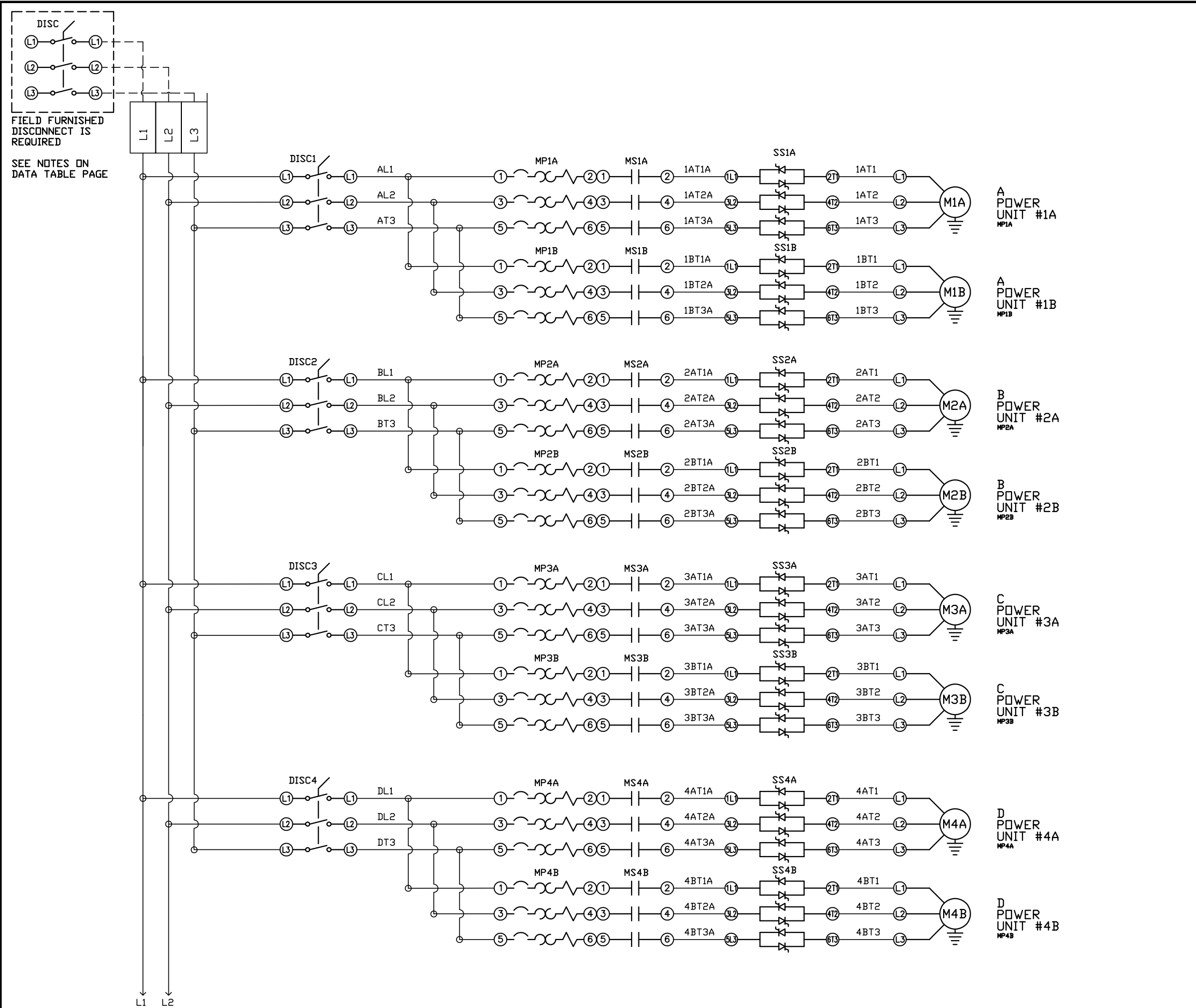




REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	05/12/25	PXEC0667	BTS	SEK

OPTIONAL:

CONFIDENTIAL DISCLOSURE:
This drawing is the property of POWEREX, INC. of Marmon Specialty Products and is 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
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

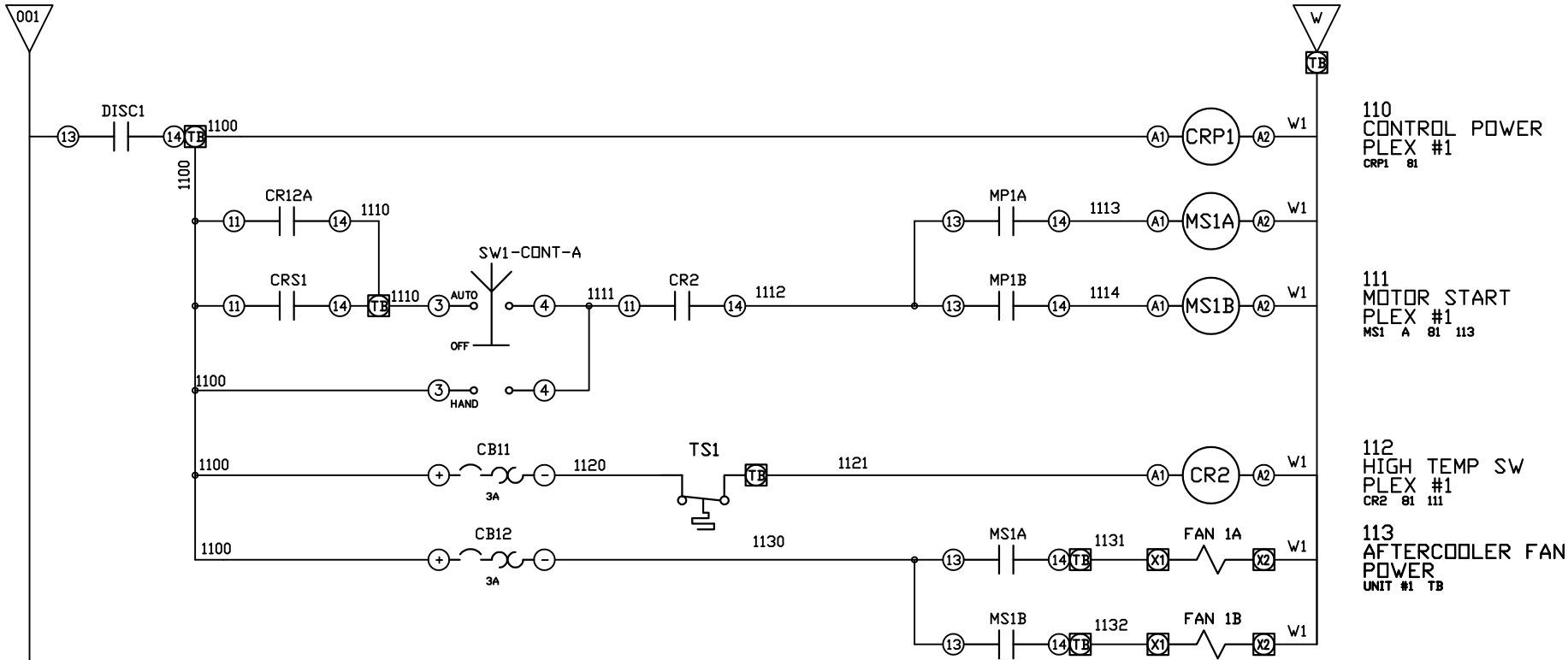
DWG. NO.

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

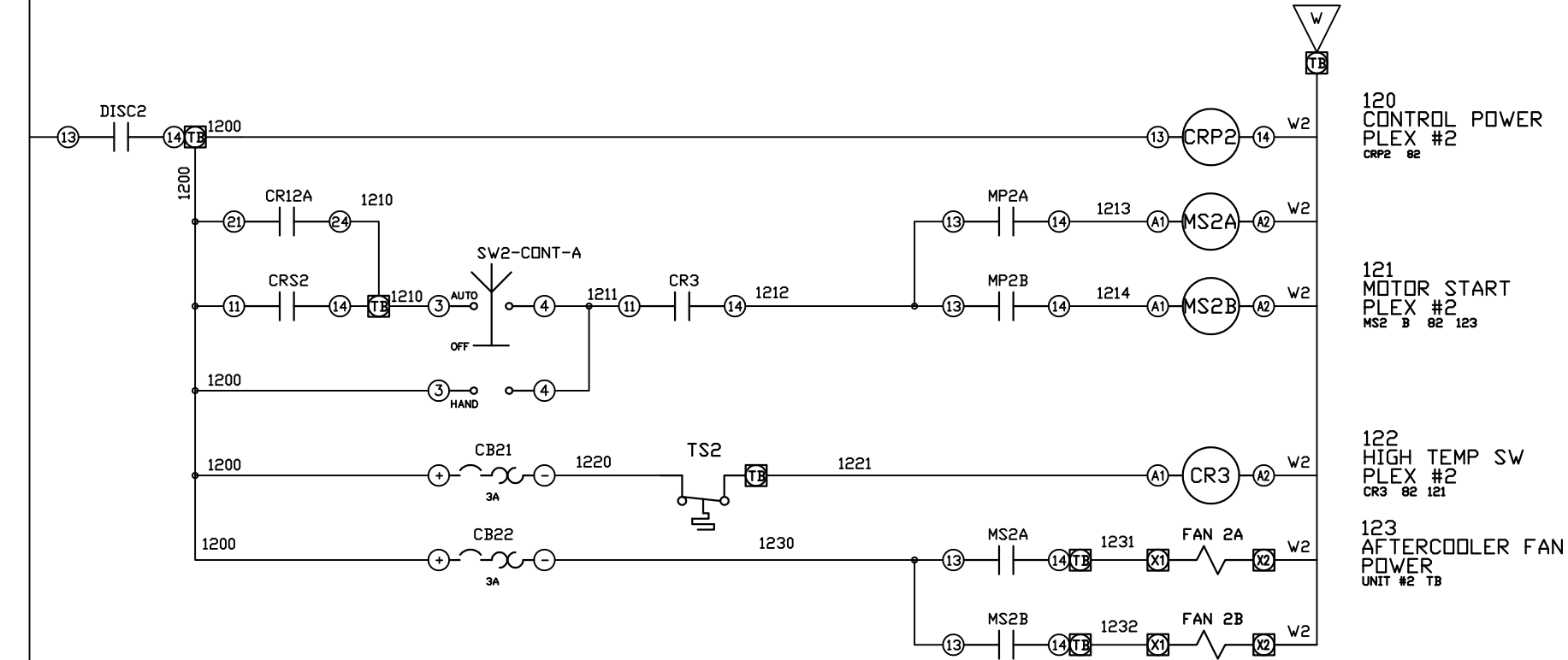


110
CONTROL POWER
PLEX #1
CRP1 81

111
MOTOR START
PLEX #1
MS1 A 81 113

112
HIGH TEMP SW
PLEX #1
CR2 81 111

113
AFTERCOOLER FAN
POWER
UNIT #1 TB



120
CONTROL POWER
PLEX #2
CRP2 82

121
MOTOR START
PLEX #2
MS2 B 82 123

122
HIGH TEMP SW
PLEX #2
CR3 82 121

123
AFTERCOOLER FAN
POWER
UNIT #2 TB

OPTIONAL:

POWEREX™

CONFIDENTIAL DISCLOSURE:
This drawing is the property of POWEREX, INC. of
Marmon Specialty Products and is 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
BTS	SEK	JRD
05/12/25	05/12/25	05/12/25

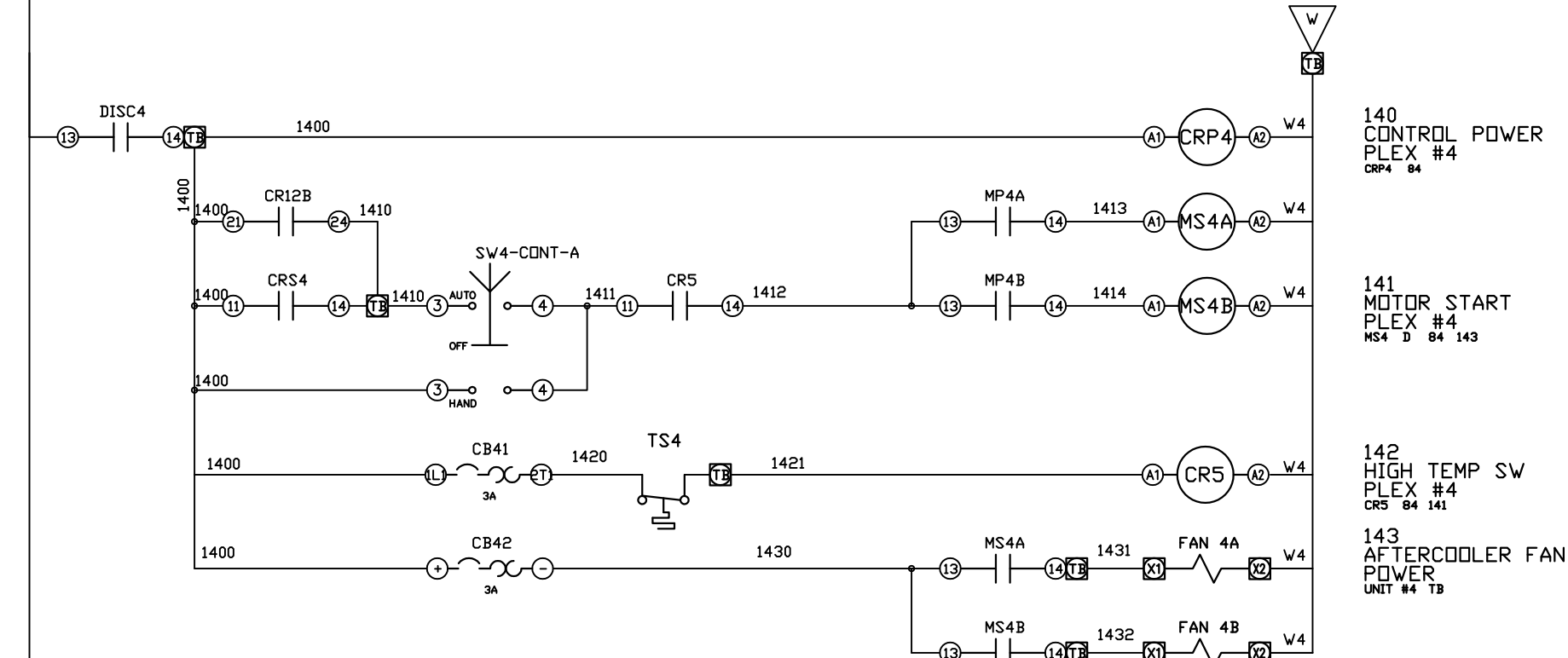
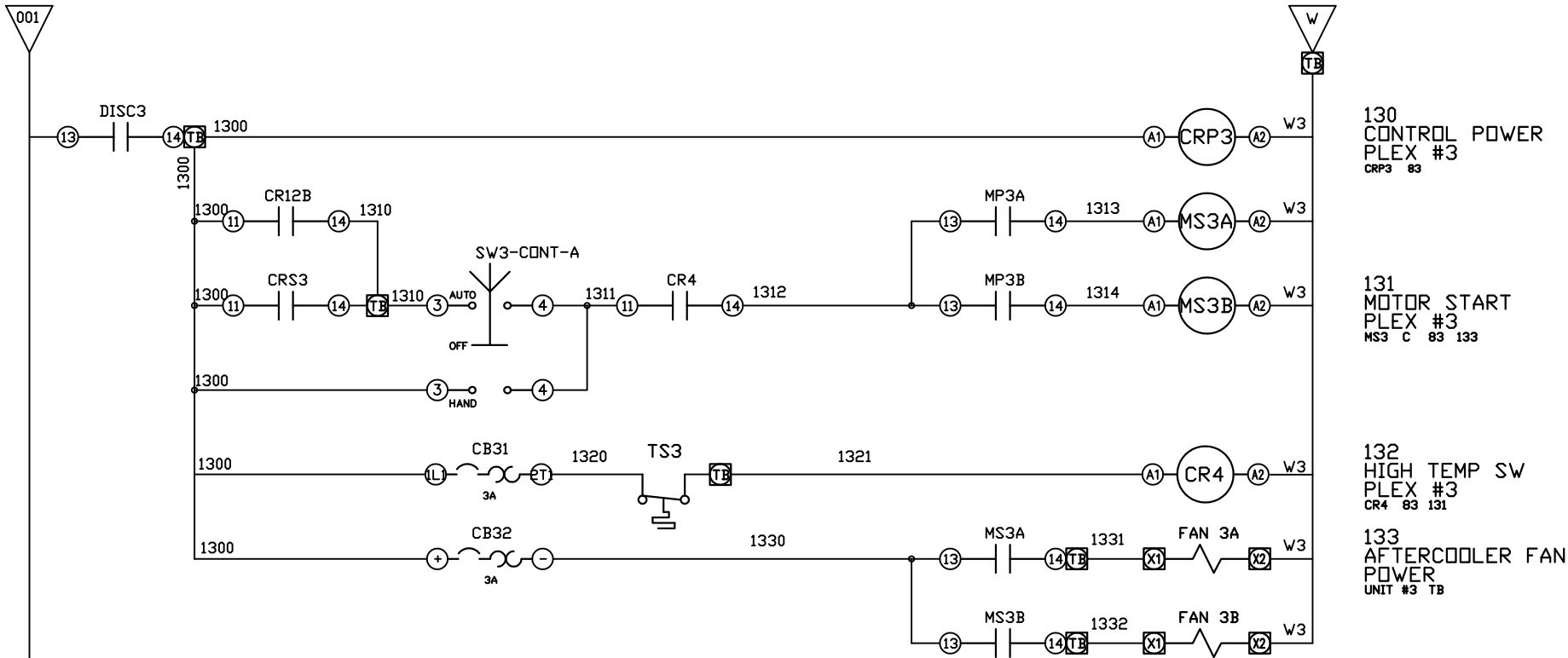
PANEL TYPE
QUADPLEX MEDICAL COMP
HMI, BACNET, WEBSVR, NFPA, SOFT START. PLEX ISO

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



OPTIONAL:

POWEREX™

CONFIDENTIAL DISCLOSURE:
This drawing is the property of POWEREX, INC. of Marmon Specialty Products and is 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
BTS	SEK	JRD
05/12/25	05/12/25	05/12/25

PANEL TYPE

QUADPLEX MEDICAL COMP

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

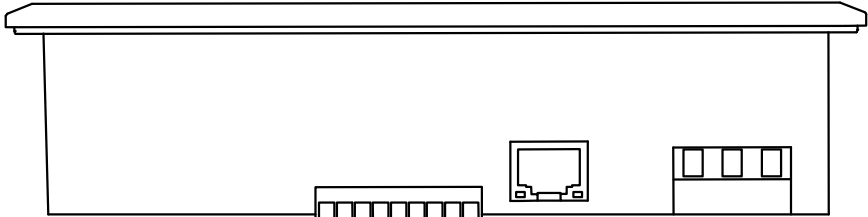
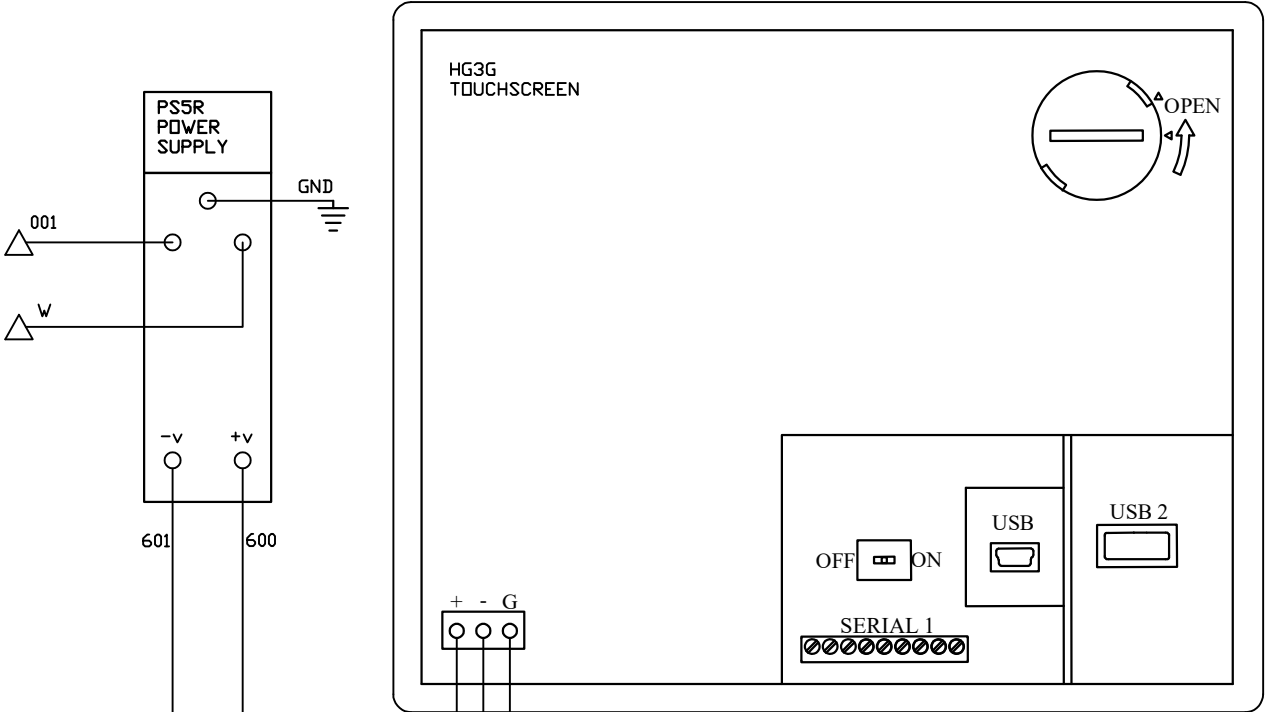
DWG. TYPE WIRING

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

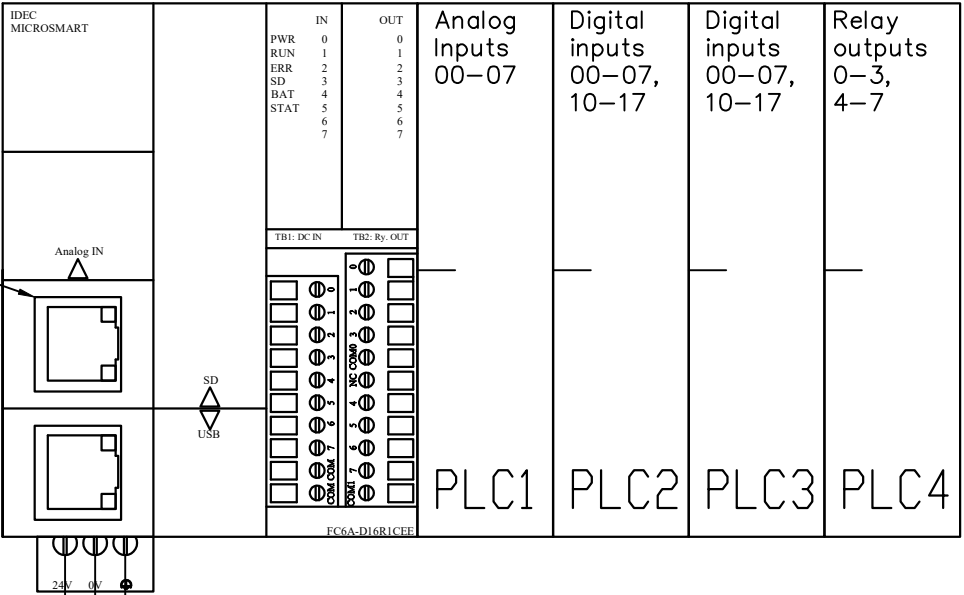


CONNECT TO ETHERNET PORT OF HMI

ETHERNET CONNECTION HERE FOR BACNET

CONNECT TO BOTTOM ETHERNET PORT OF PLC

P/N: PE000479AV



OPTIONAL:

POWEREX™

CONFIDENTIAL DISCLOSURE:
This drawing is the property of POWEREX, INC. of Marmon Specialty Products and is 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
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

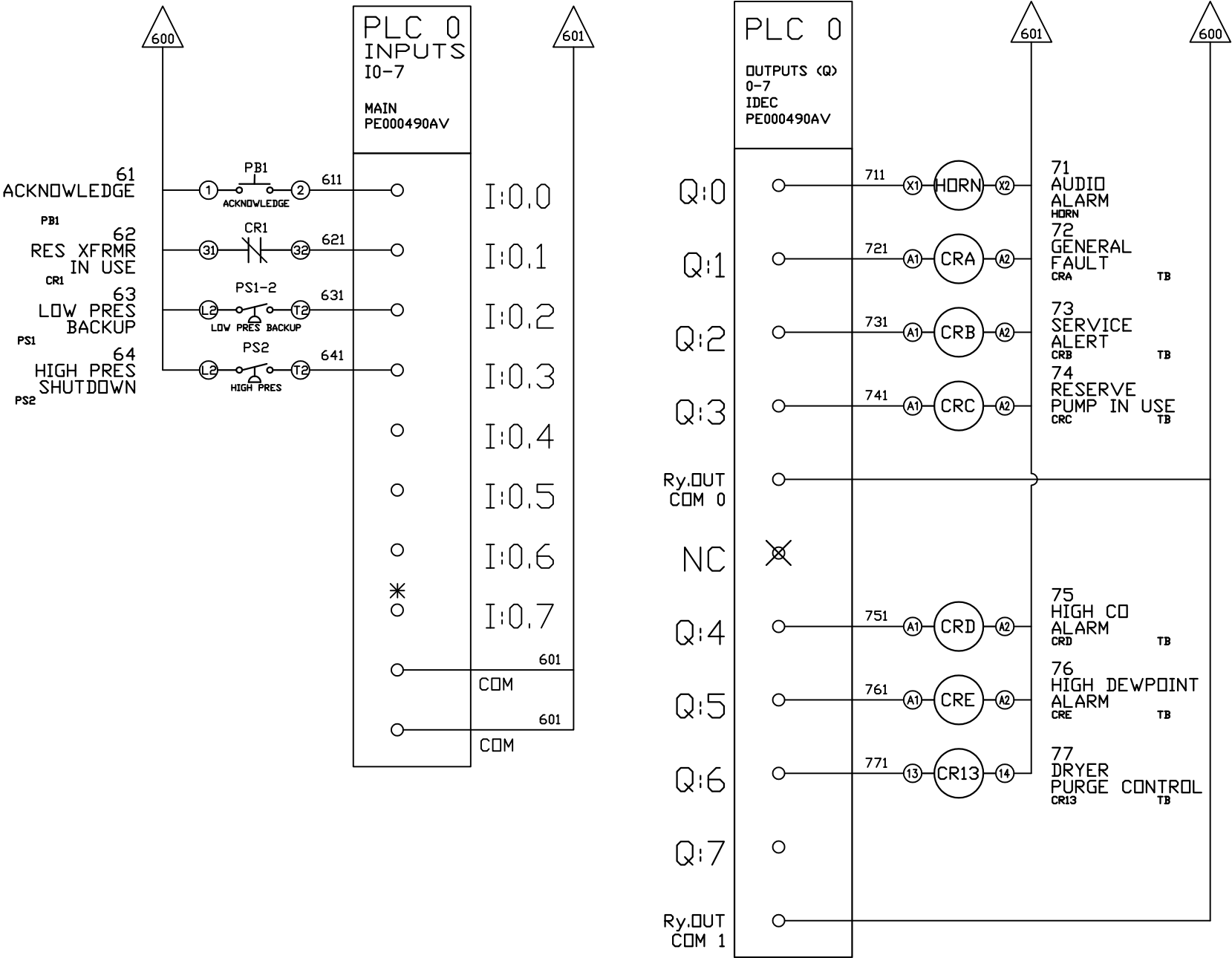
W-5

SIZE

B

PXMI-SS416X

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



*FACTORY TEST JUMPER LOCATION

OPTIONAL:

CONFIDENTIAL DISCLOSURE:
This drawing is the property of POWEREX, INC. of Marmon Specialty Products and is 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
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

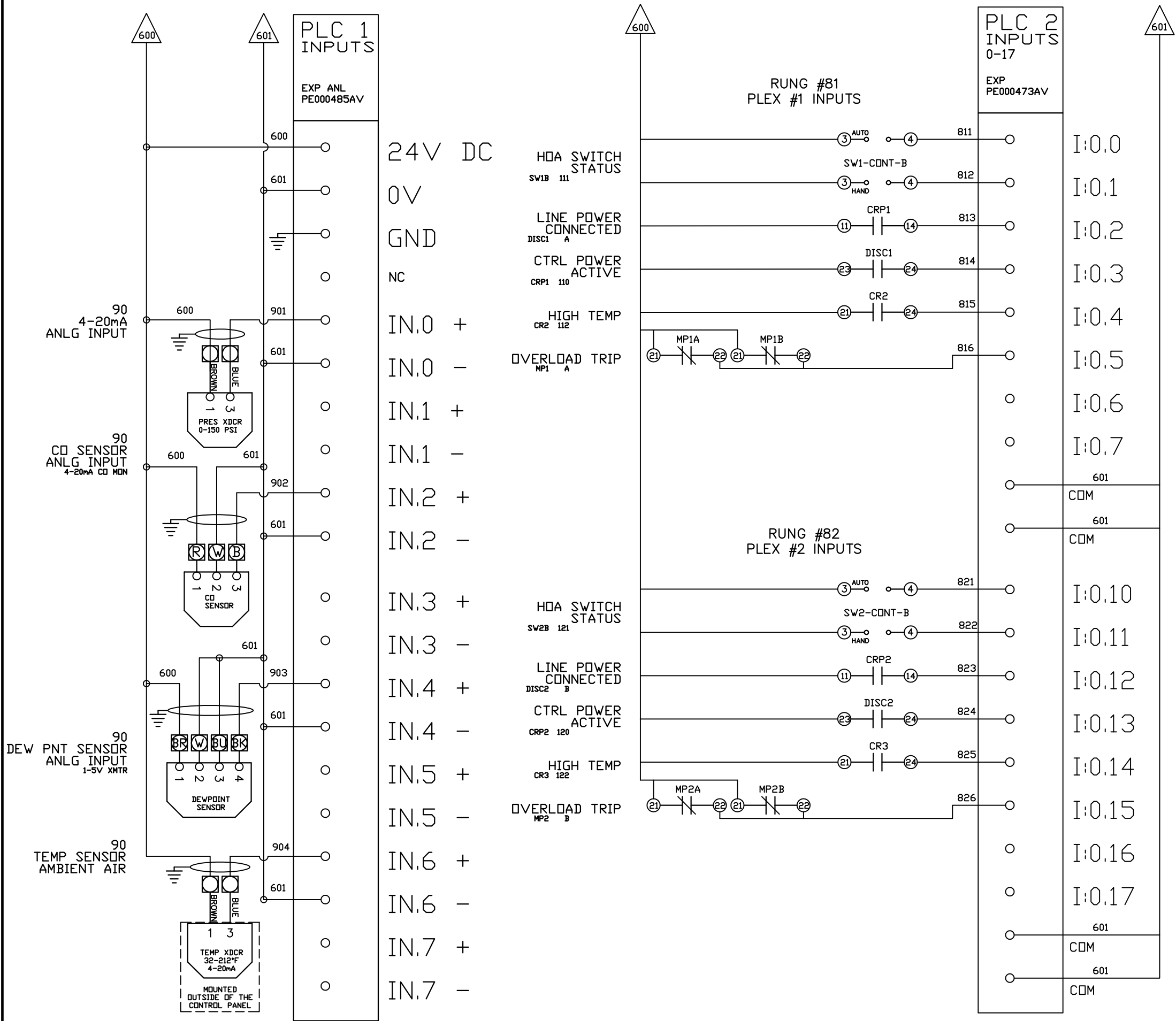
DWG. NO.

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



OPTIONAL:

POWEREX™

CONFIDENTIAL DISCLOSURE:
This drawing is the property of POWEREX, INC. of Marmon Specialty Products and is 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
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

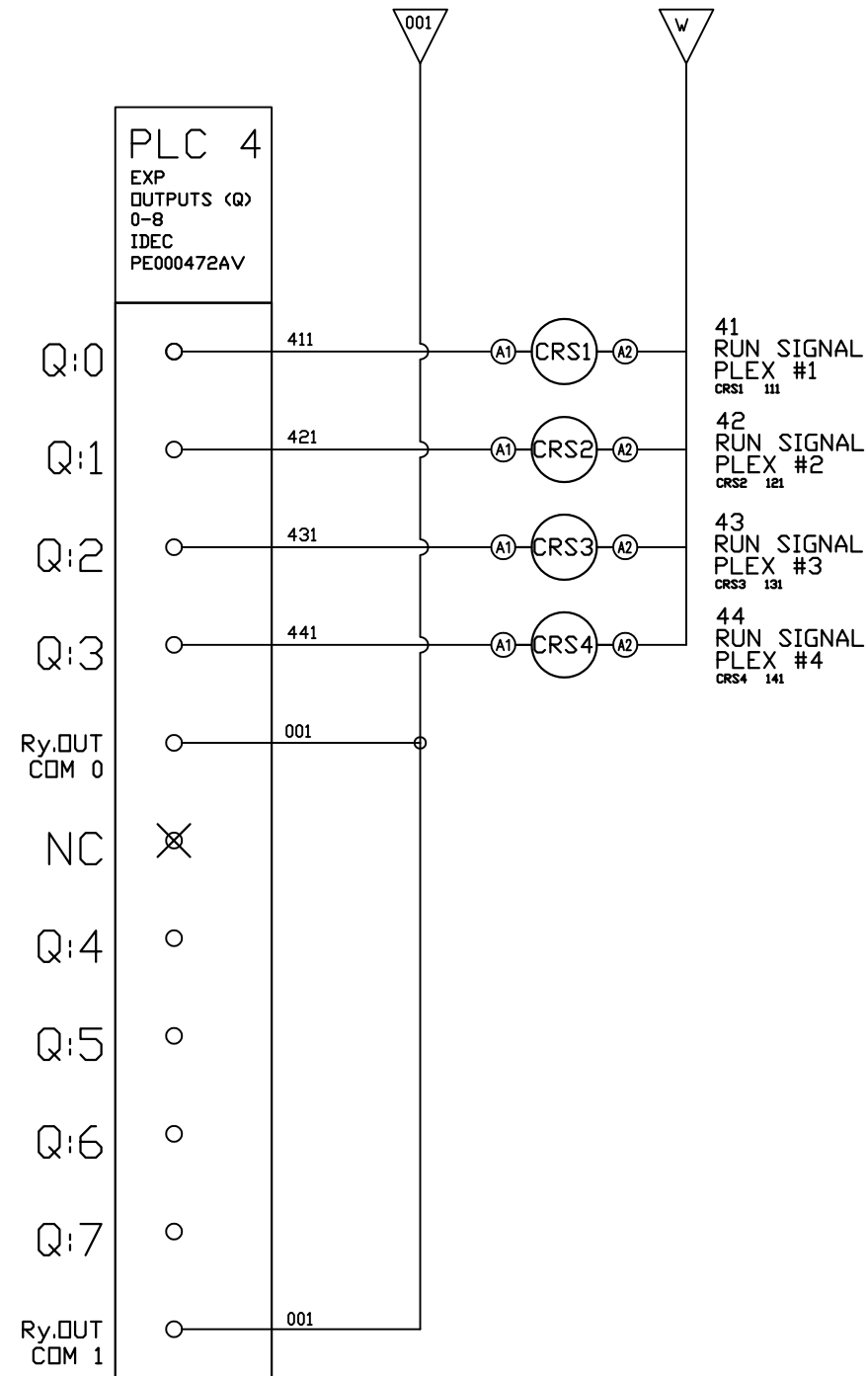
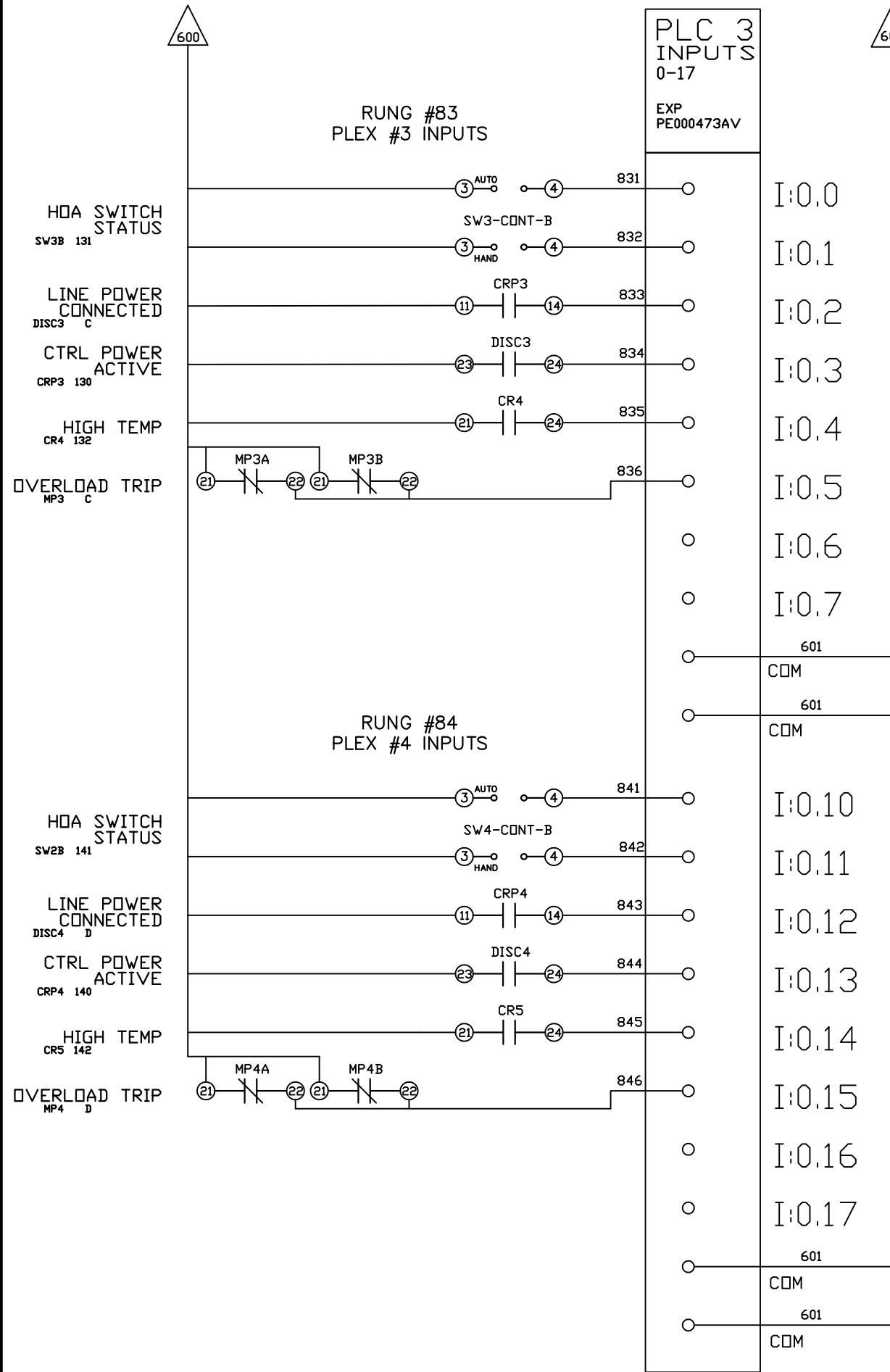
DWG. TYPE
WIRING

DWG. NO.
PXMI-SS416X

SHEET
W-7

SIZE
B

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



OPTIONAL:

POWEREX™

CONFIDENTIAL DISCLOSURE:
This drawing is the property of POWEREX, INC. of Marmon Specialty Products and is 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
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

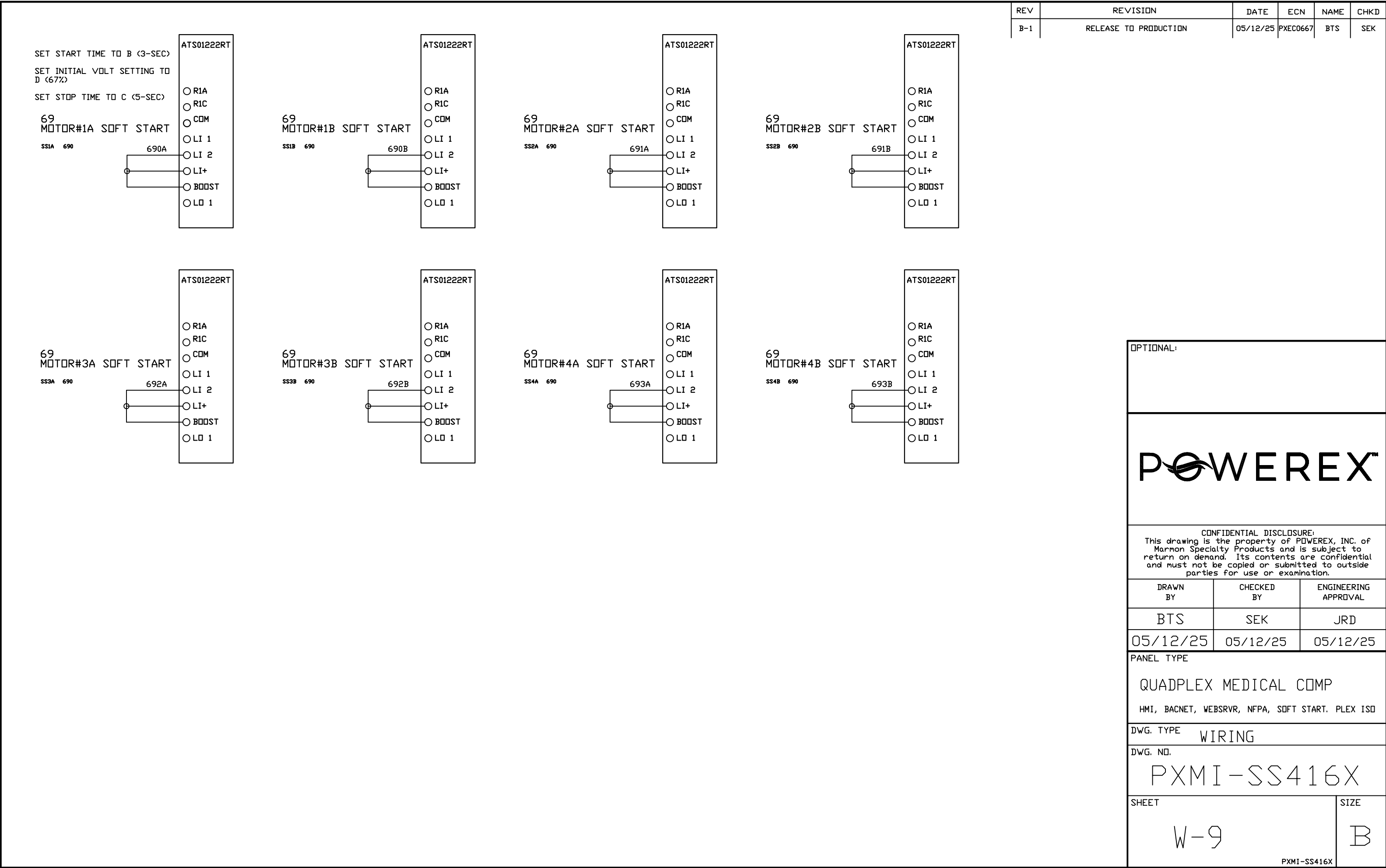
DWG. TYPE WIRING

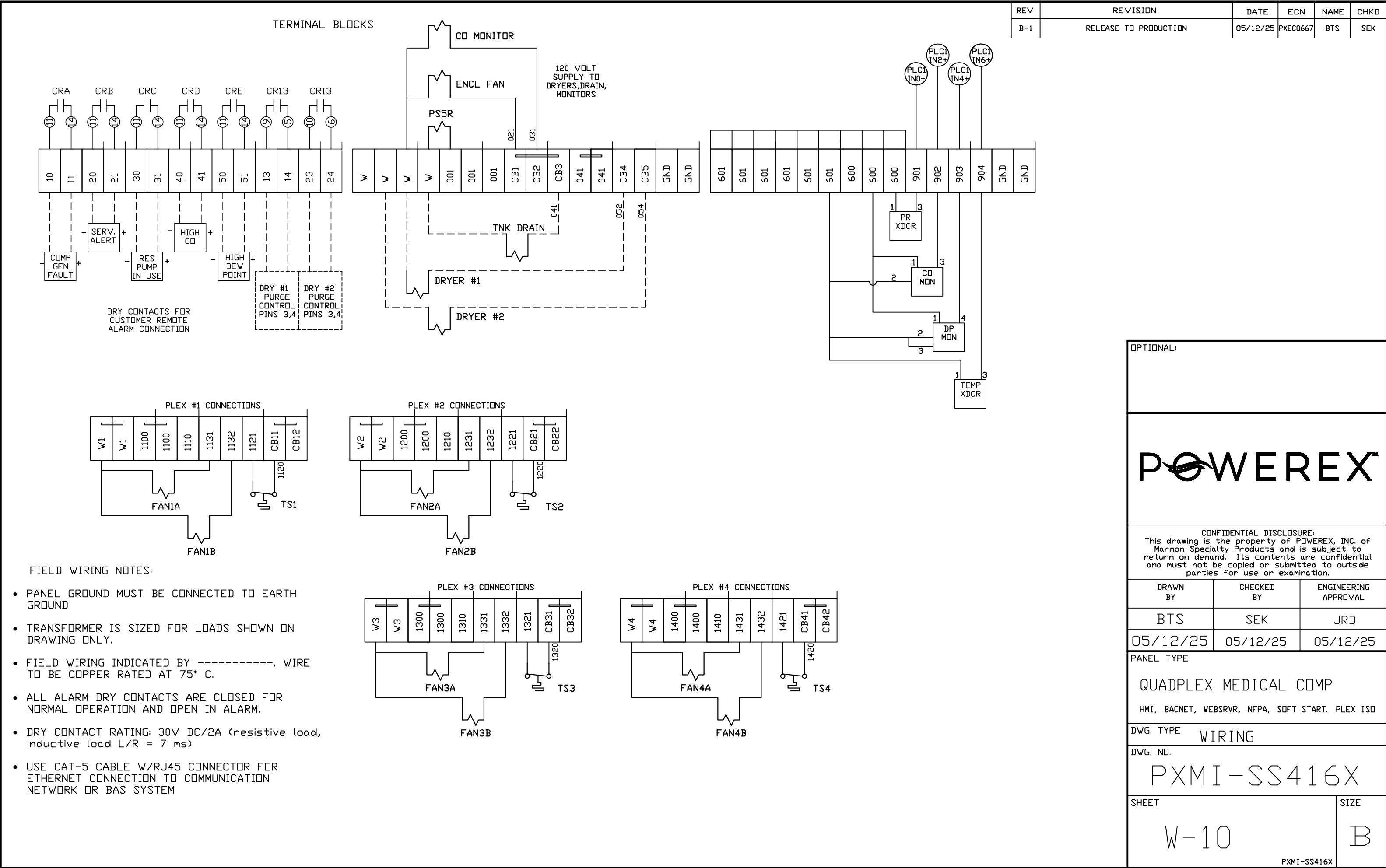
DWG. NO.

PXMI-SS416X

SHEET	SIZE
W-8	B

PXMI-SS416X

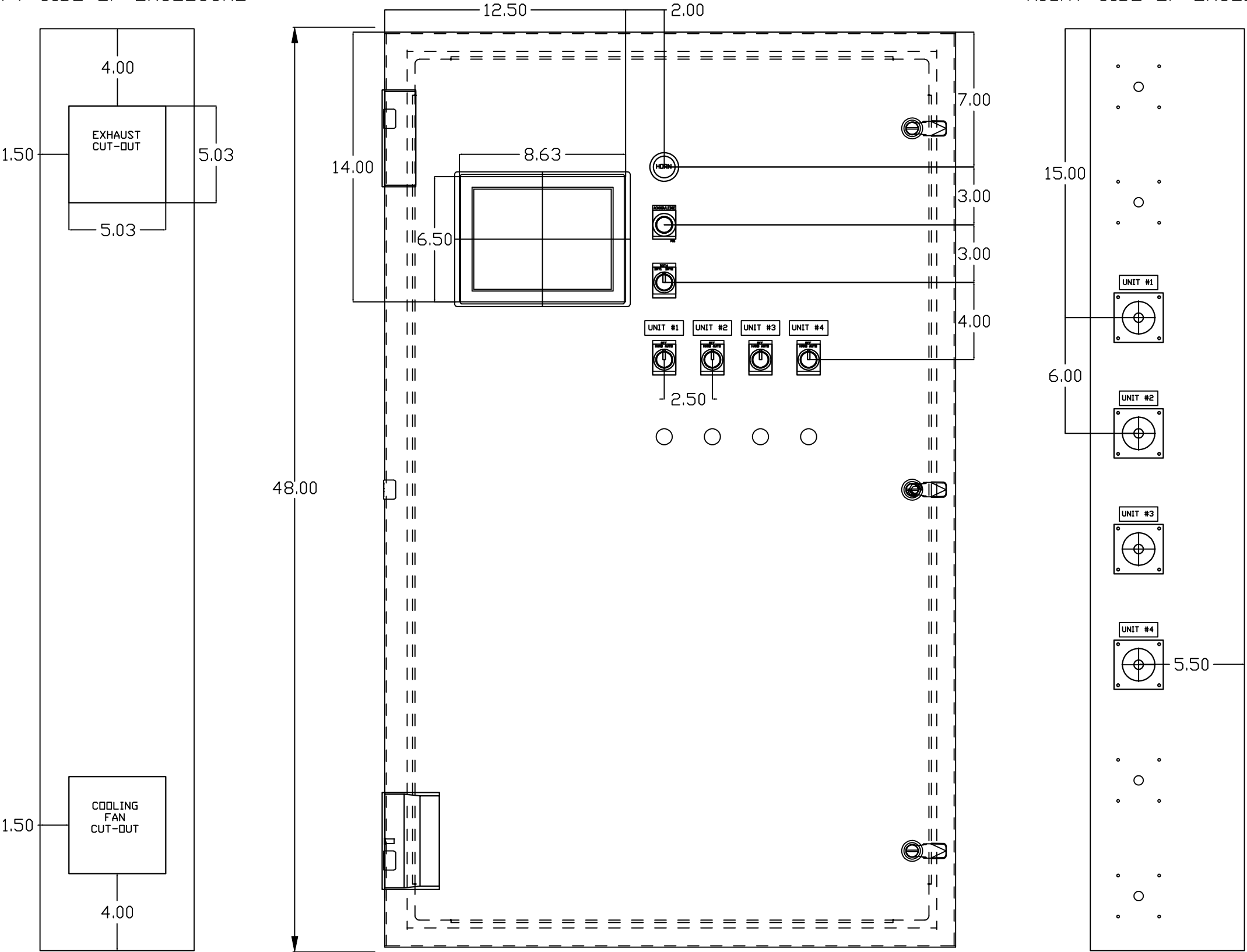




REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	05/12/25	PXEC0667	BTS	SEK

LEFT SIDE OF ENCLOSURE

RIGHT SIDE OF ENCLOSURE



OPTIONAL:

CONFIDENTIAL DISCLOSURE:

This drawing is the property of POWEREX, INC. of Marmon Specialty Products and is 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
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

PXMI-SS416X

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	19.2	156	200A	175A	200A
PBMISS416E3AJ	7.5(X2)	230V/3Ø	17.3	141	200A	175A	200A
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	12.0	98	125A	110A	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					
FUSE TYPE	VOLT	VOLT	380 VOLT	VOLT	WIRE TYPE TABLE				
FU1,2A FU1,2B	FNQR	6A	5A	5A	4A	VOLTAGE	WIRE NUMBERS	GAUGE	COLOR
FU3A,B	FNM	7A	7A	7A	7A	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
SEE XFMR FOR CONNECTIONS									

OPTIONAL:

CONFIDENTIAL DISCLOSURE:
This drawing is the property of POWEREX, INC. of Marmon Specialty Products and is 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
BTS	SEK	JRD
05/12/25	05/12/25	05/12/25

PANEL TYPE

QUADPLEX MEDICAL COMP

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

DWG. TYPE DATA

DWG. NO.

PXMI-SS416X

SHEET	SIZE
D-1	B

PXMI-SS416X