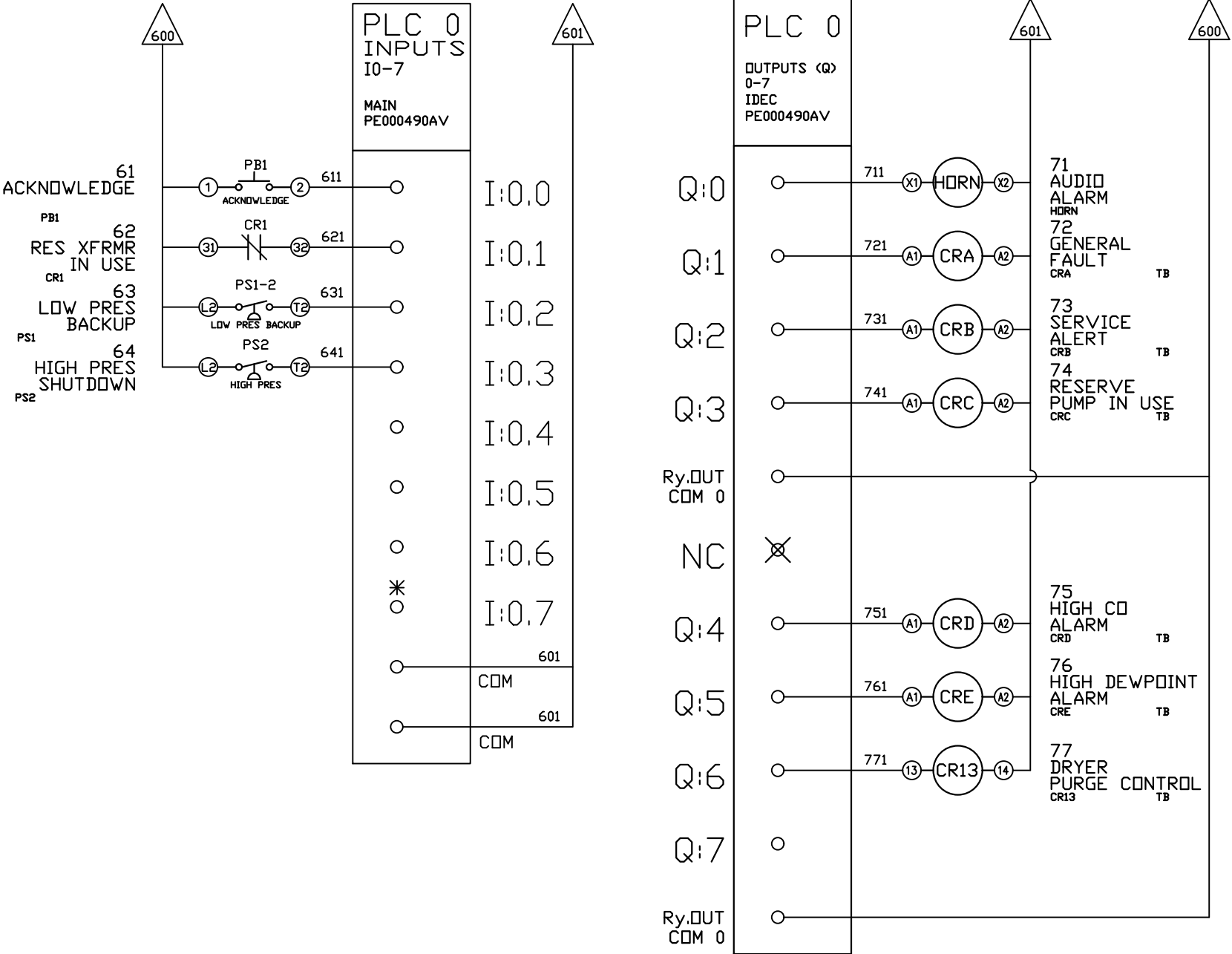
WIRING

DWG. NO.

PXMI-SS516X

SHEET	SIZE
W-4	B

REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	05/14/25	PXEC0667	BTS	SEK



*FACTORY TEST JUMPER LOCATION

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DRAWN BY	CHECKED BY	ENGINEERING APPROVAL
BTS	SEK	JRD
05/14/25	05/14/25	05/14/25

PANEL TYPE

PENTAPLEX MEDICAL COMP

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

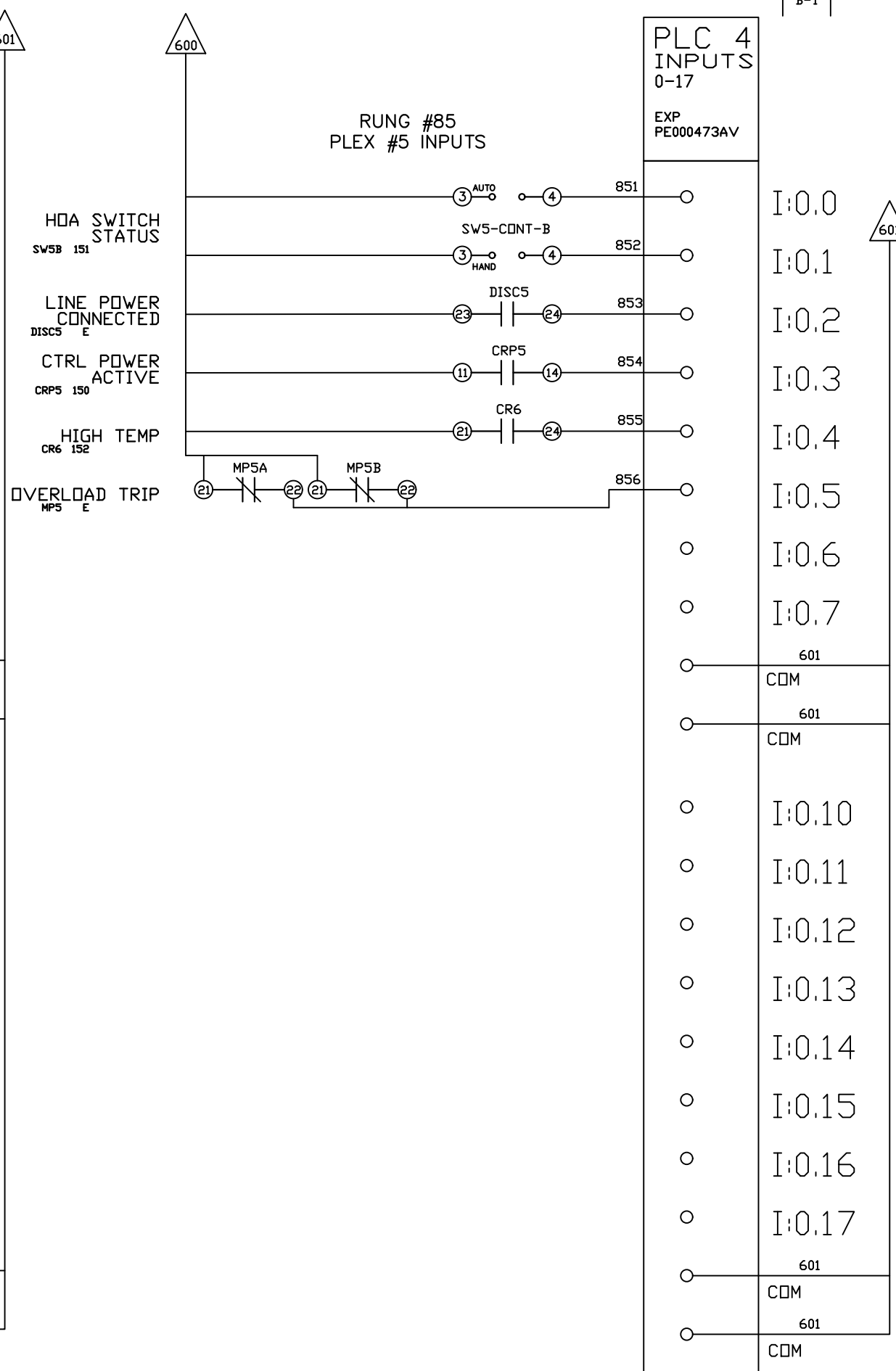
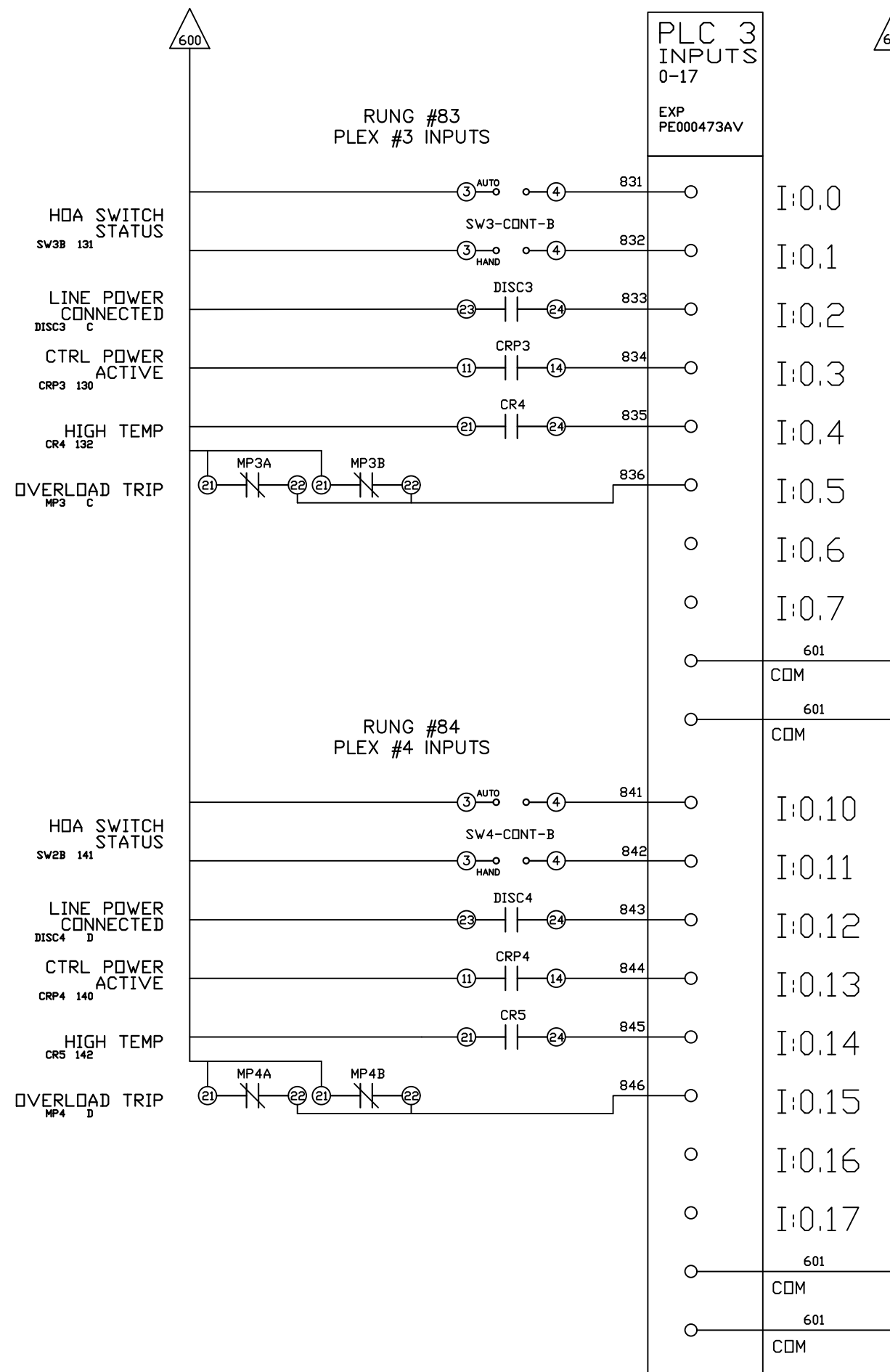
DWG. TYPE WIRING

DWG. NO. PXMI-SS516X

SHEET	SIZE
W-8	B

PXMI-SS516X

REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	05/14/25	PXEC0667	BTS	SEK



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DRAWN BY	CHECKED BY	ENGINEERING APPROVAL
BTS	SEK	JRD
05/14/25	05/14/25	05/14/25

PANEL TYPE	NO. OF PANELS	NO. OF STUDENTS	NO. OF STUDENTS WITH ACADEMIC RECORD	NO. OF STUDENTS WITH ACADEMIC RECORD AND ACADEMIC RECORD
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2	1	1	1	1
3	1	1	1	1
4	1	1	1	1
5	1	1	1	1
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93	1	1	1	1
94	1			

PENTAPLEX MEDICAL COMP

HMI, BACNET, WEBSRVR, NFPA, SOFT START, PLEX ISO

DWG. TYPE	WIRING
-----------	--------

DWG. NO.

PXM I-SS516X

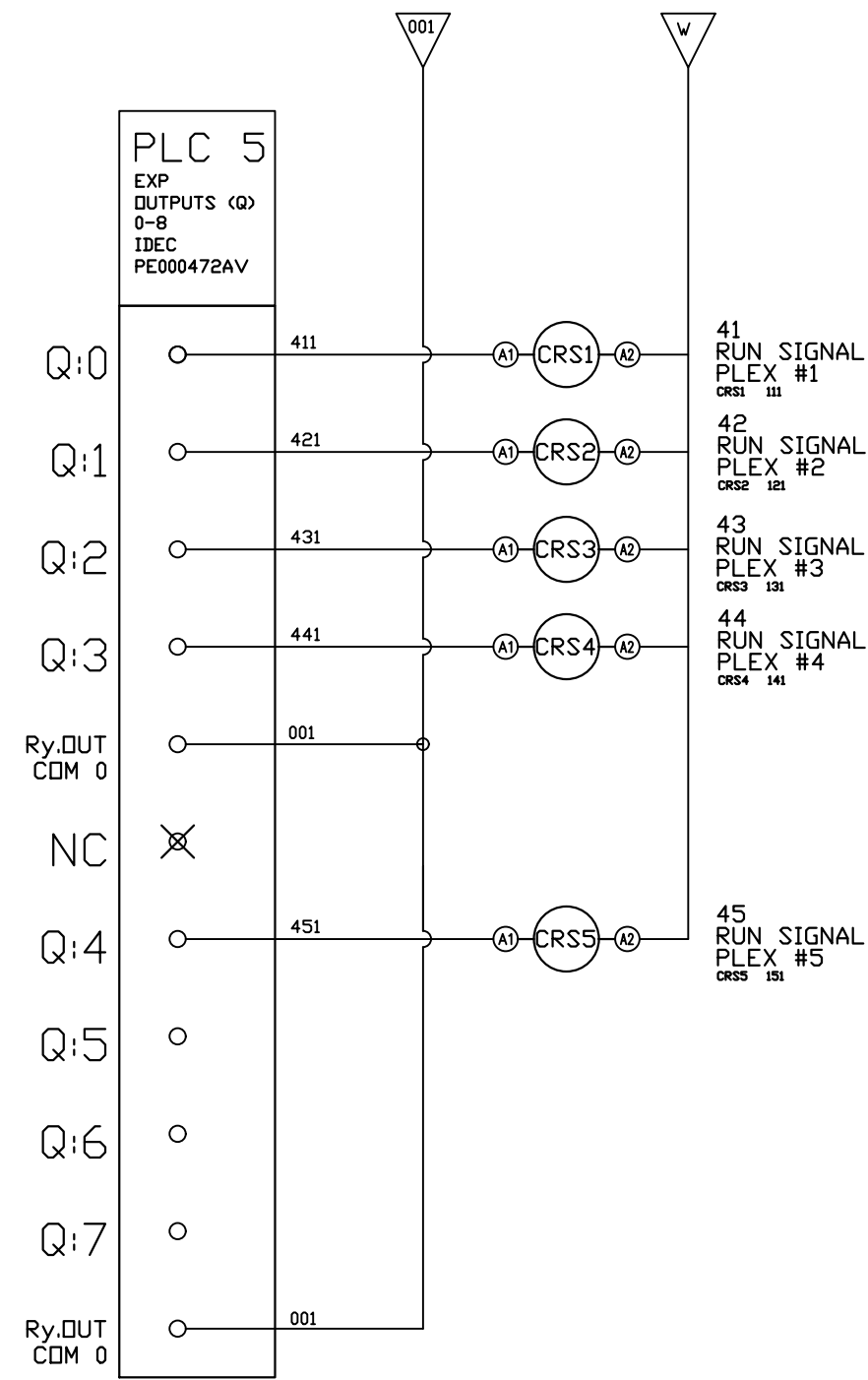
SHEET

W-10

IZE

B

REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	05/14/25	PXEC0667	BTS	SEK



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DRAWN BY	CHECKED BY	ENGINEERING APPROVAL
BTS	SEK	JRD
05/14/25	05/14/25	05/14/25

PANEL TYPE

PENTAPLEX MEDICAL COMP

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

DWG. TYPE WIRING

DWG. NO.

PXMI-SS516X

SHEET	SIZE
W-11	B

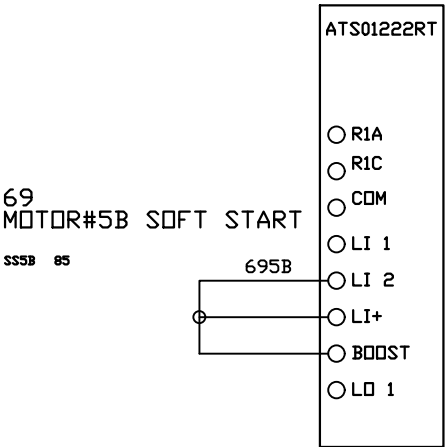
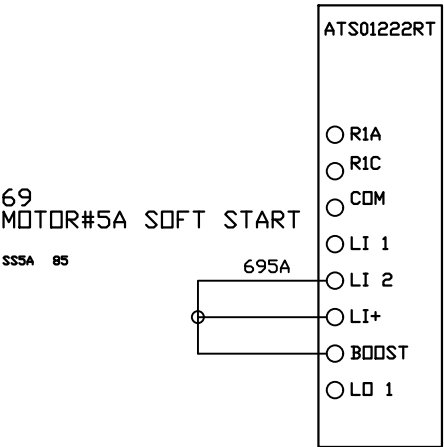
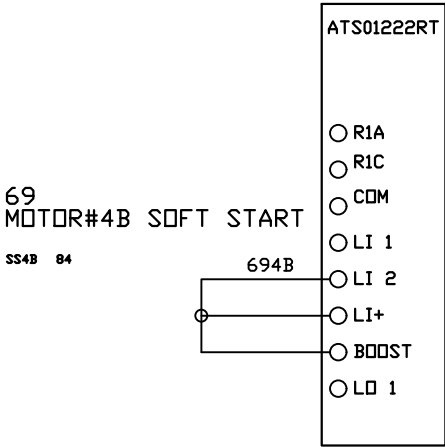
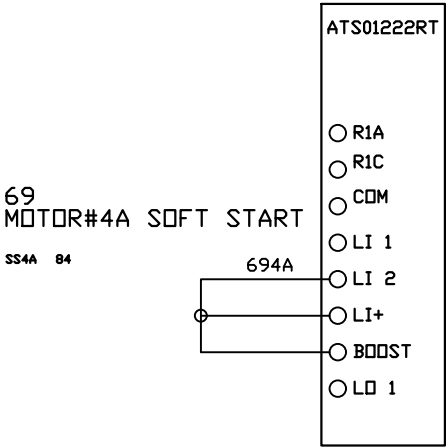
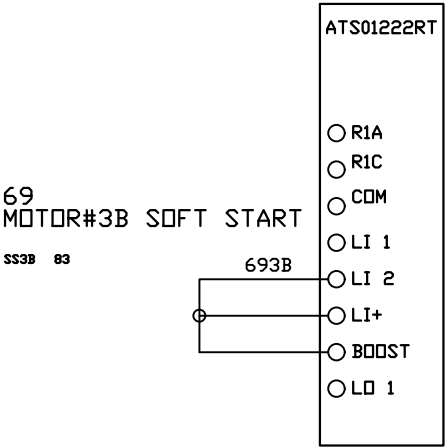
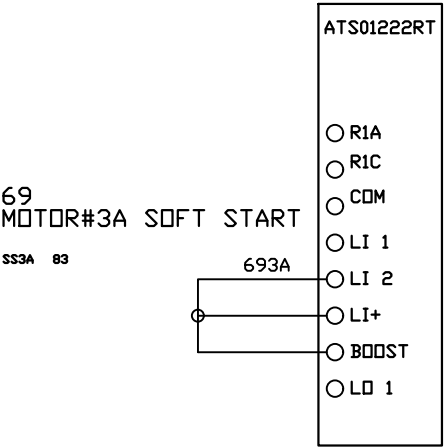
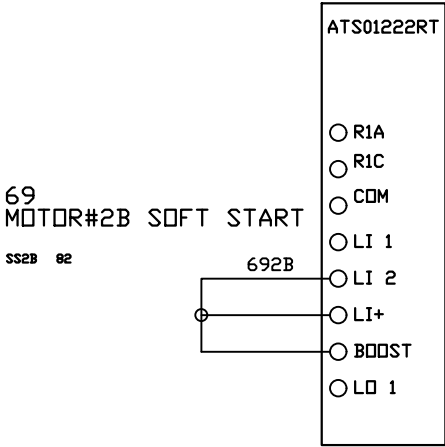
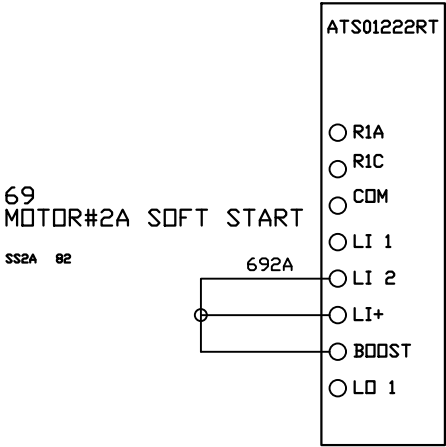
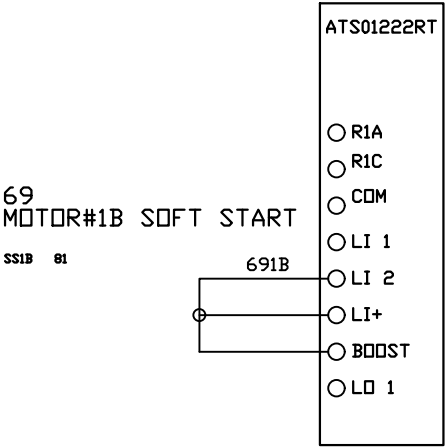
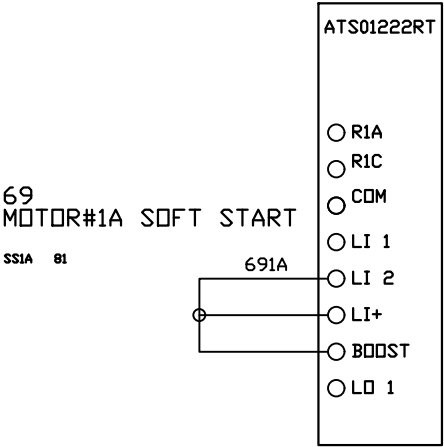
PXMI-SS516X

SET START TIME TO 3-SEC (B)

SET INITIAL VOLT SETTING TO 67% (D)

SET STOP TIME TO 60 SEC (C)

REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	05/14/25	PXEC0667	BTS	SEK



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DRAWN BY	CHECKED BY	ENGINEERING APPROVAL
BTS	SEK	JRD
05/14/25	05/14/25	05/014/25

PANEL TYPE

PENTAPLEX MEDICAL COMP

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

DWG. TYPE WIRING

DWG. NO.

PXMI-SS516X

SHEET

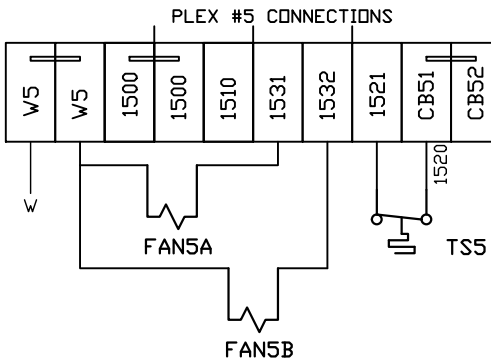
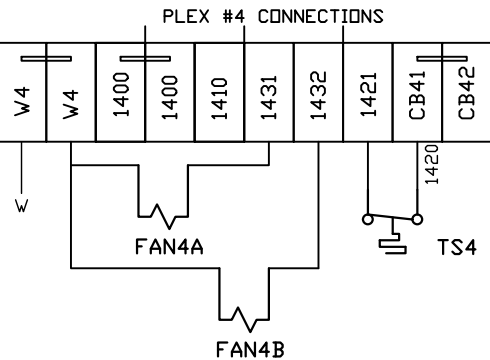
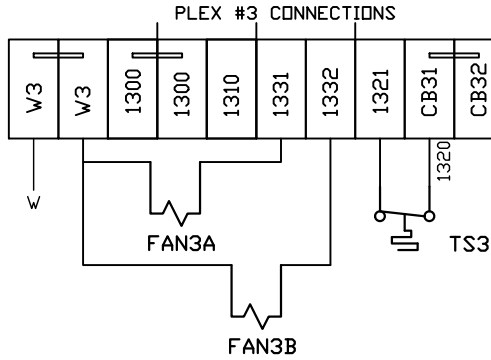
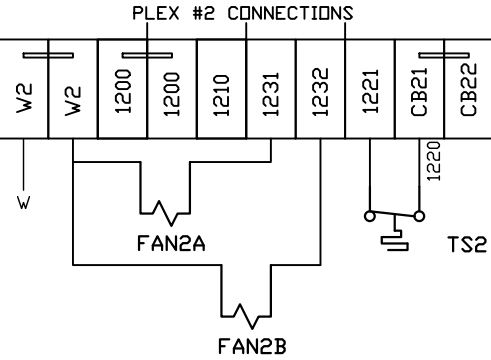
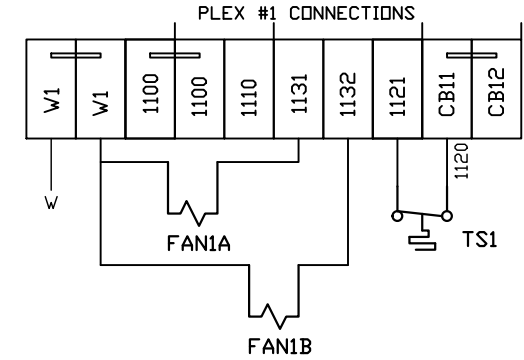
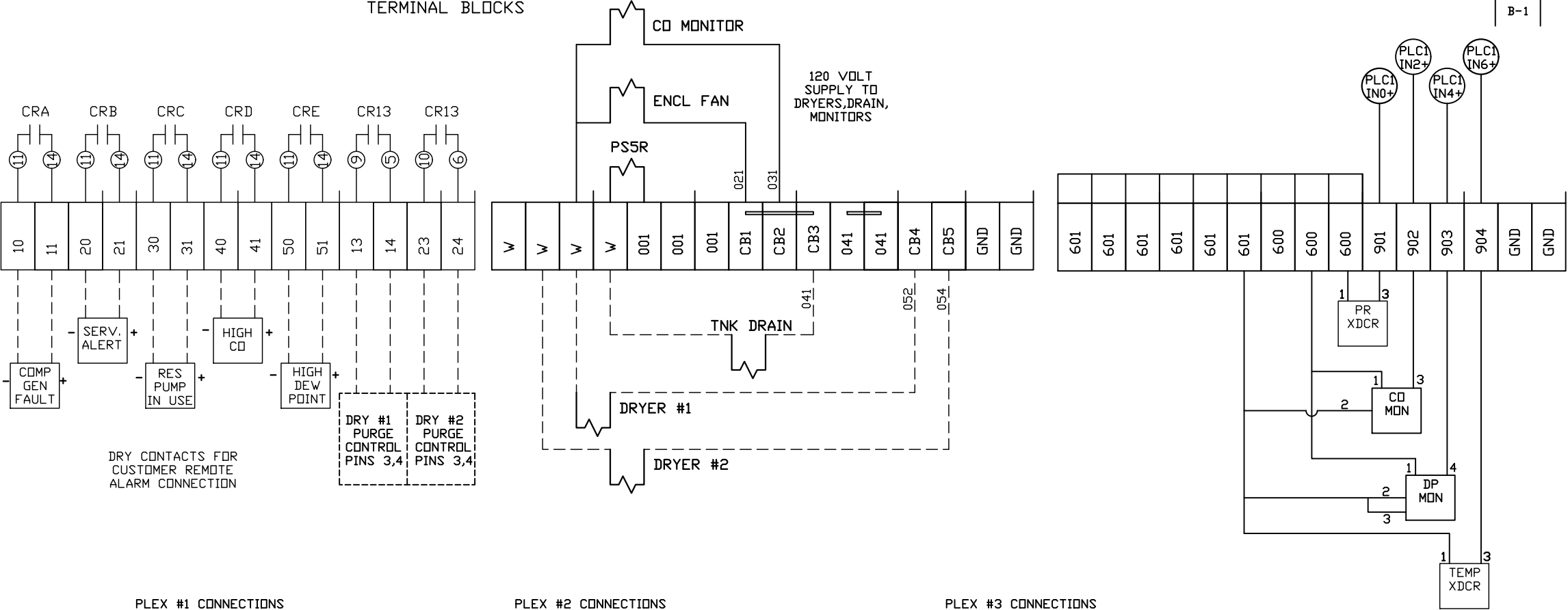
W-12

SIZE

B

PXMI-SS516X

REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	05/14/25	PXEC0667	BTS	SEK



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:

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DRAWN BY	CHECKED BY	ENGINEERING APPROVAL
BTS	SEK	JRD
05/14/25	05/14/25	05/014/25

PANEL TYPE

PENTAPLEX MEDICAL COMP

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

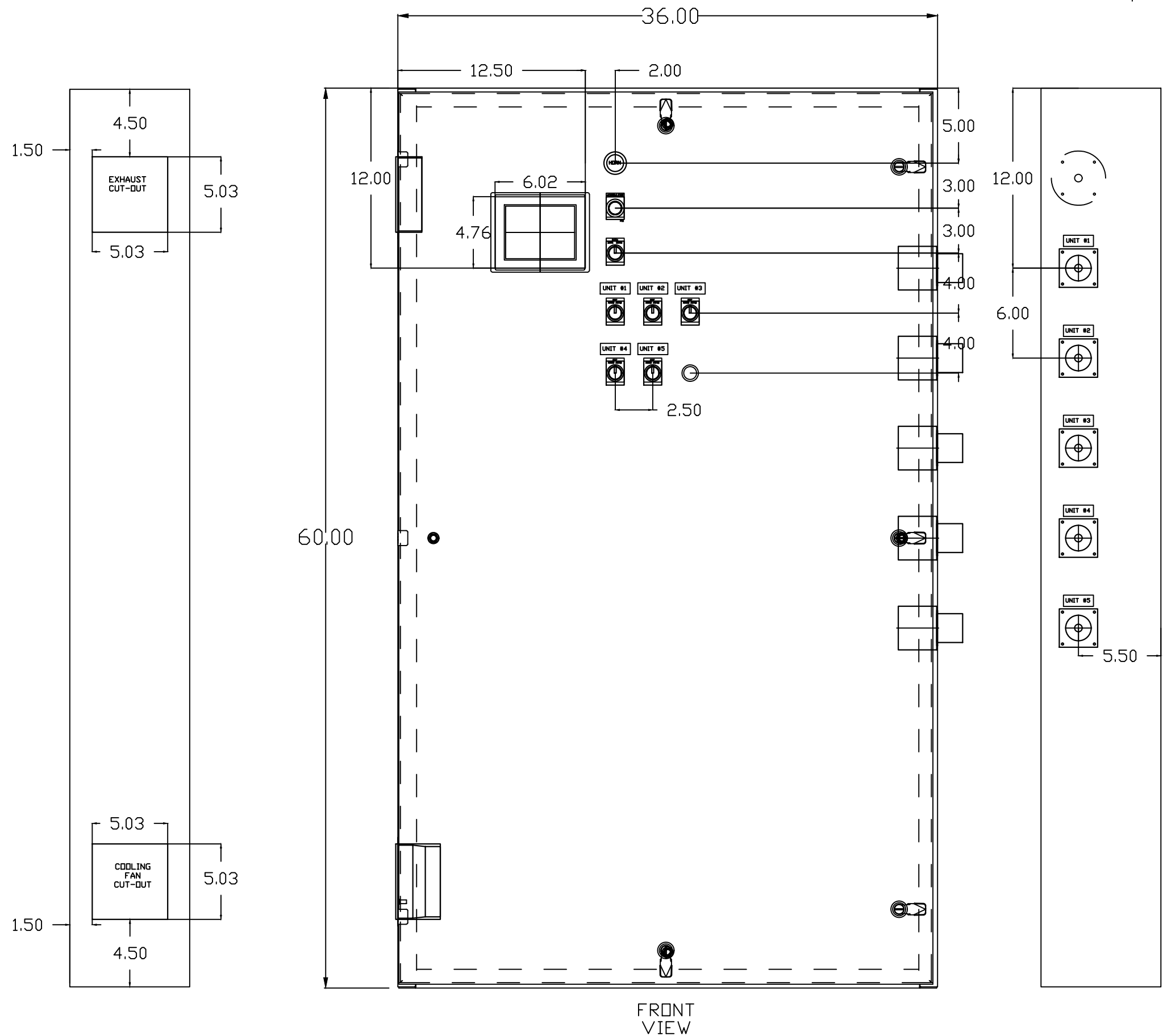
DWG. TYPE WIRING

DWG. NO.

PXMI-SS516X

SHEET	SIZE
W-13	B

REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	05/14/25	PXEC0667	BTS	SEK



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DRAWN BY	CHECKED BY	ENGINEERING APPROVAL
BTS	SEK	JRD
05/14/25	05/14/25	05/14/25

PANEL TYPE

PENTAPLEX MEDICAL COMP

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

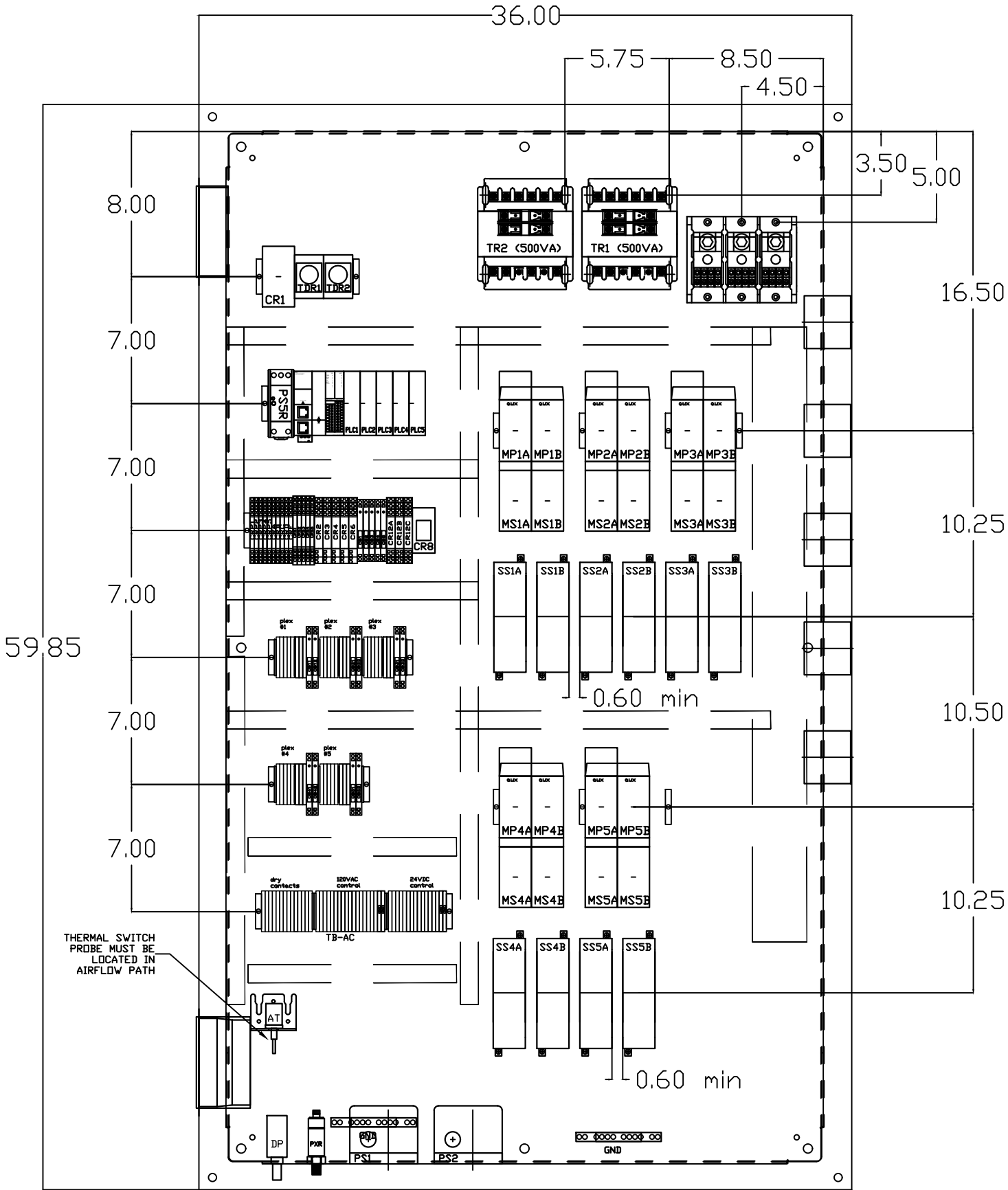
DWG. TYPE LAYOUT

DWG. NO. PXMI-SS516X

SHEET	SIZE
LA-1	B

PXMI-SS516X

REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	05/14/25	PXEC0667	BTS	SEK



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DRAWN BY	CHECKED BY	ENGINEERING APPROVAL
BTS	SEK	JRD
05/14/25	05/14/25	05/14/25

PANEL TYPE

PENTAPLEX MEDICAL COMP

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

DWG. TYPE
LAYOUT

DWG. NO.
PXMI-SS516X

SHEET LA-2	SIZE B
-------------------	---------------

PXMI-SS516X

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	
PBMISS516E2AJ	7.5(X2)	208V/3Ø	21.1	212.2	300A	250A	250A	
PBMISS516E3AJ	7.5(X2)	230V/3Ø	17.9	181.2	225A	200A	225A	
PBMISS516E4AJ	7.5(X2)	460V/3Ø	8.97	91.7	110A	100A	110A	
PBMISS516G2AJ	10(X2)	208V/3Ø	26.5	267	350A	300A	350A	
PBMISS516G3AJ	10(X2)	230V/3Ø	24.0	242	300A	300A	300A	
PBMISS516G4AJ	10(X2)	460V/3Ø	12.0	122	150A	150A	150A	
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 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								
REPLACEMENT	208	230	460	575	WIRE TYPE TABLE			
FUSE TYPE	VOLT	VOLT	380 VOLT	VOLT	VOLTAGE	WIRE NUMBERS	GAUGE	COLOR
FU1,2A FU1,2B	FNQR	6A	5A	5A	4A	120VAC 0VAC 24VDC 0VDC GND CUSTOMER SUPPLY	001-599,1100+ W 600-1099 601 - 01-99	16-18AWG 16-18AWG 16-18AWG 16-18AWG VARIES 16-18AWG
FU3A,B	FNM	7A	7A	7A	7A			RED/BLK WHT/BLK PURPLE PURPLE GREEN YELLOW
SEE XFRMR FOR CONNECTIONS								

REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	05/14/25	PXEC0667	BTS	SEK

OPTIONAL:



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DRAWN BY	CHECKED BY	ENGINEERING APPROVAL
BTS	SEK	JRD
05/14/25	05/14/25	05/014/25

PANEL TYPE

PENTAPLEX MEDICAL COMP

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

DWG. TYPE DATA

DWG. NO.

PXMI-SS516X

SHEET	SIZE
D-1	B

PXMI-SS516X