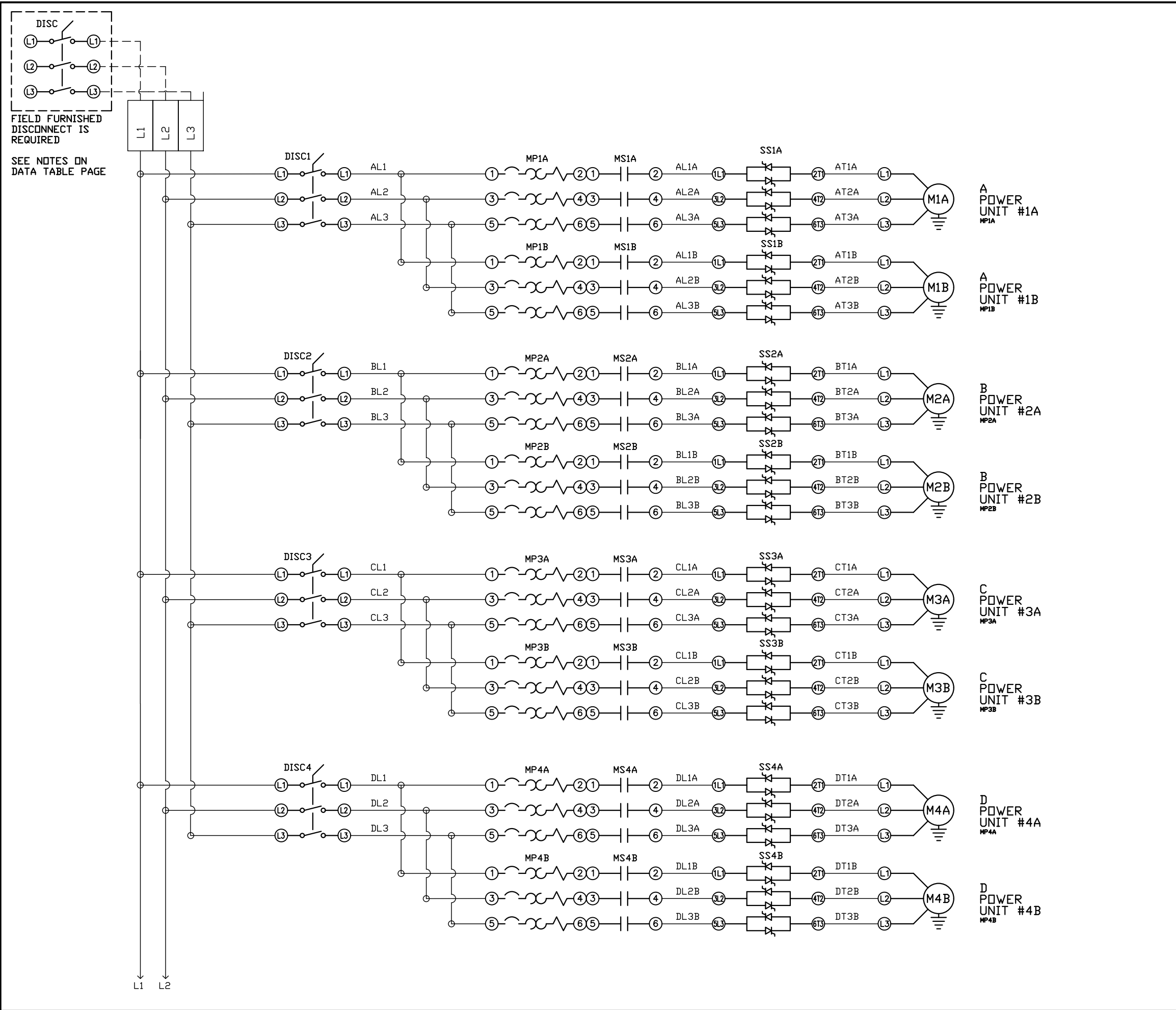




REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	05/12/25	PXEC0667	BTS	SEK

OPTIONAL:

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DRAWN BY	CHECKED BY	ENGINEERING APPROVAL
BTS	SEK	JRD
05/12/25	05/12/25	05/12/25

PANEL TYPE

QUADPLEX MEDICAL COMP

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

DWG. TYPE

WIRING

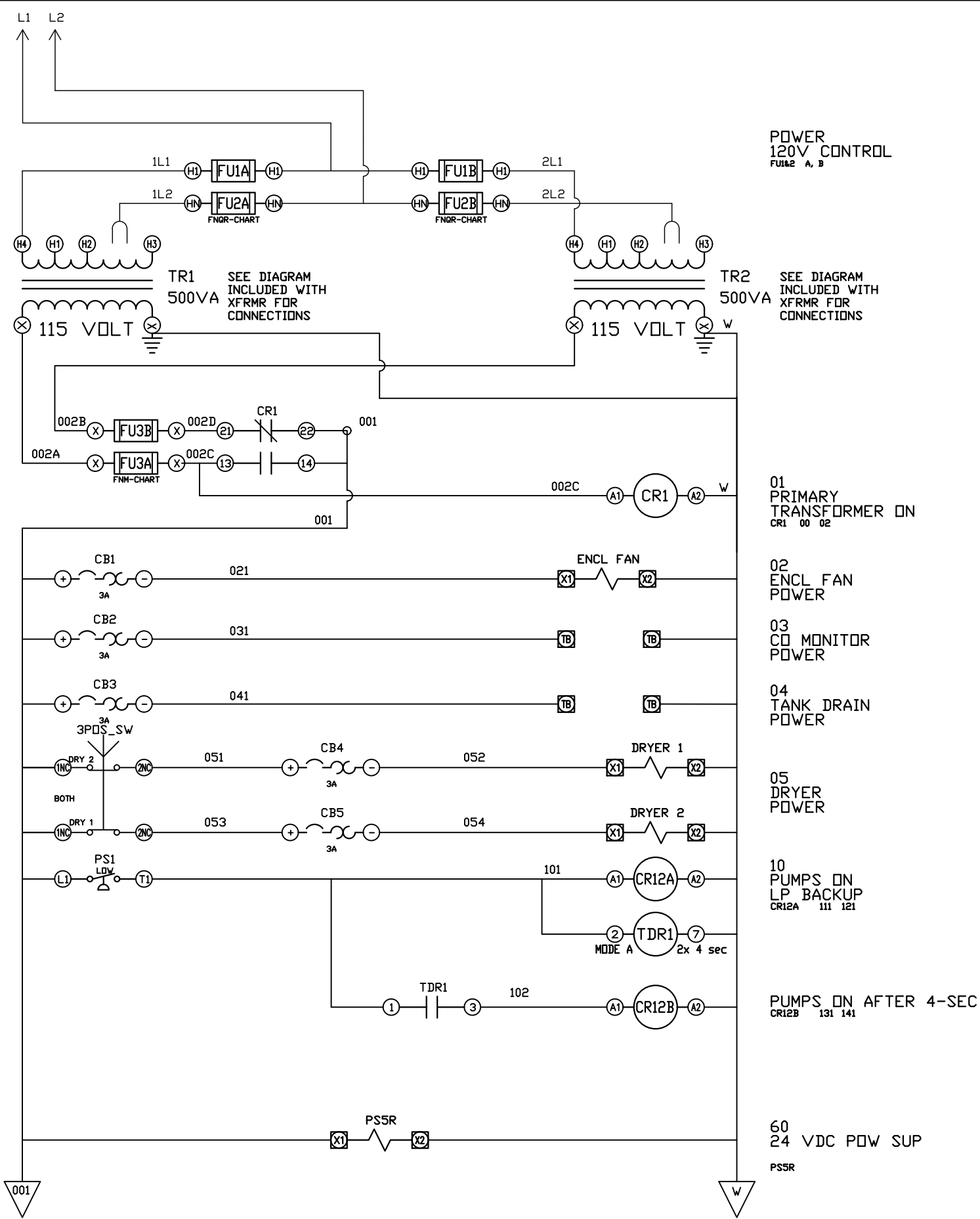
DWG. NO.

PXMI-SS416X

SHEET	SIZE
W-1	B

PXMI-SS416X

REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	05/12/25	PXEC0667	BTS	SEK



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DRAWN BY	CHECKED BY	ENGINEERING APPROVAL
BTS	SEK	JRD
05/12/25	05/12/25	05/12/25

PANEL TYPE

QUADPLEX MEDICAL COMP

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

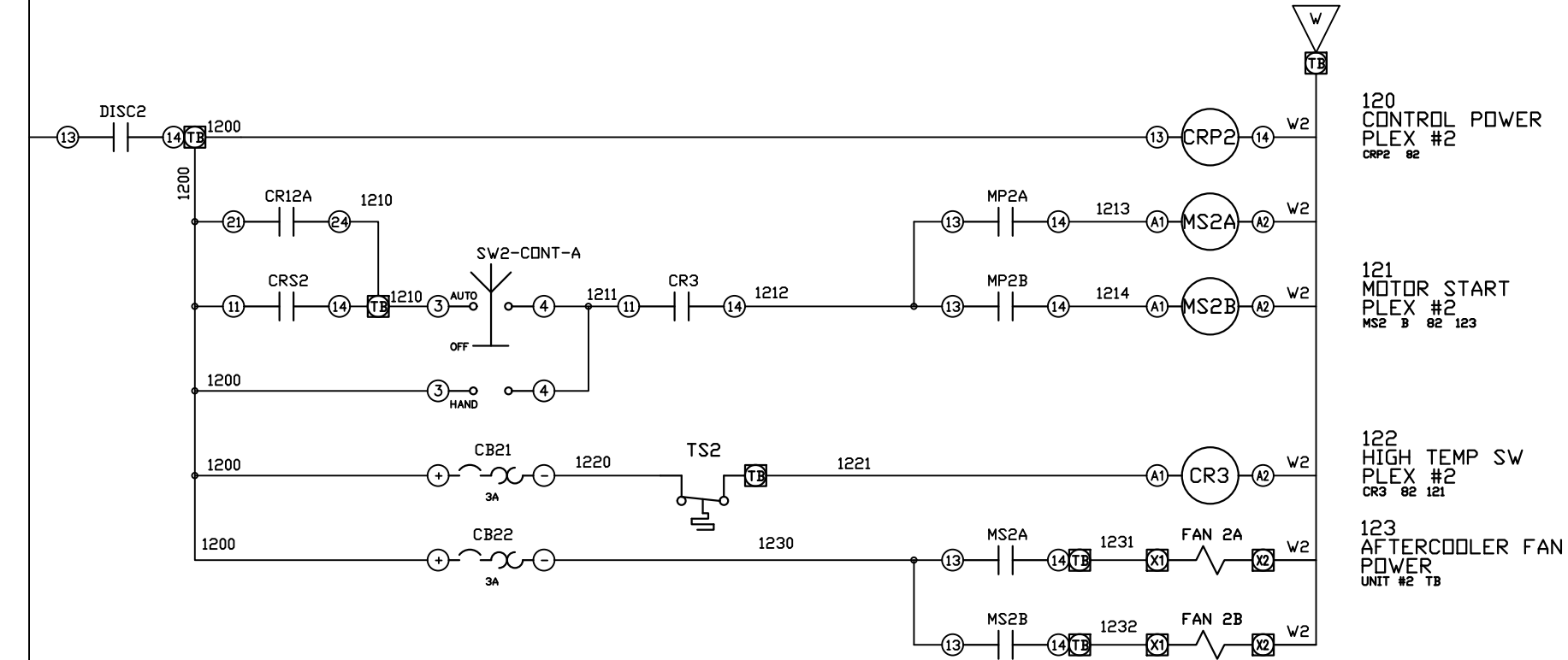
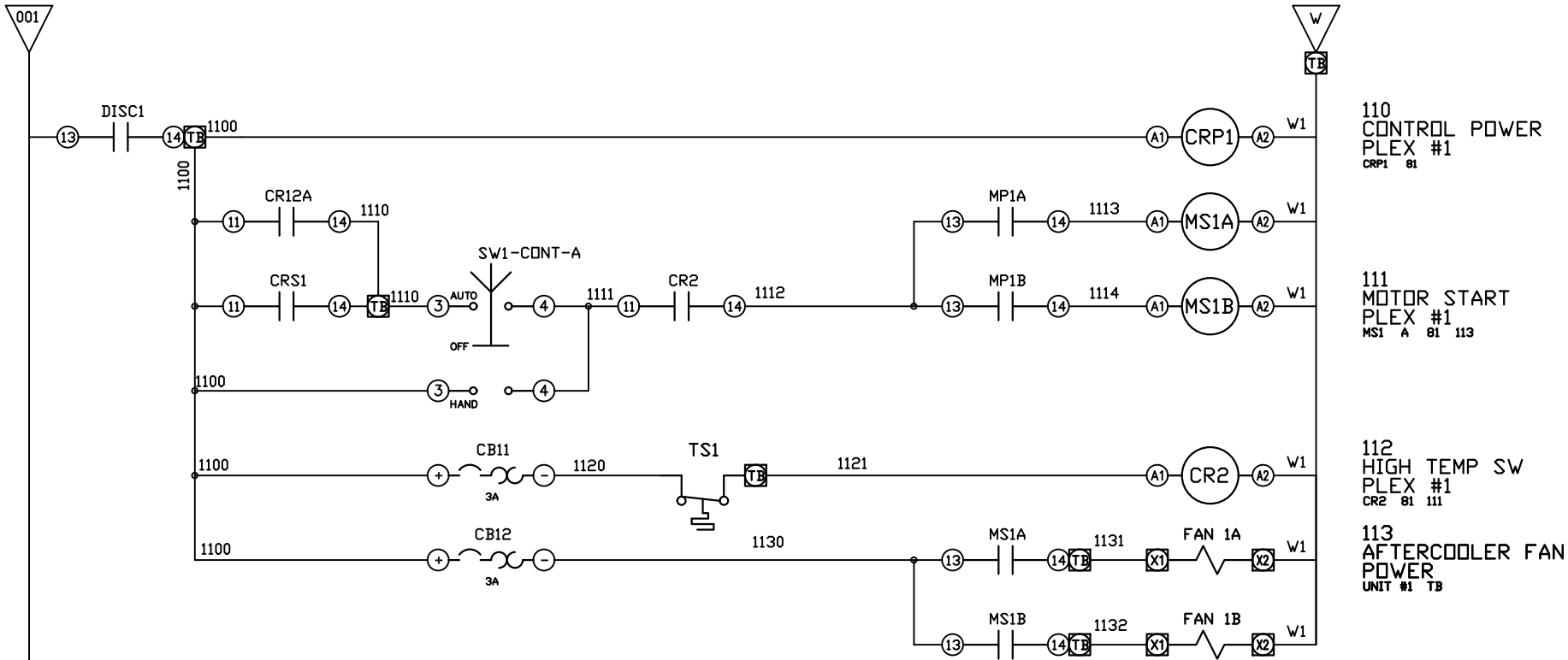
DWG. TYPE WIRING

DWG. NO. PXMI-SS416X

SHEET	SIZE
W-2	B

PXMI-SS416X

REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	05/12/25	PXEC0667	BTS	SEK



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DRAWN BY	CHECKED BY	ENGINEERING APPROVAL
BTS	SEK	JRD
05/12/25	05/12/25	05/12/25

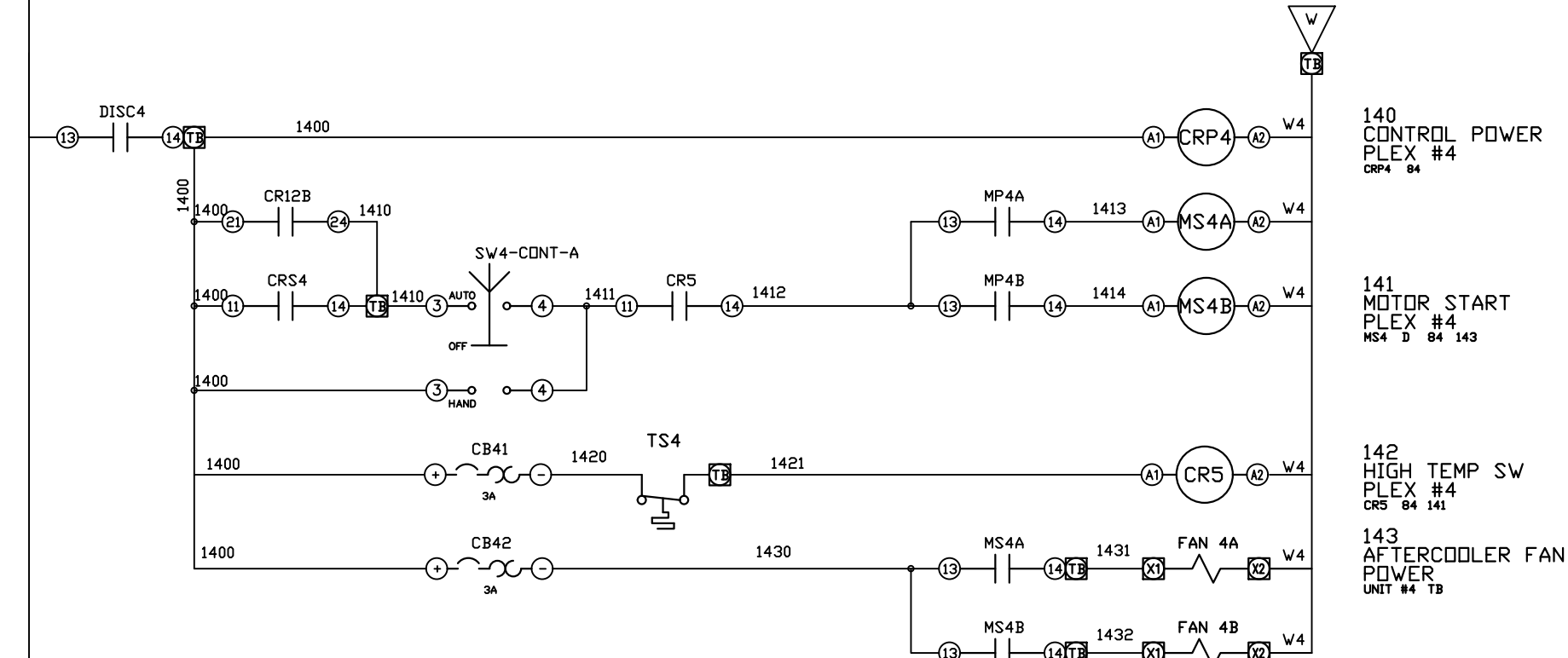
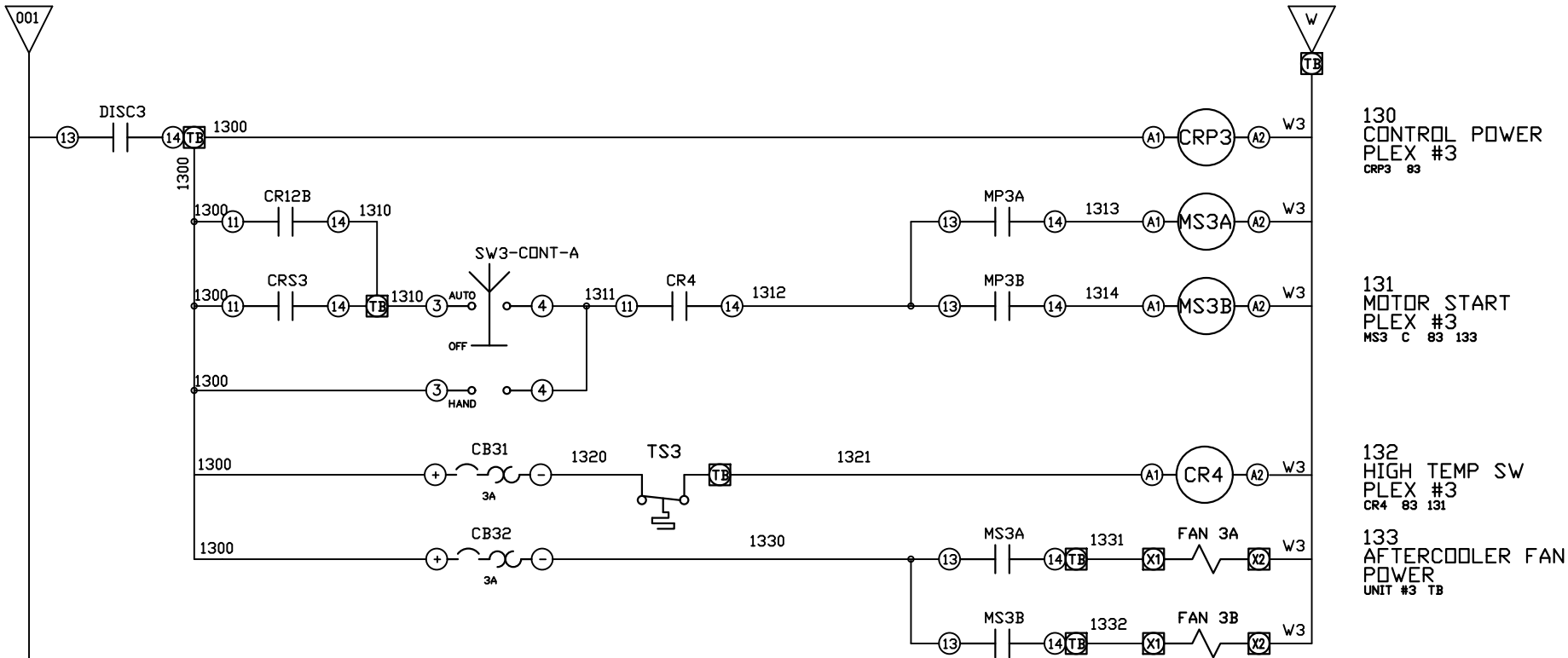
PANEL TYPE
QUADPLEX MEDICAL COMP
HMI, BACNET, WEBSVR, NFPA, SOFT START. PLEX ISO

DWG. TYPE
WIRING

DWG. NO.
PXMI-SS416X

SHEET	SIZE
W-3	B

REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	05/12/25	PXEC0667	BTS	SEK



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DRAWN BY	CHECKED BY	ENGINEERING APPROVAL
BTS	SEK	JRD
05/12/25	05/12/25	05/12/25

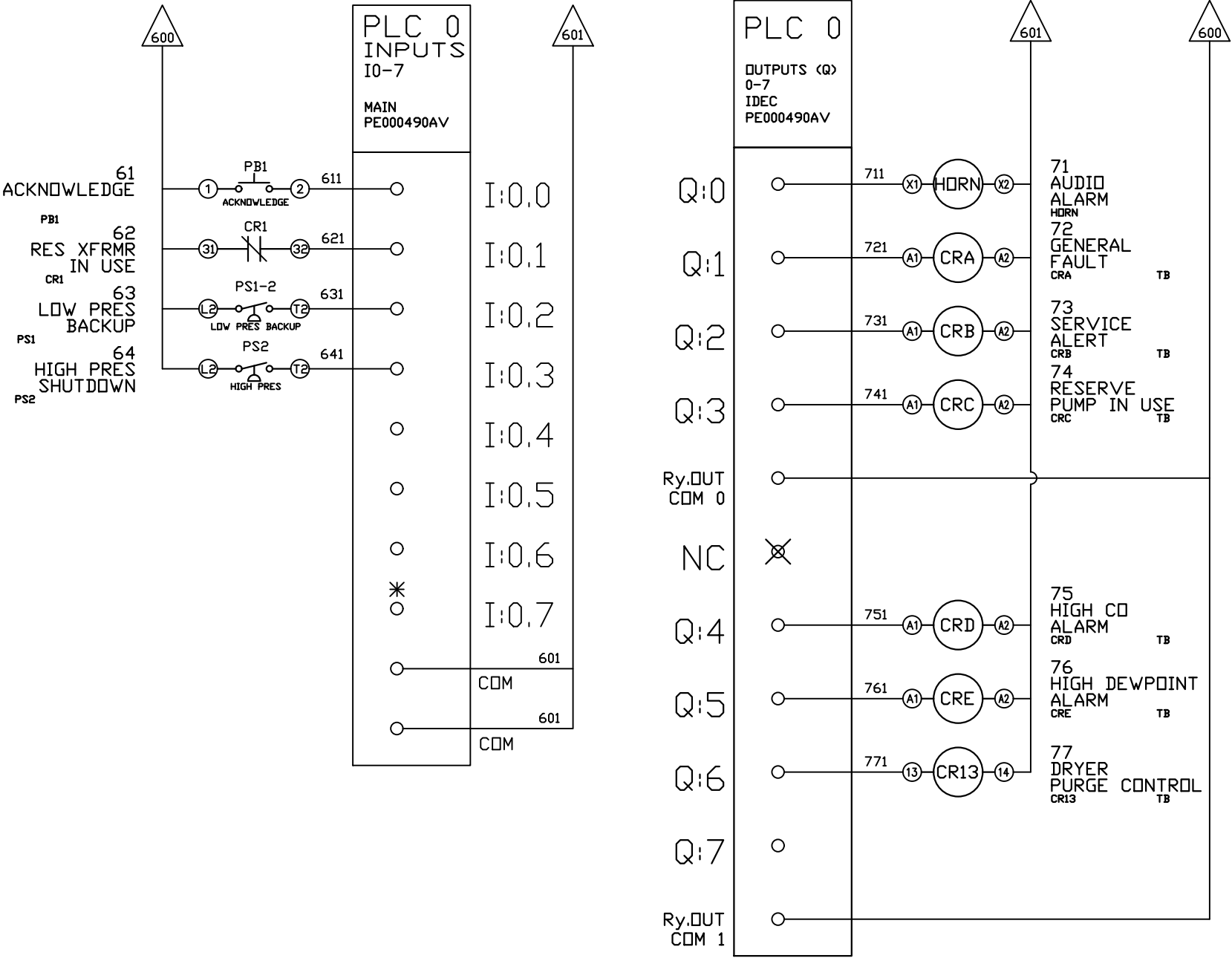
PANEL TYPE
QUADPLEX MEDICAL COMP
HMI, BACNET, WEBSVR, NFPA, SOFT START. PLEX ISO

DWG. TYPE WIRING

DWG. NO. PXMI-SS416X

SHEET	SIZE
W-4	B

REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	05/12/25	PXEC0667	BTS	SEK



*FACTORY TEST JUMPER LOCATION

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DRAWN BY	CHECKED BY	ENGINEERING APPROVAL
BTS	SEK	JRD
05/12/25	05/12/25	05/12/25

PANEL TYPE

QUADPLEX MEDICAL COMP

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

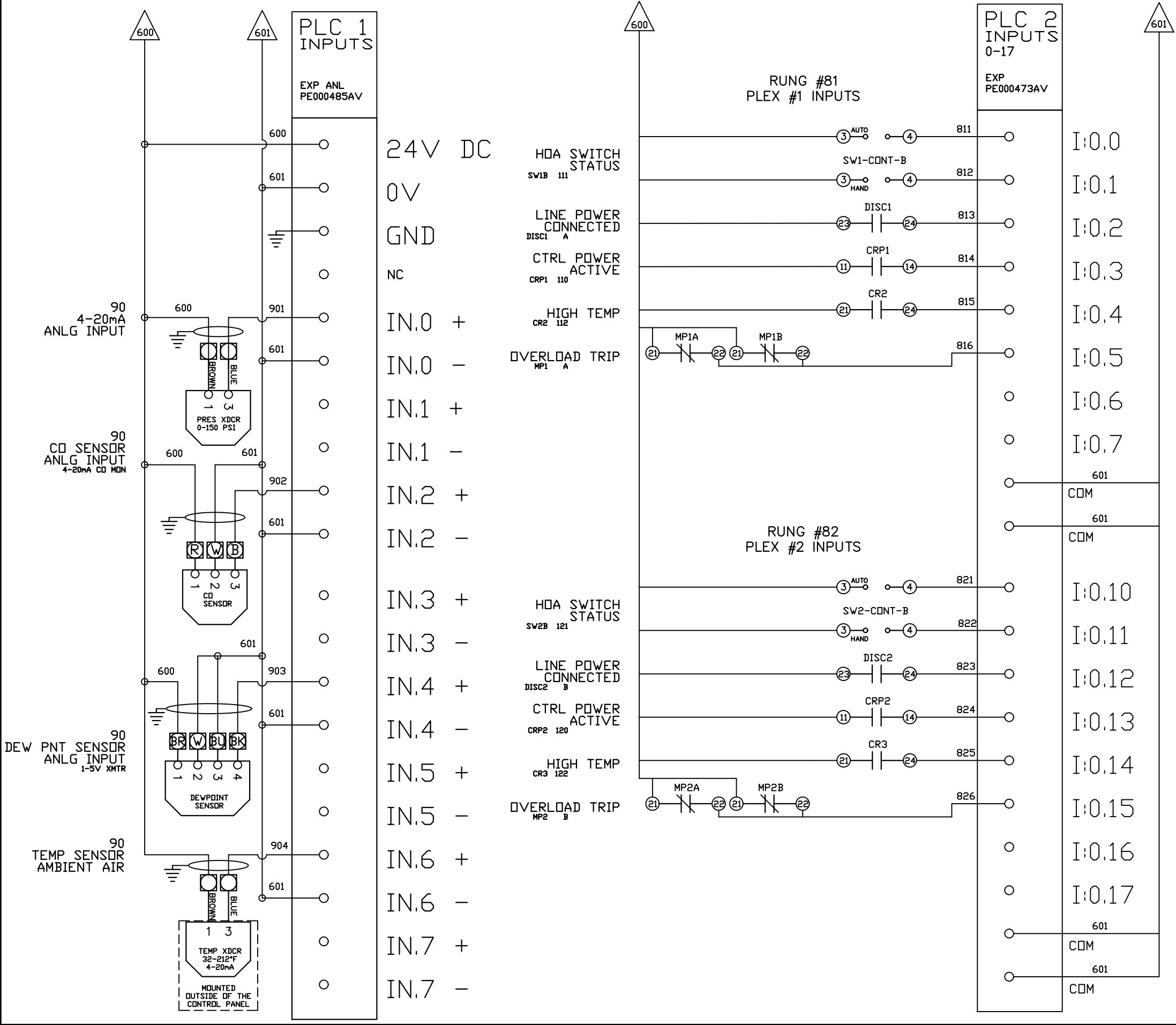
DWG. TYPE WIRING

DWG. NO. PXMI-SS416X

SHEET	SIZE
W-6	B

PXMI-SS416X

REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	05/12/25	PXEC0667	BTS	SEK



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DRAWN BY	CHECKED BY	ENGINEERING APPROVAL
BTS	SEK	JRD
05/12/25	05/12/25	05/12/25

PANEL TYPE

QUADPLEX MEDICAL COMP

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

DWG. TYPE WIRING

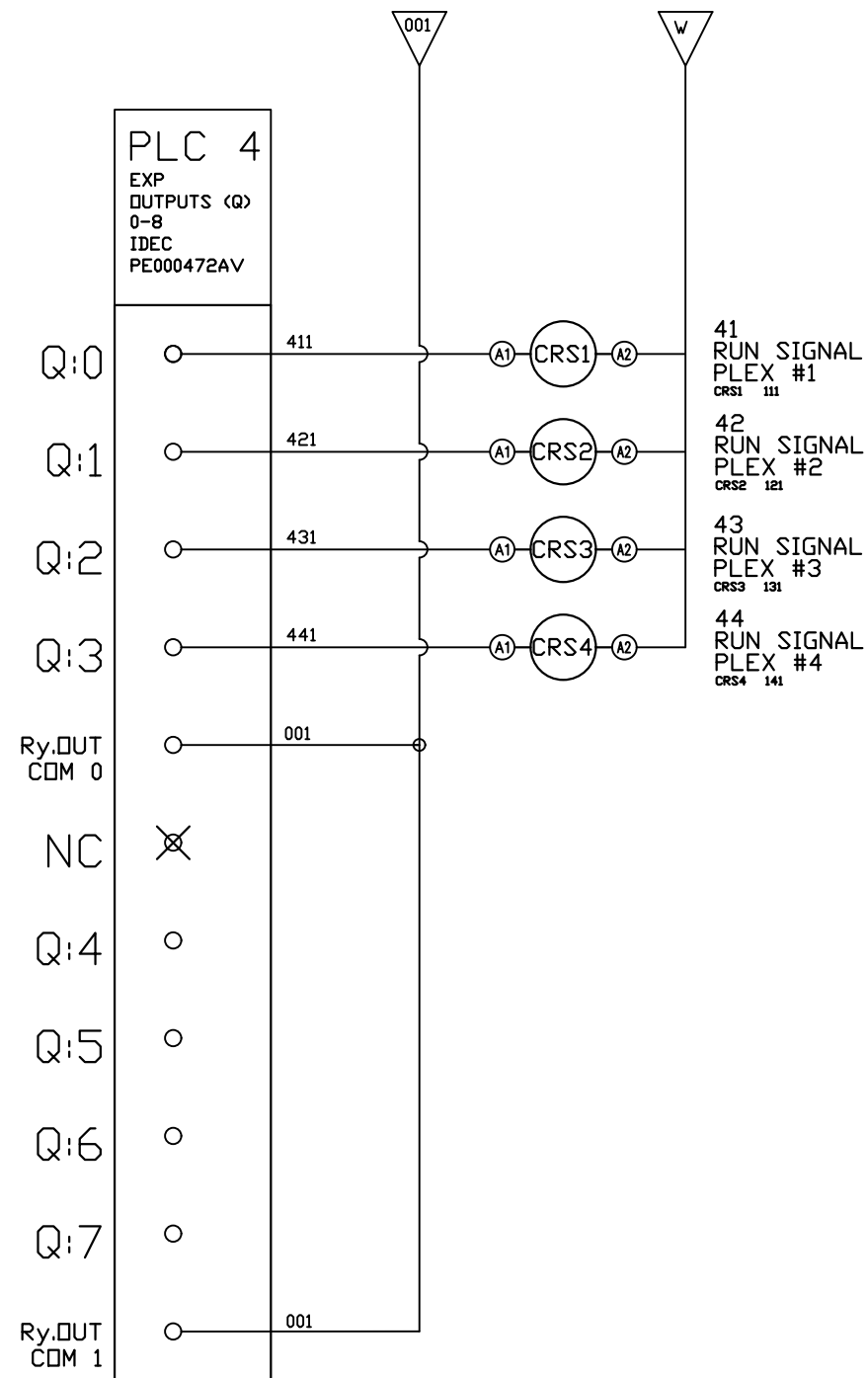
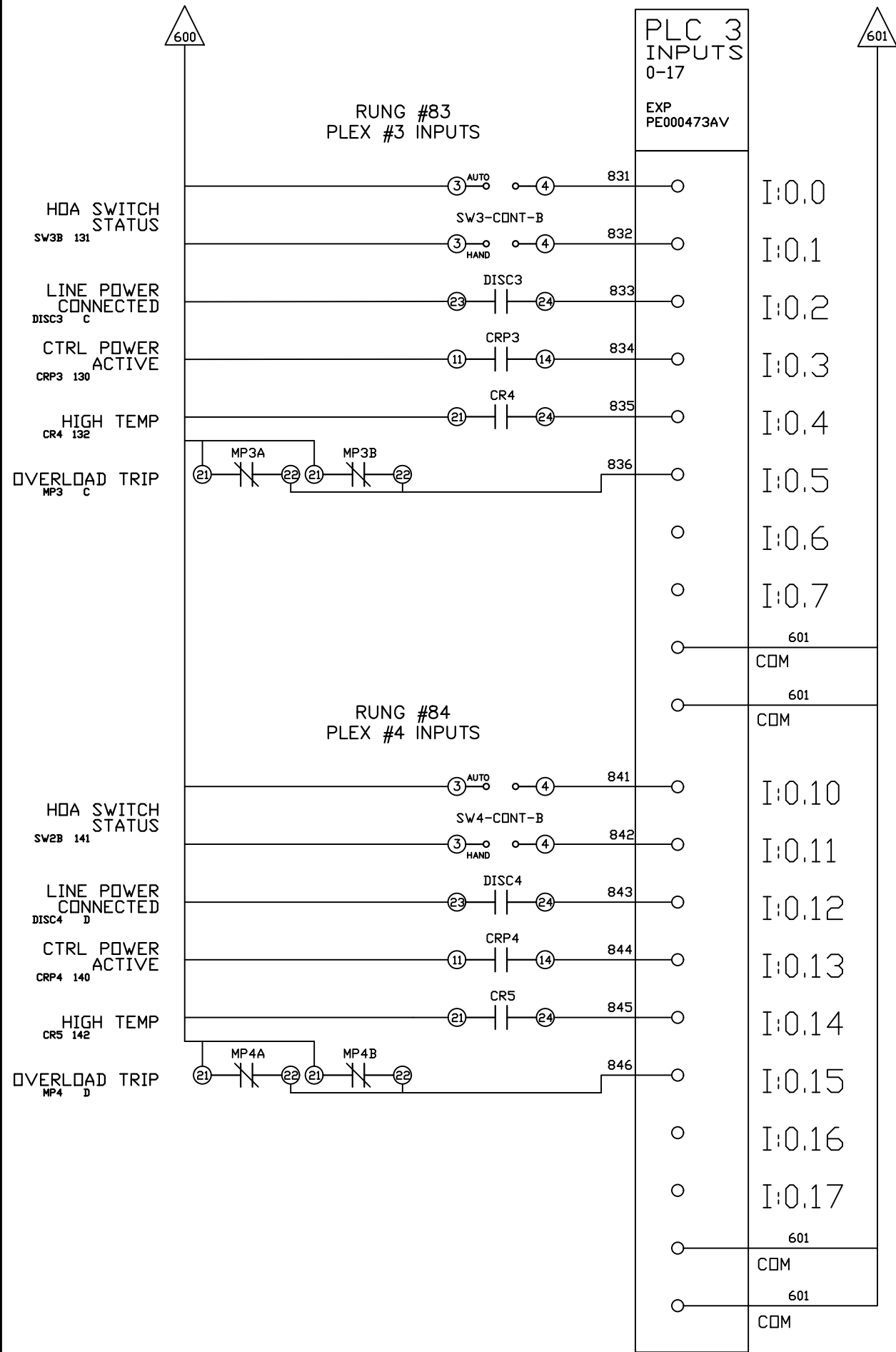
DWG. NO. PXMI-SS416X

SHEET W-7

SIZE B

PXMI-SS416X

REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	05/12/25	PXEC0667	BTS	SEK



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DRAWN BY	CHECKED BY	ENGINEERING APPROVAL
BTS	SEK	JRD
05/12/25	05/12/25	05/12/25

PANEL TYPE

QUADPLEX MEDICAL COMP

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

DWG. TYPE WIRING

DWG. NO.

PXMI-SS416X

SHEET

W-8

SIZE

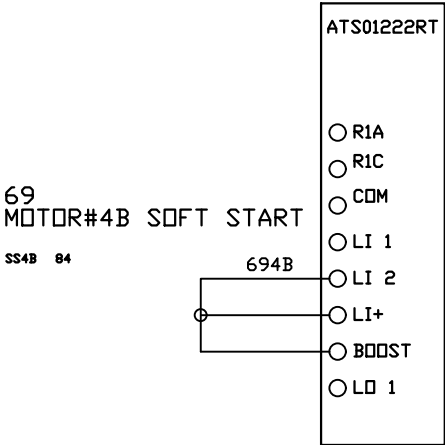
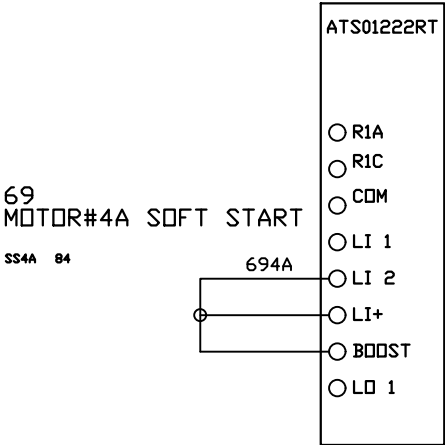
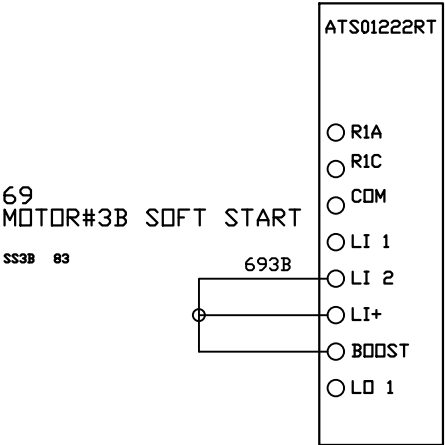
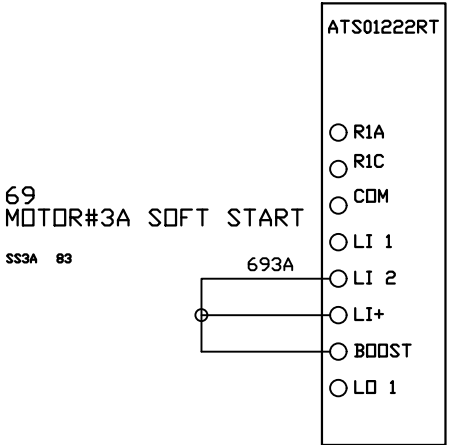
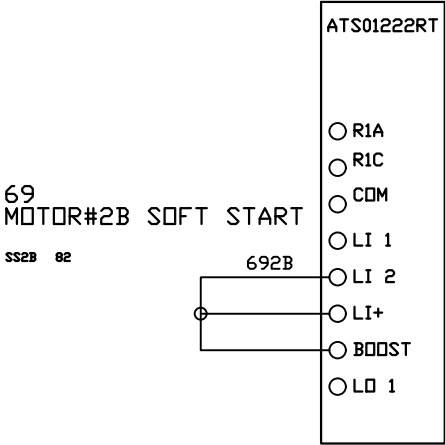
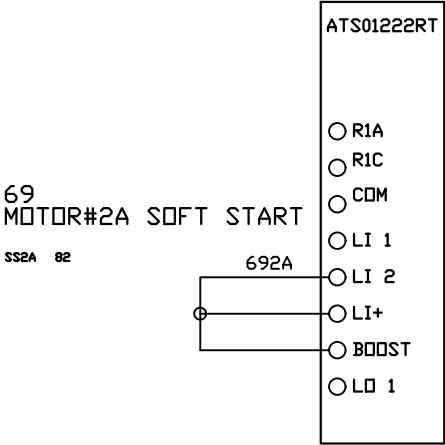
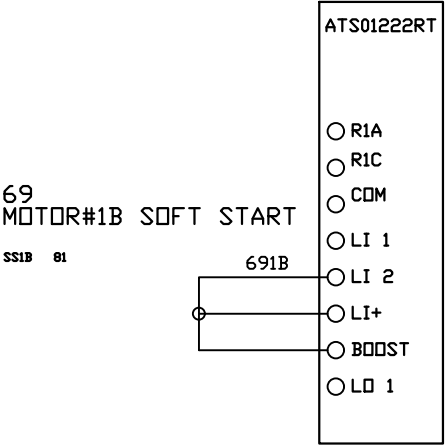
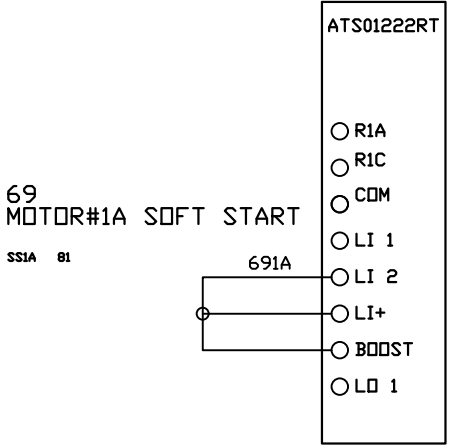
B

SET START TIME TO 3-SEC (B)

SET INITIAL VOLT SETTING TO 67% (D)

SET STOP TIME TO 6 SEC (C)

REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	05/12/25	PXEC0667	BTS	SEK



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DRAWN BY	CHECKED BY	ENGINEERING APPROVAL
BTS	SEK	JRD
05/12/25	05/12/25	05/12/25

PANEL TYPE

QUADPLEX MEDICAL COMP

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

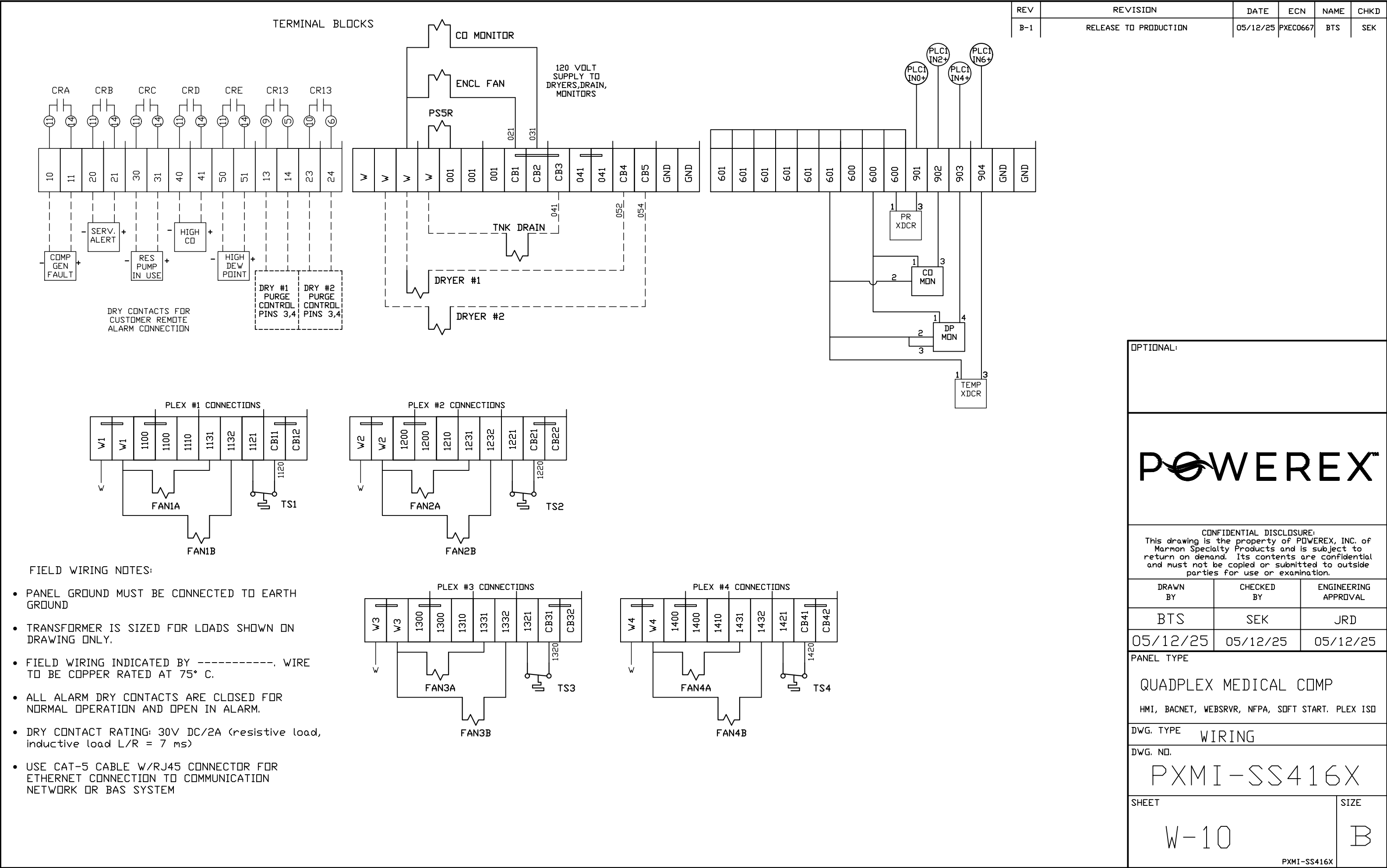
DWG. TYPE WIRING

DWG. NO.

PXMI-SS416X

SHEET	SIZE
W-9	B

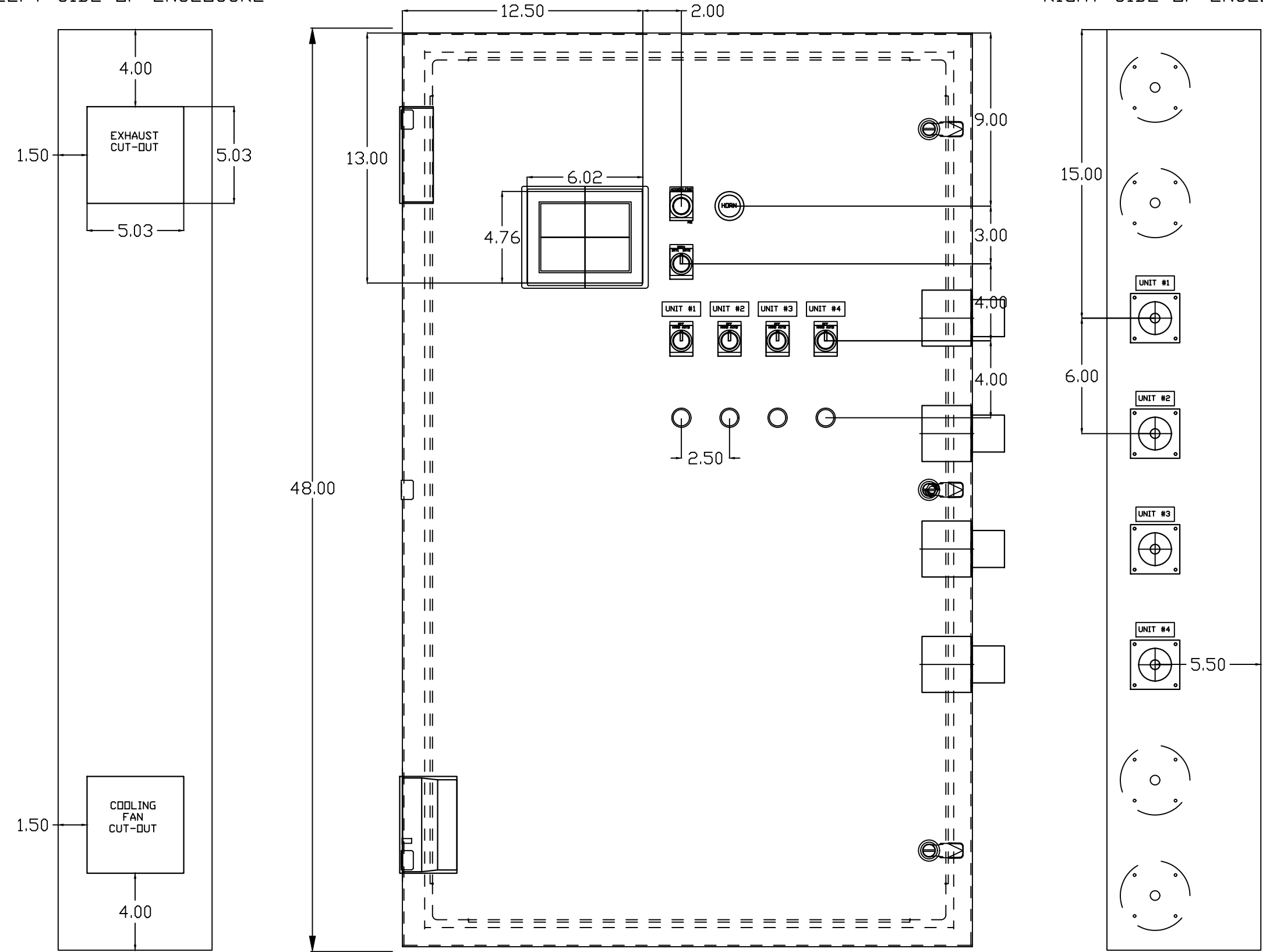
PXMI-SS416X



REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	05/12/25	PXEC0667	BTS	SEK

LEFT SIDE OF ENCLOSURE

RIGHT SIDE OF ENCLOSURE



OPTIONAL:

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DRAWN BY	CHECKED BY	ENGINEERING APPROVAL
BTS	SEK	JRD
05/12/25	05/12/25	05/12/25

PANEL TYPE
QUADPLEX MEDICAL COMP
HMI, BACNET, WEBSVR, NFPA, SOFT START. PLEX ISO

DWG. TYPE LAYOUT

DWG. NO.
PXMI-SS416X

SHEET	SIZE
LA-1	B

REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	05/12/25	PXEC0667	BTS	SEK

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
PBMISS416E2AJ	7.5(X2)	208V/3Ø	21.1	171	225A	200A	225A
PBMISS416E3AJ	7.5(X2)	230V/3Ø	17.9	145.4	200A	175A	175A
PBMISS416E4AJ	7.5(X2)	460V/3Ø	8.97	73.8	100A	90A	90A
PBMISS416G2AJ	10(X2)	208V/3Ø	26.5	214	300A	250A	300A
PBMISS416G3AJ	10(X2)	230V/3Ø	24.0	194	250A	225A	250A
PBMISS416G4AJ	10(X2)	460V/3Ø	12.4	101.2	150A	125A	125A
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 RED/BLK 16-18AWG WHT/BLK 16-18AWG PURPLE 16-18AWG PURPLE VARIES GREEN 16-18AWG YELLOW
FU3A,B	FNM	7A	7A	7A	7A			
SEE XFRMR FOR CONNECTIONS								

OPTIONAL:



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BTS	SEK	JRD
05/12/25	05/12/25	05/12/25

PANEL TYPE

QUADPLEX MEDICAL COMP

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

DWG. TYPE DATA

DWG. NO.

PXMI-SS416X

SHEET	SIZE
D-1	B

PXMI-SS416X