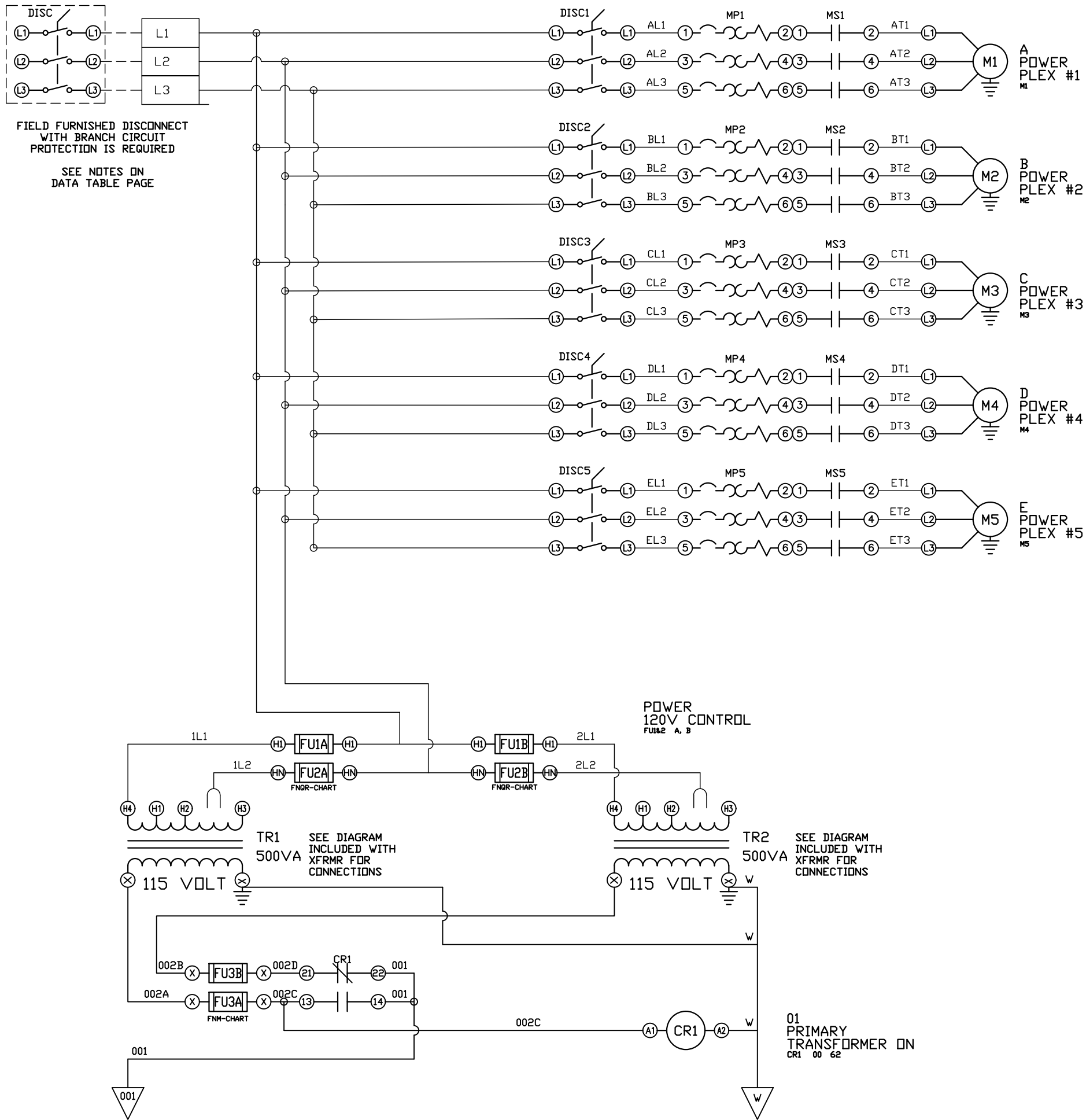




REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	02/13/14	PXEC0066	AJL	KMD
G-1	ADD CB TO EXTERNAL DEVICES & DISCONNECT TO INPUT POWER	07/15/24	PXEC0628	SEK	JRD
H-1	PLEX ISOLATION UPDATES	08/04/25	PXEC0639	WMM	SEK

OPTIONAL:

POWEREX™

CONFIDENTIAL DISCLOSURE:
This drawing is the property of POWEREX, INC. of
Marnon 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
AJL	KMD	KMD
02/13/14	02/13/14	02/13/14

PANEL TYPE

MED VACUUM PENTAPLEX
HMI, NFPA

DWG. TYPE WIRING

DWG. NO.

PXMI-V569

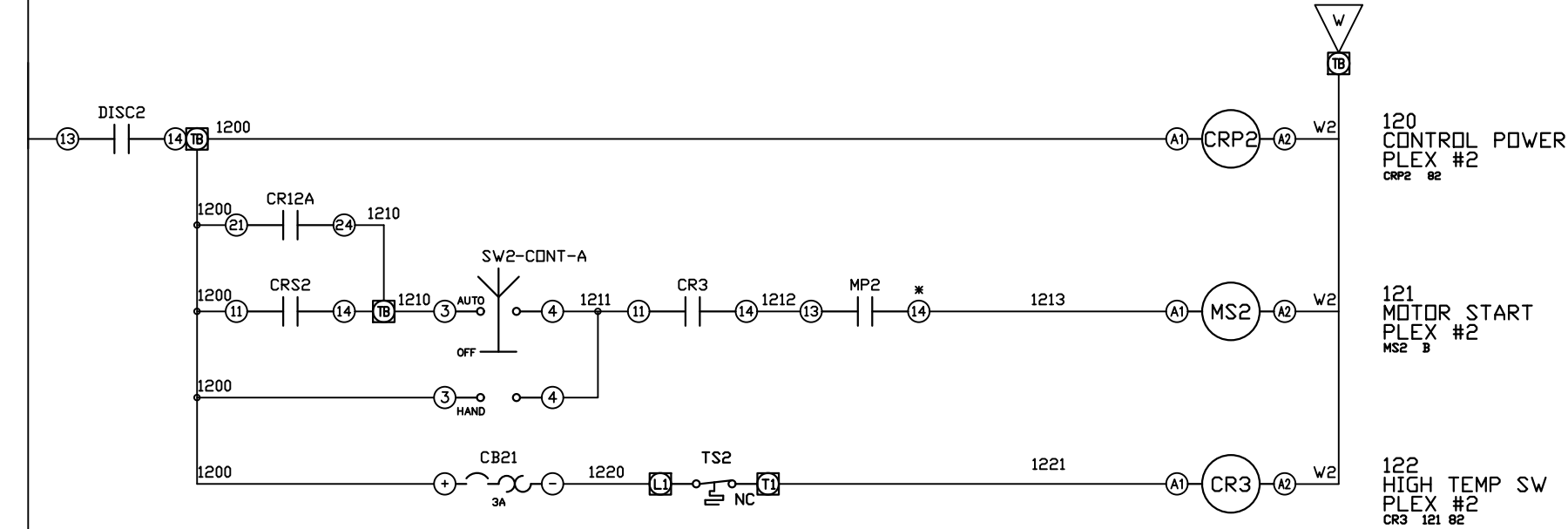
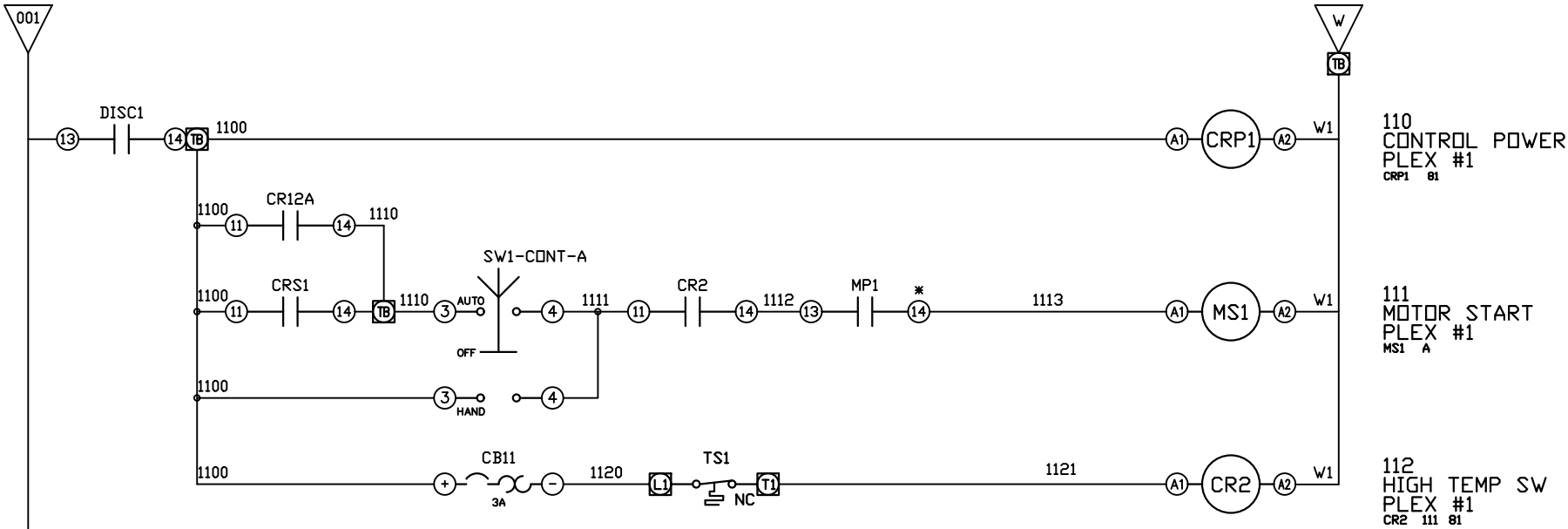
SHEET

W-1

SIZE

B

REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	02/13/14	PXEC0066	AJL	KMD
G-1	ADD CB TO EXTERNAL DEVICES & DISCONNECT TO INPUT POWER	07/15/24	PXEC0628	SEK	JRD
H-1	PLEX ISOLATION UPDATES	08/04/25	PXEC0639	WMM	SEK



* FOR GV4 MOTOR PROTECTORS USE PINS #1 AND #4 ON AUX CONTACT IN '0F1' SLOT

OPTIONAL:

CONFIDENTIAL DISCLOSURE:
This drawing is the property of POWEREX, INC. of Marnon 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
AJL	KMD	KMD
02/13/14	02/13/14	02/13/14

PANEL TYPE

MED VACUUM PENTAPLEX
HMI, NFPA

DWG. TYPE WIRING

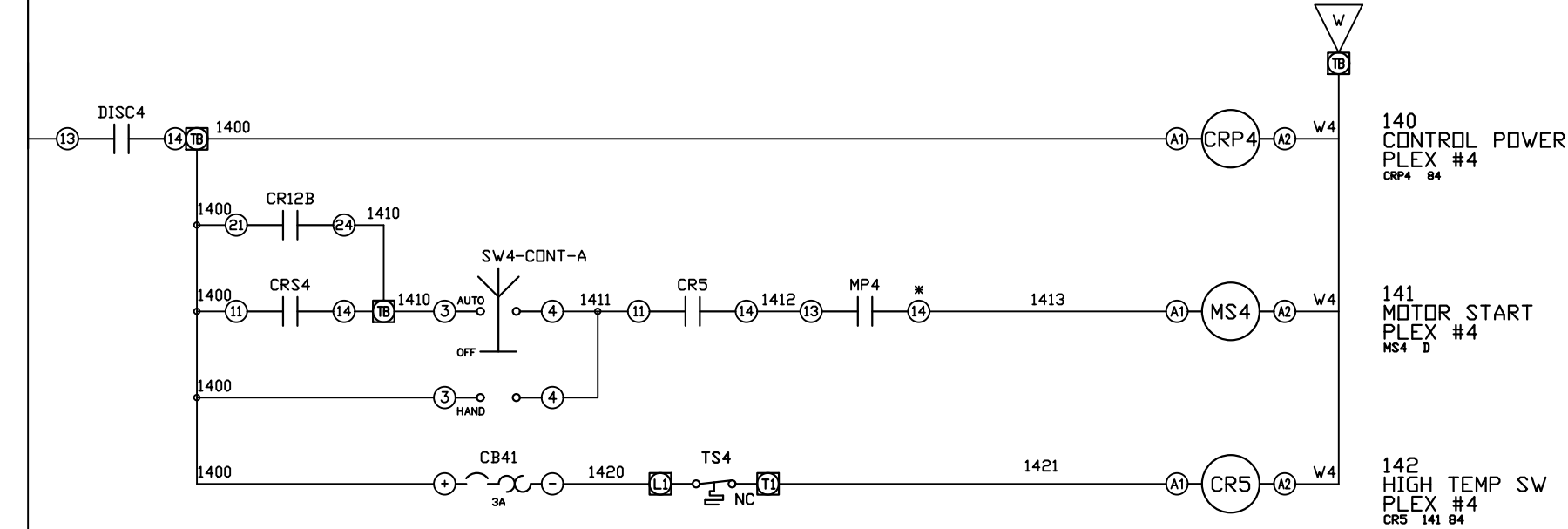
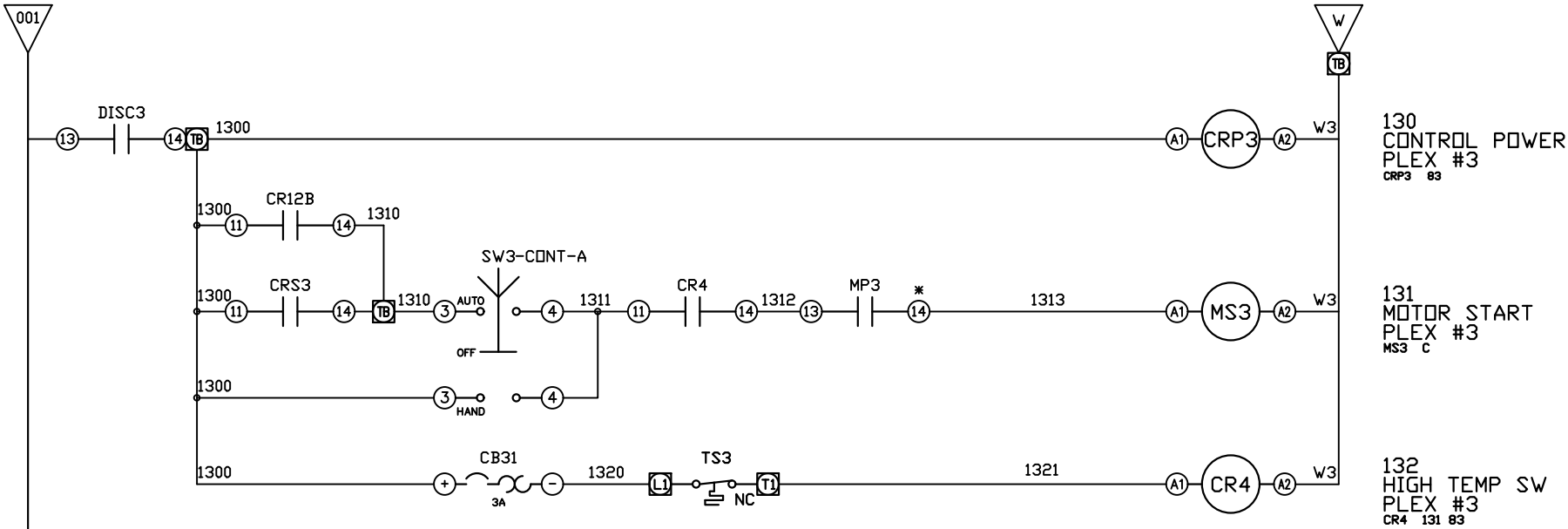
DWG. NO.

PXMI-V569

SHEET	SIZE
W-3	B

PXMI-V569

REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	02/13/14	PXEC0066	AJL	KMD
G-1	ADD CB TO EXTERNAL DEVICES & DISCONNECT TO INPUT POWER	07/15/24	PXEC0628	SEK	JRD
H-1	PLEX ISOLATION UPDATES	08/04/25	PXEC0639	WMM	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
AJL	KMD	KMD
02/13/14	02/13/14	02/13/14

PANEL TYPE

MED VACUUM PENTAPLEX
HMI, NFPA

DWG. TYPE WIRING

DWG. NO.

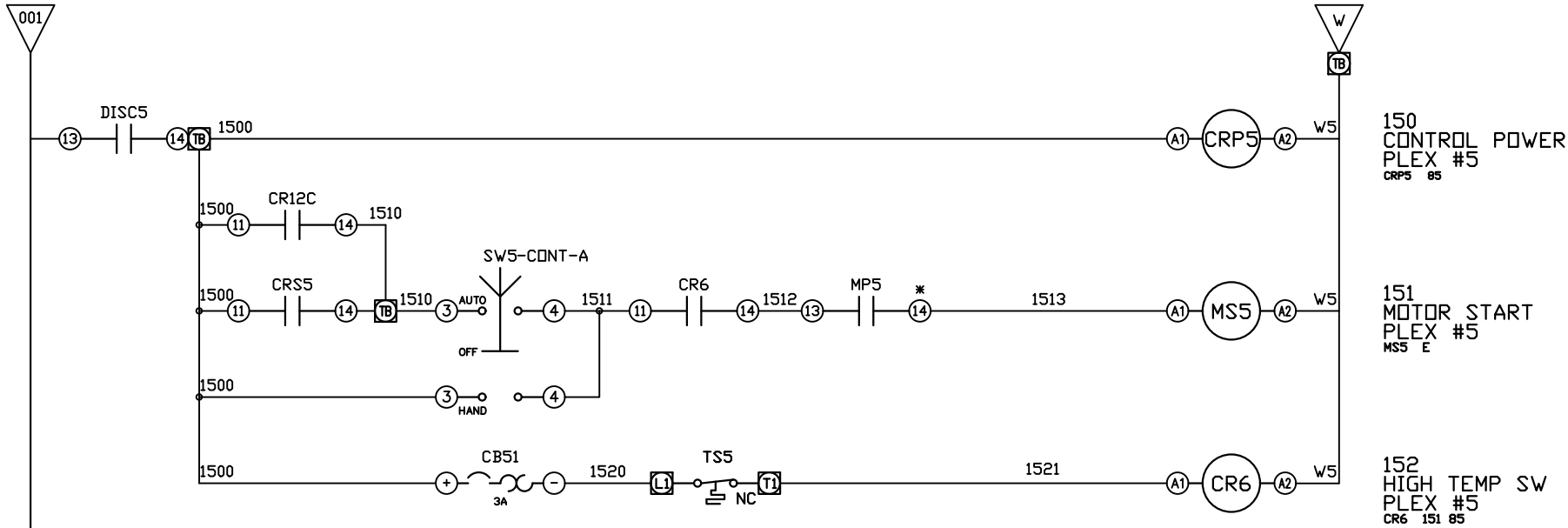
PXMI-V569

SHEET	SIZE
W-4	B

* FOR GV4 MOTOR PROTECTORS USE PINS
#1 AND #4 ON AUX CONTACT IN "OF1" SLOT

PXMI-V569

REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	02/13/14	PXEC0066	AJL	KMD
G-1	ADD CB TO EXTERNAL DEVICES & DISCONNECT TO INPUT POWER	07/15/24	PXEC0628	SEK	JRD
H-1	PLEX ISOLATION UPDATES	08/04/25	PXEC0639	WMM	SEK



OPTIONAL:

POWEREX™

CONFIDENTIAL DISCLOSURE:
This drawing is the property of POWEREX, INC. of
Marion 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.

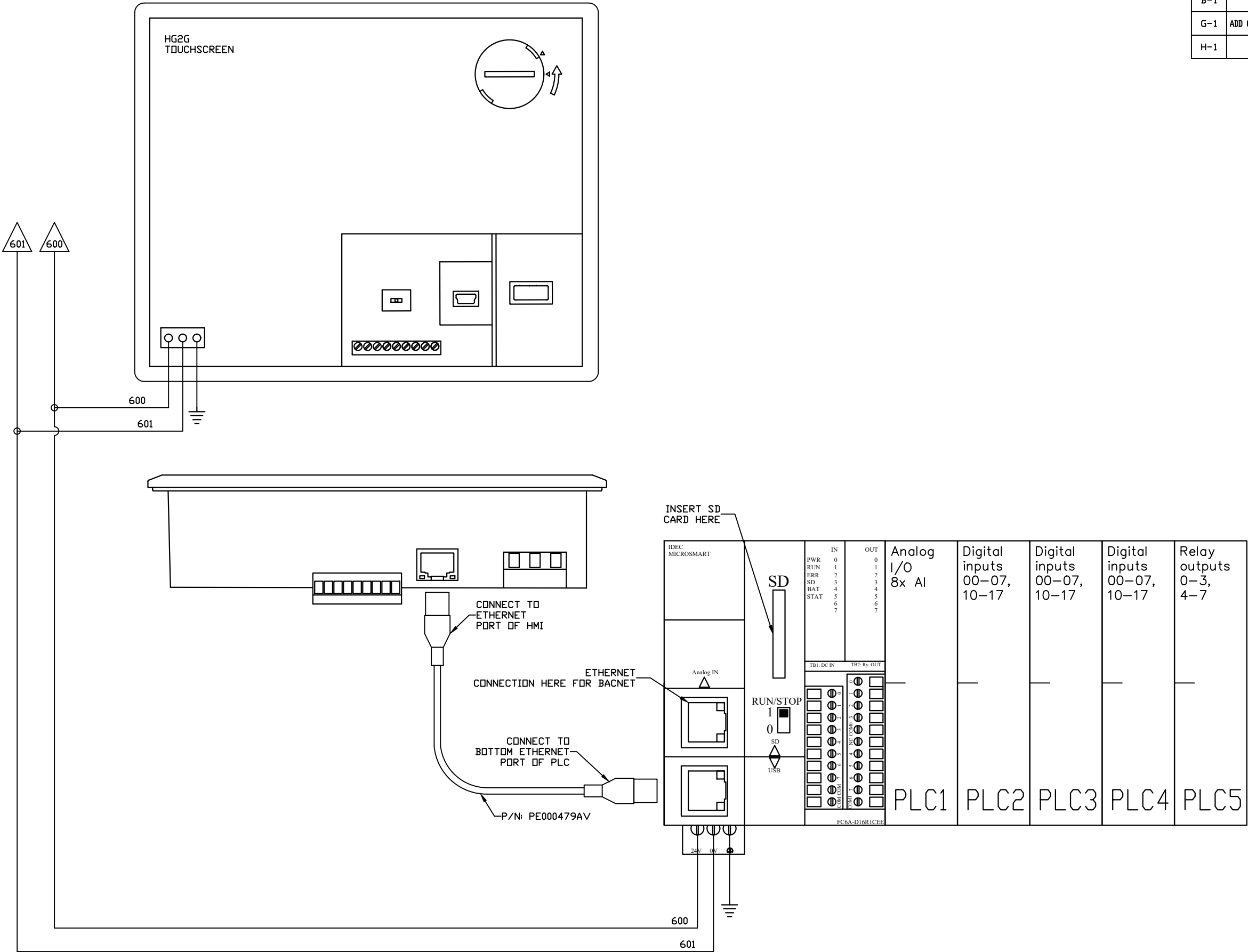
DRAWN BY	CHECKED BY	ENGINEERING APPROVAL
AJL	KMD	KMD
02/13/14	02/13/14	02/13/14

PANEL TYPE
MED VACUUM PENTAPLEX HMI, NFPA
DWG. TYPE WIRING
DWG. NO. PXMI-V569

SHEET W-5	SIZE B
--------------	-----------

* FOR GV4 MOTOR PROTECTORS USE PINS
#1 AND #4 ON AUX CONTACT IN '0F1' SLOT

REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	02/13/14	PXEC0066	AJL	KMD
G-1	ADD CB TO EXTERNAL DEVICES & DISCONNECT TO INPUT POWER	07/15/24	PXEC0628	SEK	JRD
H-1	PLEX ISOLATION UPDATES	08/04/25	PXEC0639	WMM	SEK



OPTIONAL:

POWEREX™

CONFIDENTIAL DISCLOSURE:
This drawing is the property of POWEREX, INC. of
Marnon 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
AJL	KMD	KMD
02/13/14	02/13/14	02/13/14

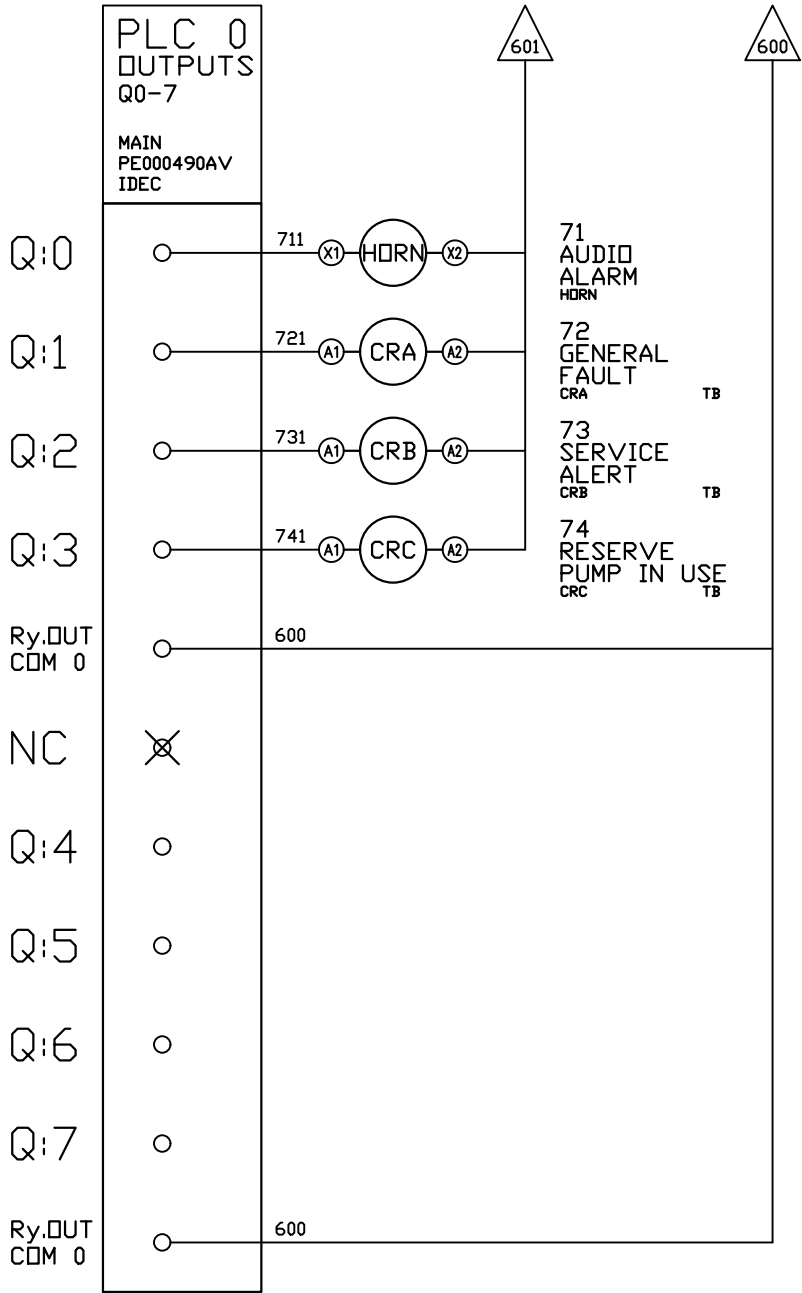
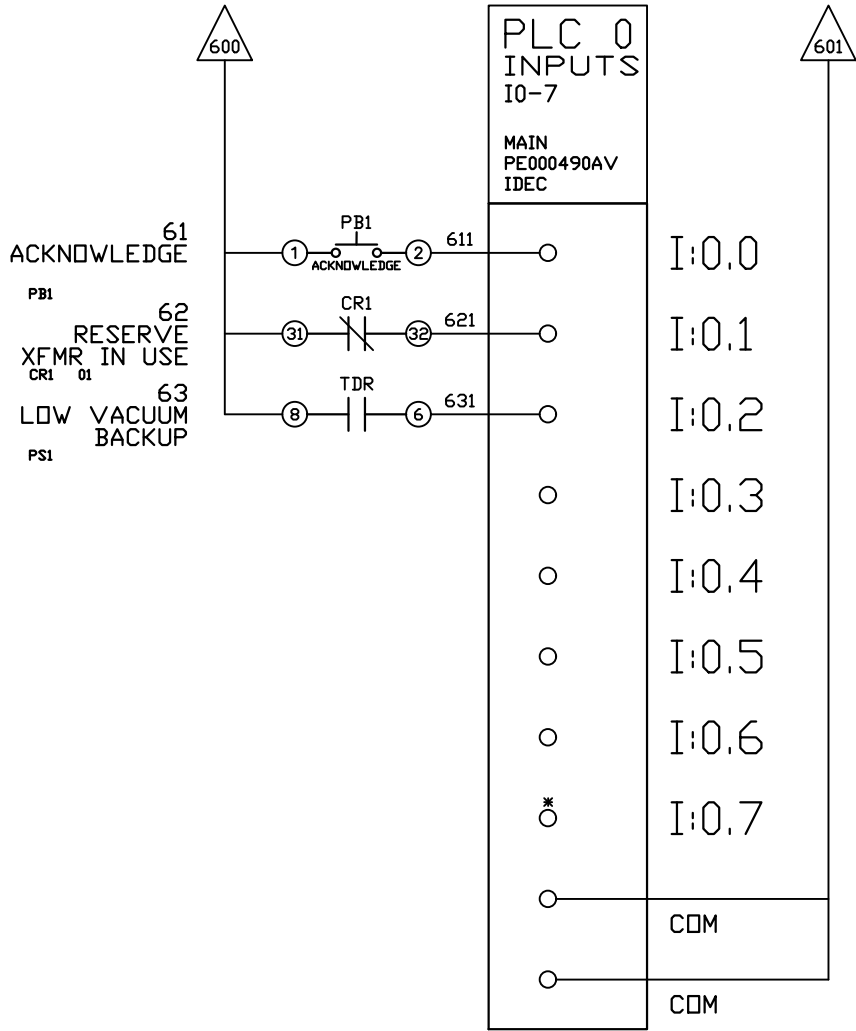
PANEL TYPE
MED VACUUM PENTAPLEX
HMI, NFPA

DWG. TYPE WIRING

DWG. NO.
PXMI-V569

SHEET	SIZE
W-6	B

REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	02/13/14	PXEC0066	AJL	KMD
G-1	ADD CB TO EXTERNAL DEVICES & DISCONNECT TO INPUT POWER	07/15/24	PXEC0628	SEK	JRD
H-1	PLEX ISOLATION UPDATES	08/04/25	PXEC0639	WMM	SEK



OPTIONAL:

POWEREX™

CONFIDENTIAL DISCLOSURE:
This drawing is the property of POWEREX, INC. of
Marmion 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
AJL	KMD	KMD
02/13/14	02/13/14	02/13/14

PANEL TYPE		
MED VACUUM PENTAPLEX HMI, NFPA		
DWG. TYPE WIRING		
DWG. NO. PXMI-V569		

SHEET	SIZE
W-7	B

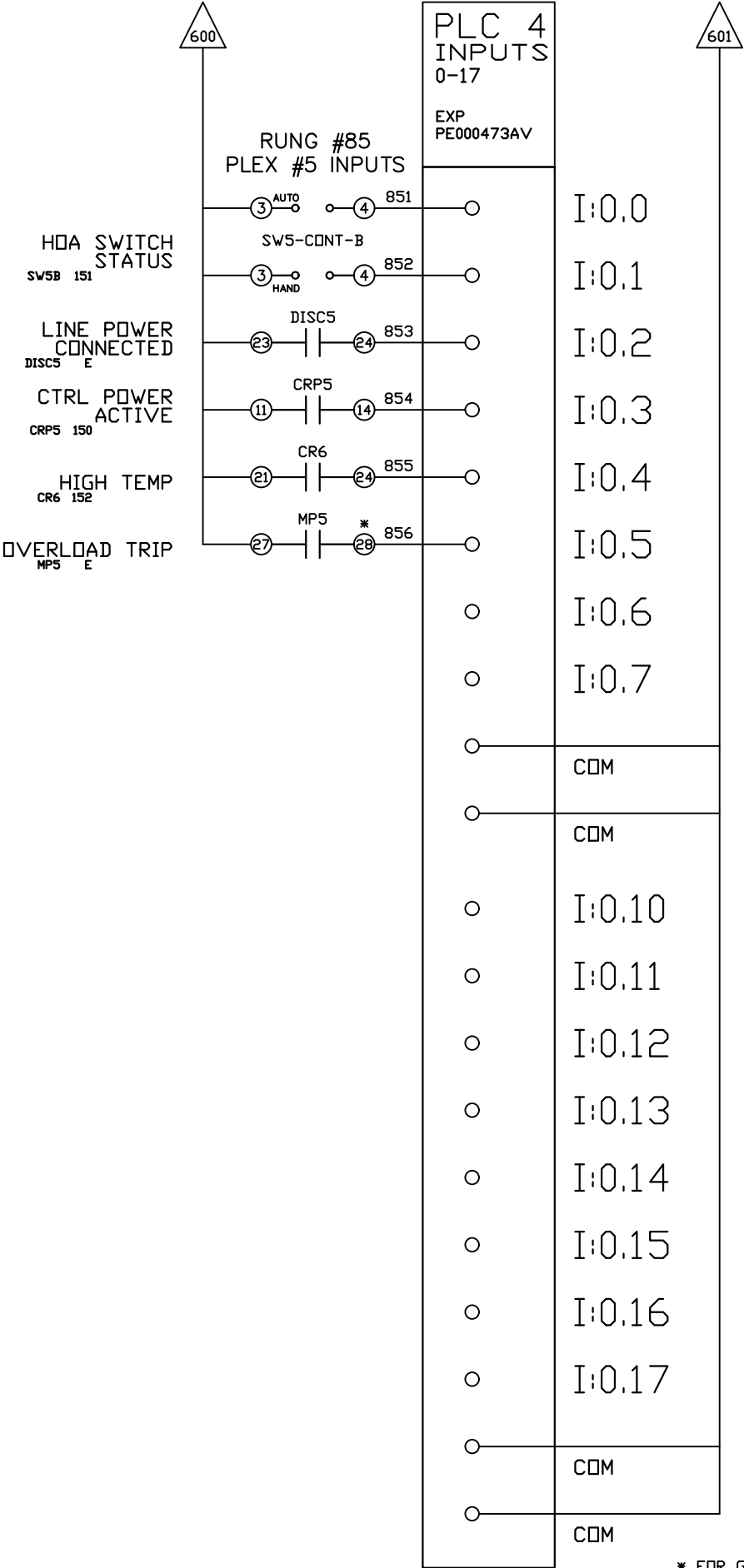
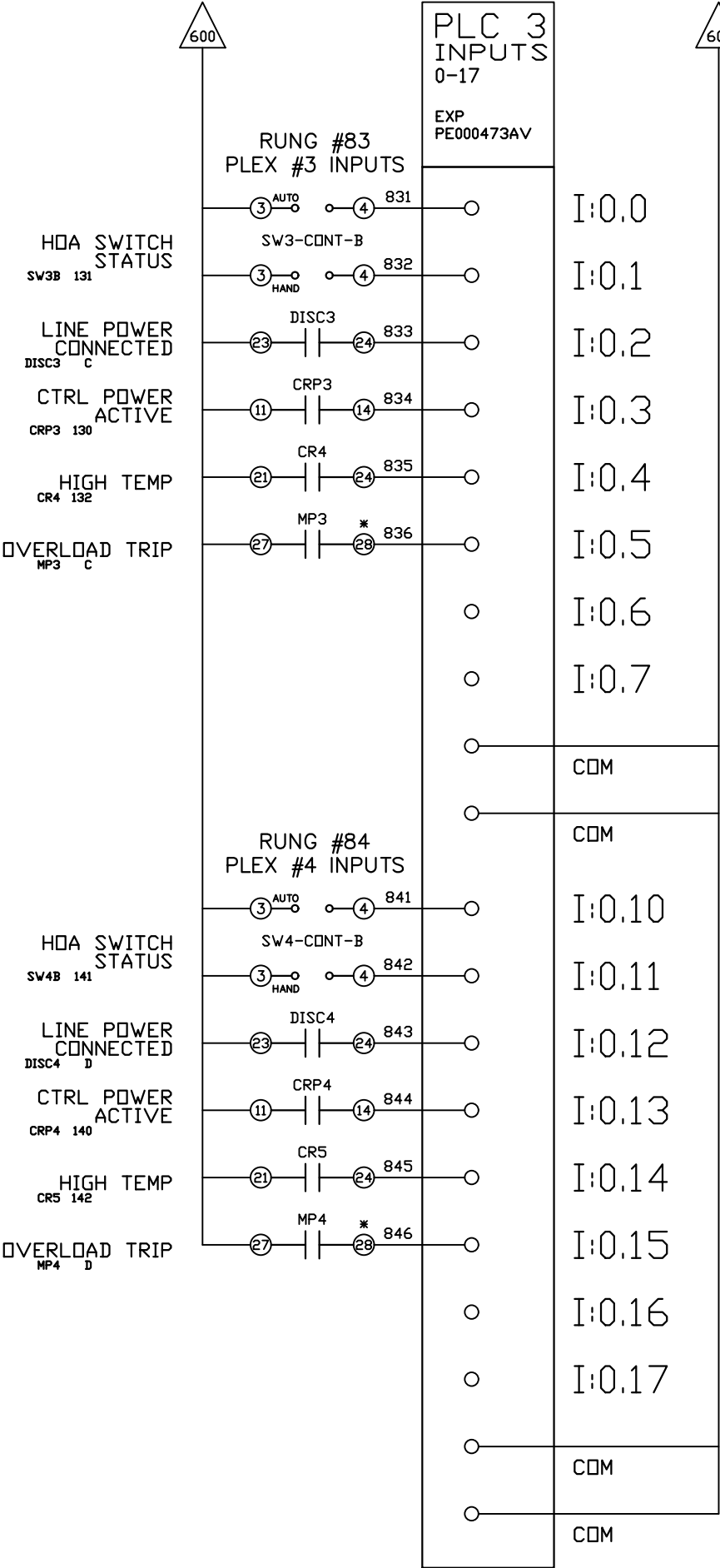
*FACTORY TEST JUMPER LOCATION

VACUUM
TRANSDUCER
0"Hg= 4 mA
29.5"Hg= 20 mA



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
AJL	KMD	KMD
02/13/14	02/13/14	02/13/14
PANEL TYPE		
MED VACUUM PENTAPLEX HMI, NFPA		
DWG. TYPE		
WIRING		
DWG. NO.		
PXMI-V569		
SHEET		SIZE
W-8		B

REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	02/13/14	PXEC0066	AJL	KMD
G-1	ADD CB TO EXTERNAL DEVICES & DISCONNECT TO INPUT POWER	07/15/24	PXEC0628	SEK	JRD
H-1	PLEX ISOLATION UPDATES	08/04/25	PXEC0639	WMM	SEK



* FOR GV4 MOTOR PROTECTORS USE PINS
#1 AND #4 ON AUX CONTACT IN 'DF1' SLOT

OPTIONAL:



CONFIDENTIAL DISCLOSURE:
This drawing is the property of POWEREX, INC. of
Marron 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
AJL

CHECKED
BY
KMD

ENGINEERING
APPROVAL
KMD

02/13/1402/13/1402/13/14

PANEL TYPE

MED VACUUM PENTAPLEX
HMI, NFPA

DWG. TYPE
WIRING

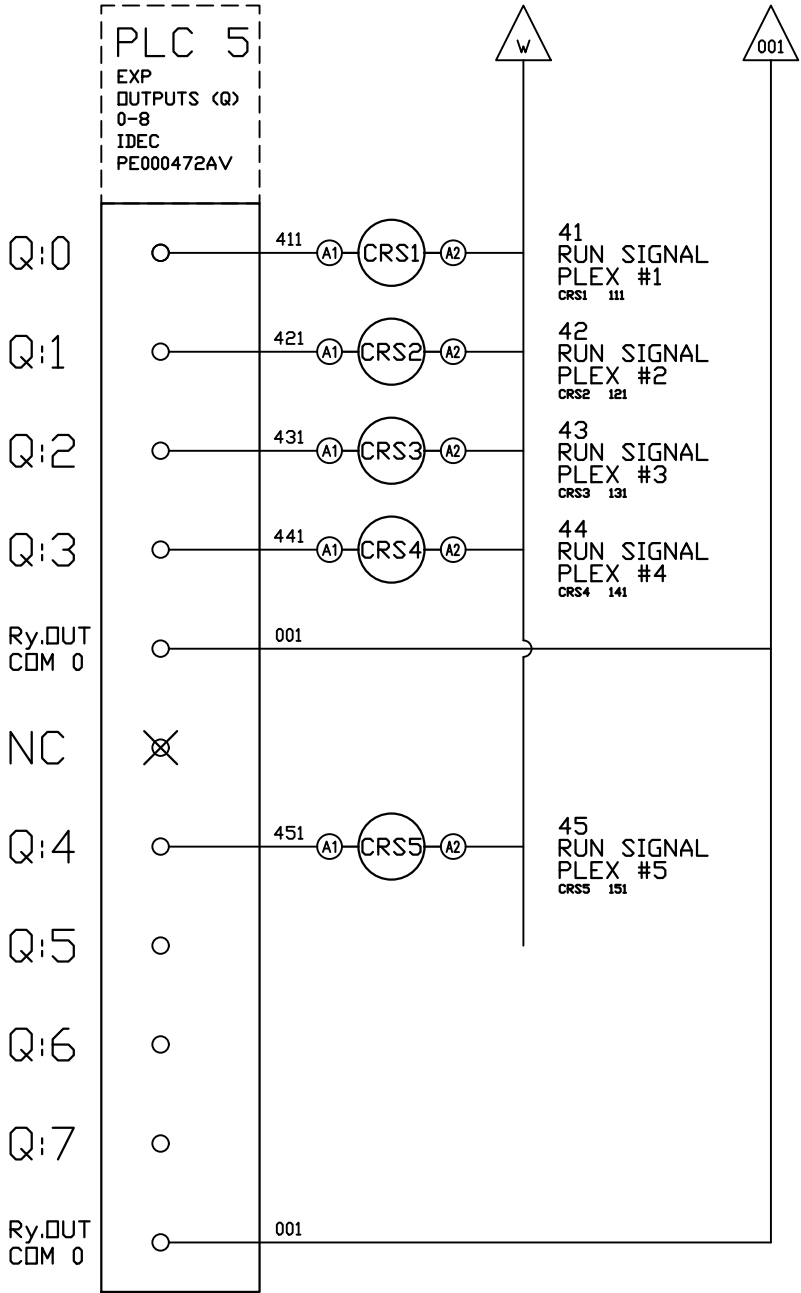
DWG. NO.
PXMI-V569

SHEET
W-9

SIZE
B

PXMI-V569

REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	02/13/14	PXEC0066	AJL	KMD
G-1	ADD CB TO EXTERNAL DEVICES & DISCONNECT TO INPUT POWER	07/15/24	PXEC0628	SEK	JRD
H-1	PLEX ISOLATION UPDATES	08/04/25	PXEC0639	WMM	SEK



OPTIONAL:

POWEREX™

CONFIDENTIAL DISCLOSURE:
This drawing is the property of POWEREX, INC. of
Marnon 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
AJL	KMD	KMD
02/13/14	02/13/14	02/13/14

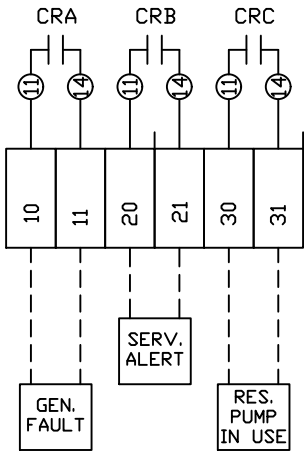
PANEL TYPE
MED VACUUM PENTAPLEX
HMI, NFPA

DWG. TYPE WIRING

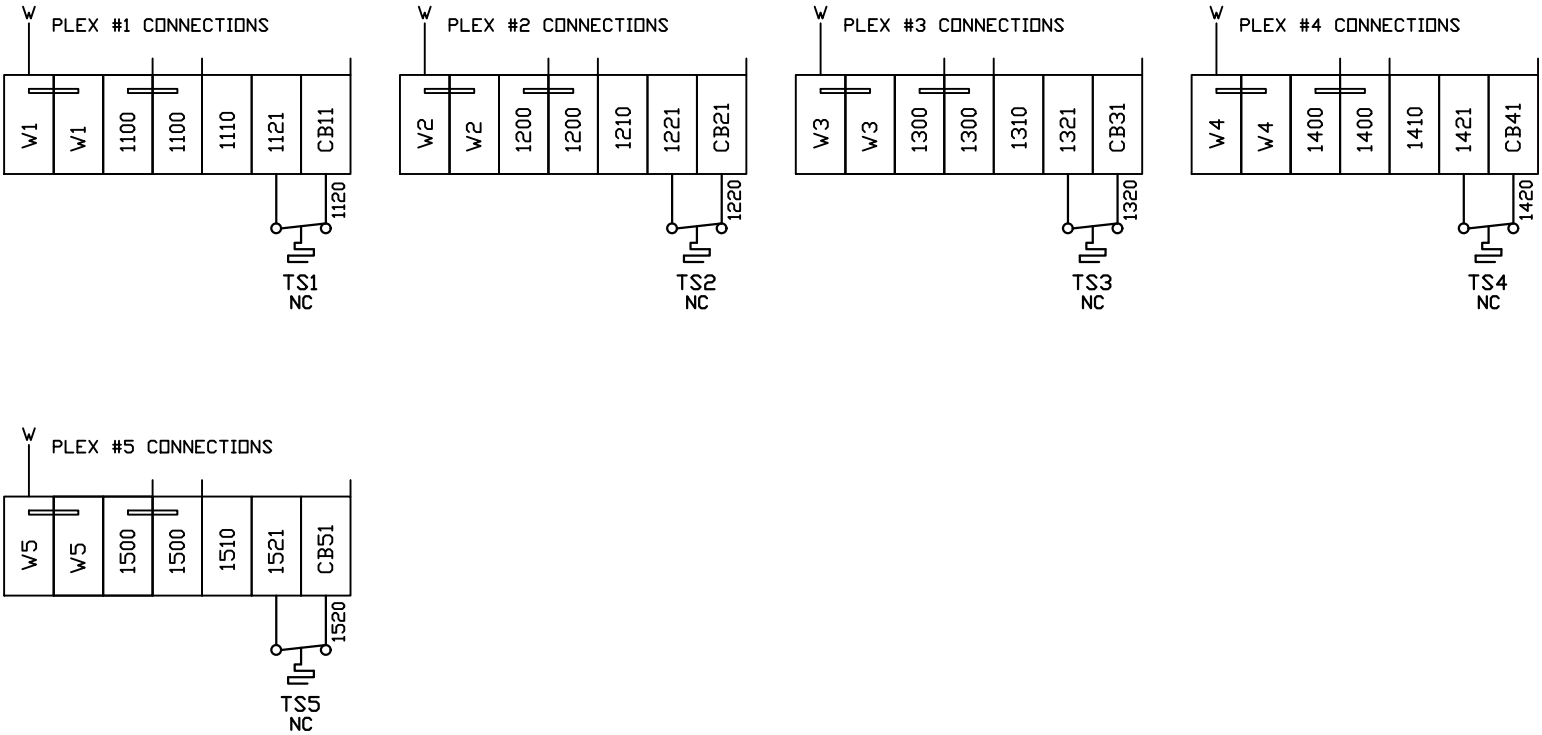
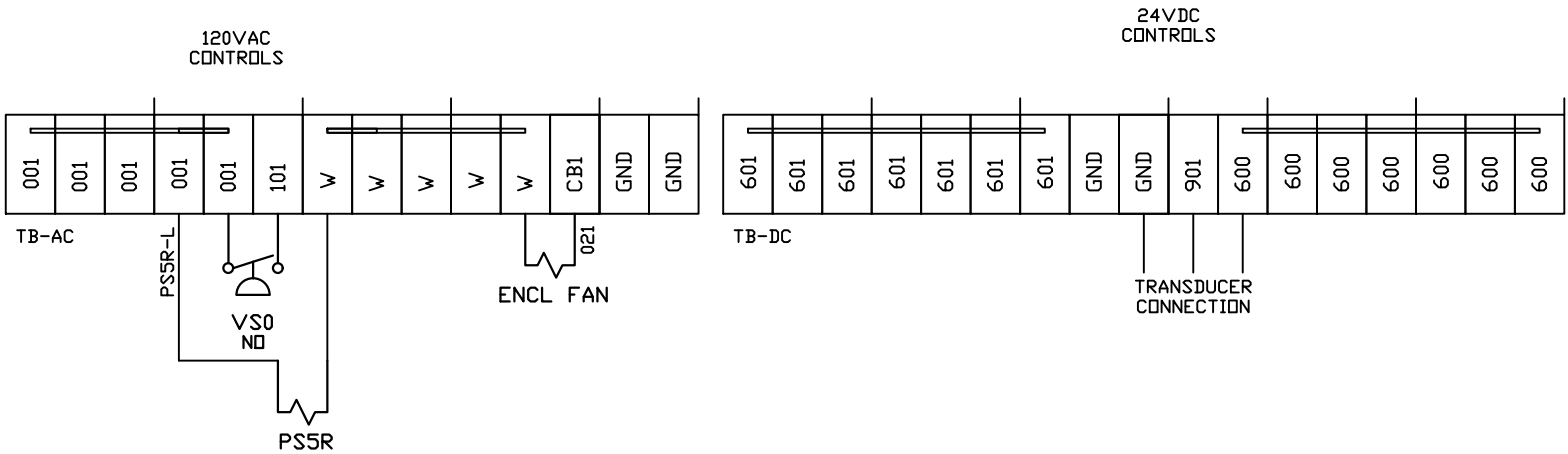
DWG. NO.
PXMI-V569

SHEET	SIZE
W-10	B

TERMINAL BLOCKS



DRY CONTACTS FOR CUSTOMER
REMOTE ALARM CONNECTION



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

REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	02/13/14	PXEC0066	AJL	KMD
G-1	ADD CB TO EXTERNAL DEVICES & DISCONNECT TO INPUT POWER	07/15/24	PXEC0628	SEK	JRD
H-1	PLEX ISOLATION UPDATES	08/04/25	PXEC0639	WMM	SEK

OPTIONAL:

POWEREX™

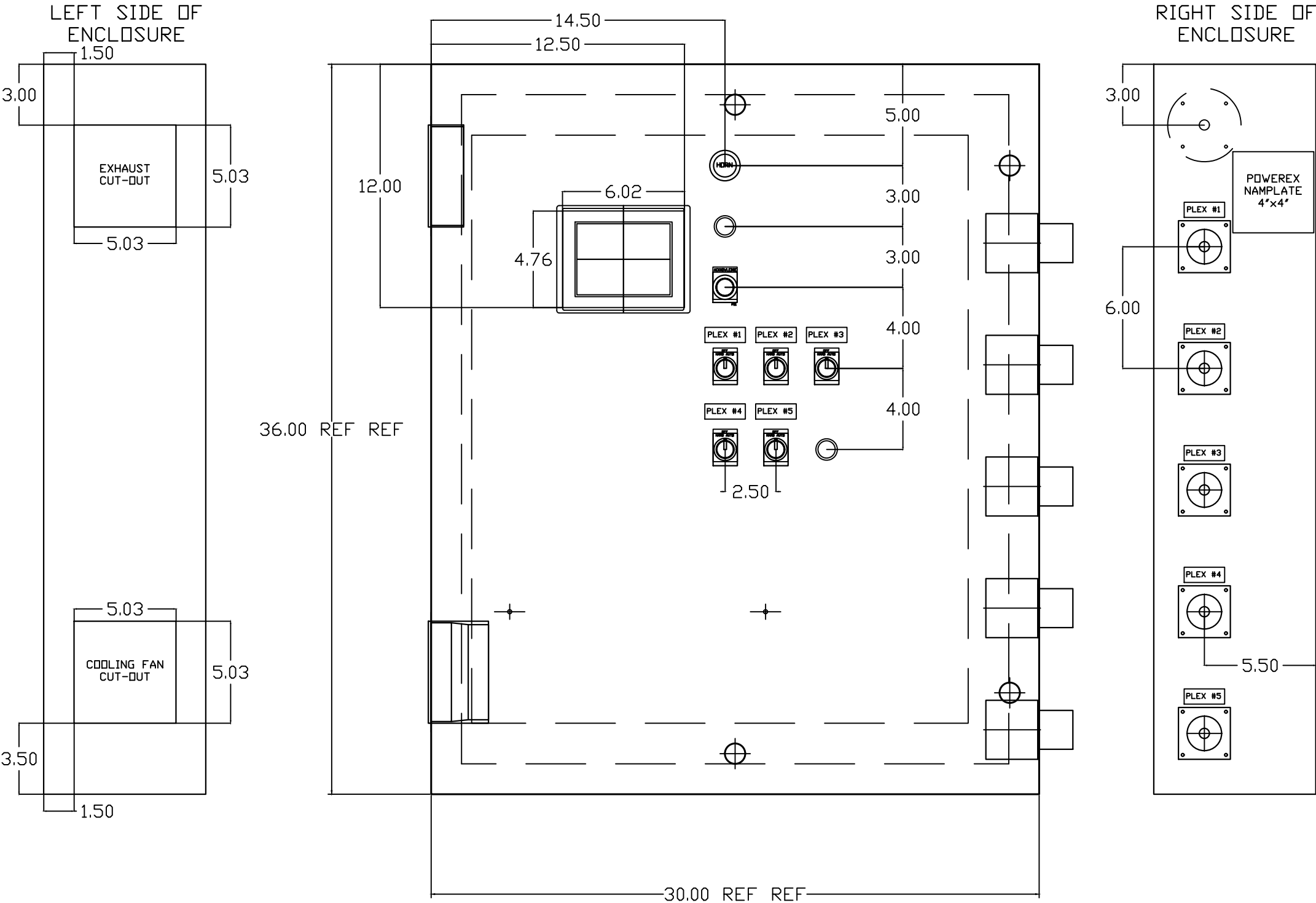
CONFIDENTIAL DISCLOSURE:
This drawing is the property of POWEREX, INC. of
Marnon Specialty Products and is subject to
return on demand. Its contents are confidential
and must not be copied or submitted to outside
parties for use or examination.

DRAWN BY	CHECKED BY	ENGINEERING APPROVAL
AJL	KMD	KMD
02/13/14	02/13/14	02/13/14

PANEL TYPE		
MED VACUUM PENTAPLEX HMI, NFPA		
DWG. TYPE WIRING		
DWG. NO. PXMI-V569		

SHEET	SIZE
W-11	B

REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	02/13/14	PXEC0066	AJL	KMD
G-1	ADD CB TO EXTERNAL DEVICES & DISCONNECT TO INPUT POWER	07/15/24	PXEC0628	SEK	JRD
H-1	PLEX ISOLATION UPDATES	08/04/25	PXEC0639	WMM	SEK



OPTIONAL:

CONFIDENTIAL DISCLOSURE:

This drawing is the property of POWEREX, INC. of Marnon 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
AJL	KMD	KMD
02/13/14	02/13/14	02/13/14

PANEL TYPE

MED VACUUM PENTAPLEX
HMI, NFPA

DWG. TYPE LAYOUT

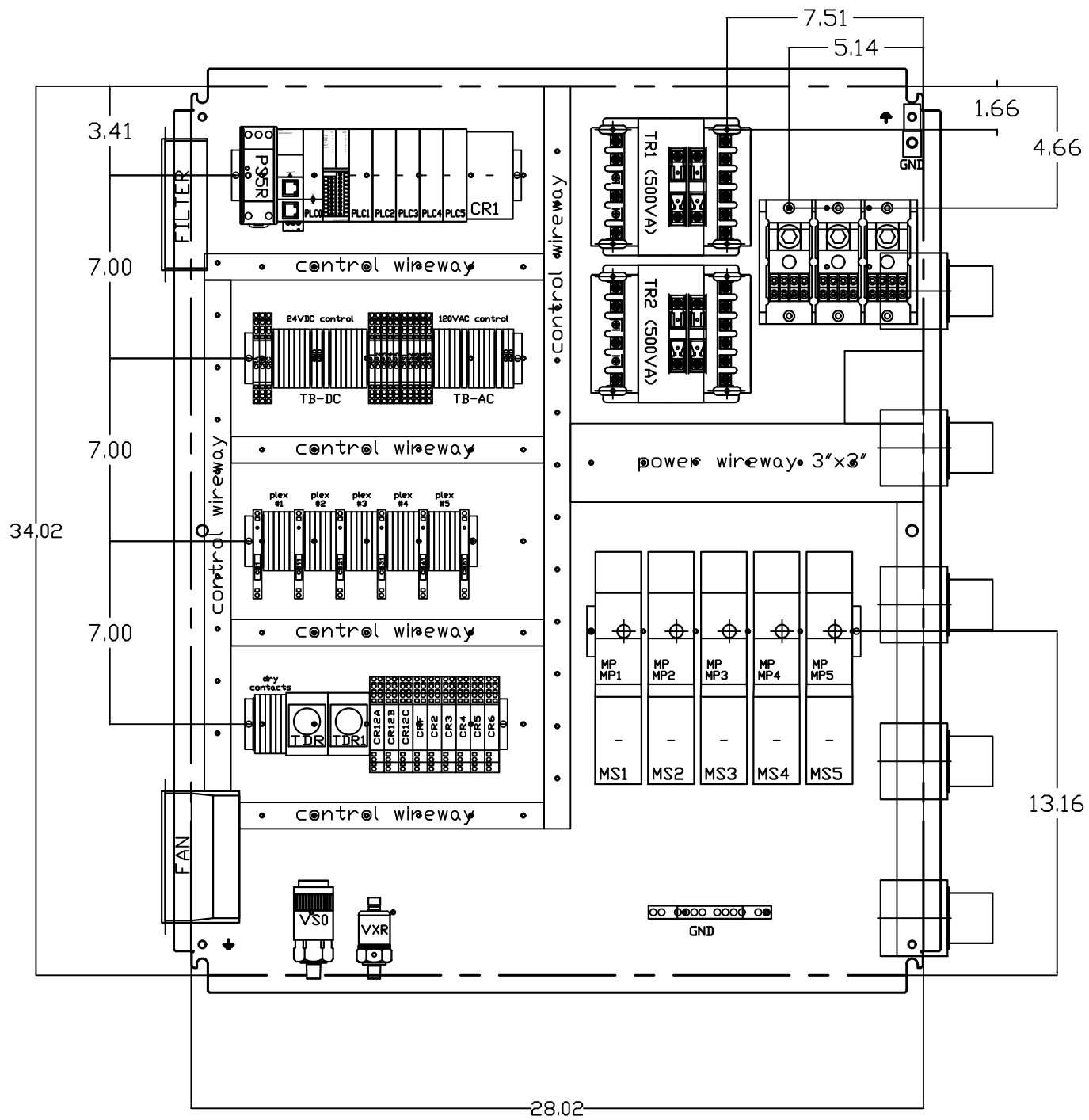
DWG. NO.

PXMI-V569

SHEET	SIZE
LA-1	B

PXMI-V569

REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	02/13/14	PXEC0066	AJL	KMD
G-1	ADD CB TO EXTERNAL DEVICES & DISCONNECT TO INPUT POWER	07/15/24	PXEC0628	SEK	JRD
H-1	PLEX ISOLATION UPDATES	08/04/25	PXEC0639	WMM	SEK



OPTIONAL:

CONFIDENTIAL DISCLOSURE:
This drawing is the property of POWEREX, INC. of
Marnon 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
AJL	KMD	KMD
02/13/14	02/13/14	02/13/14

PANEL TYPE

MED VACUUM PENTAPLEX
HMI, NFPA

DWG. TYPE LAYOUT

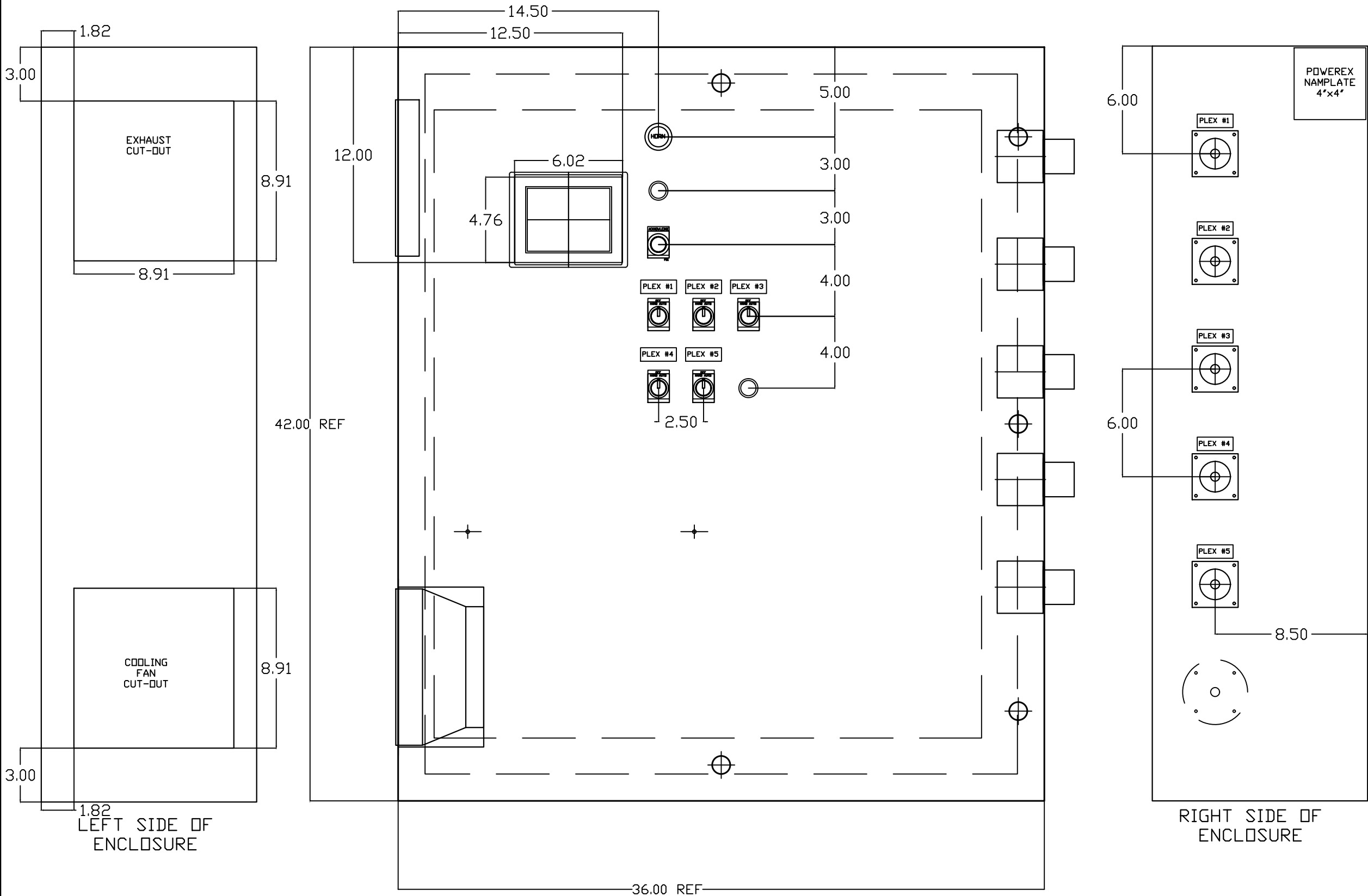
DWG. NO.

PXMI-V569

SHEET	SIZE
LA-2	B

PXMI-V569

REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	02/13/14	PXEC0066	AJL	KMD
G-1	ADD CB TO EXTERNAL DEVICES & DISCONNECT TO INPUT POWER	07/15/24	PXEC0628	SEK	JRD
H-1	PLEX ISOLATION UPDATES	08/04/25	PXEC0639	WMM	SEK



OPTIONAL:

CONFIDENTIAL DISCLOSURE:
This drawing is the property of POWEREX, INC. of
Marmion 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
AJL	KMD	KMD
02/13/14	02/13/14	02/13/14

PANEL TYPE

MED VACUUM PENTAPLEX
HMI, NFPA

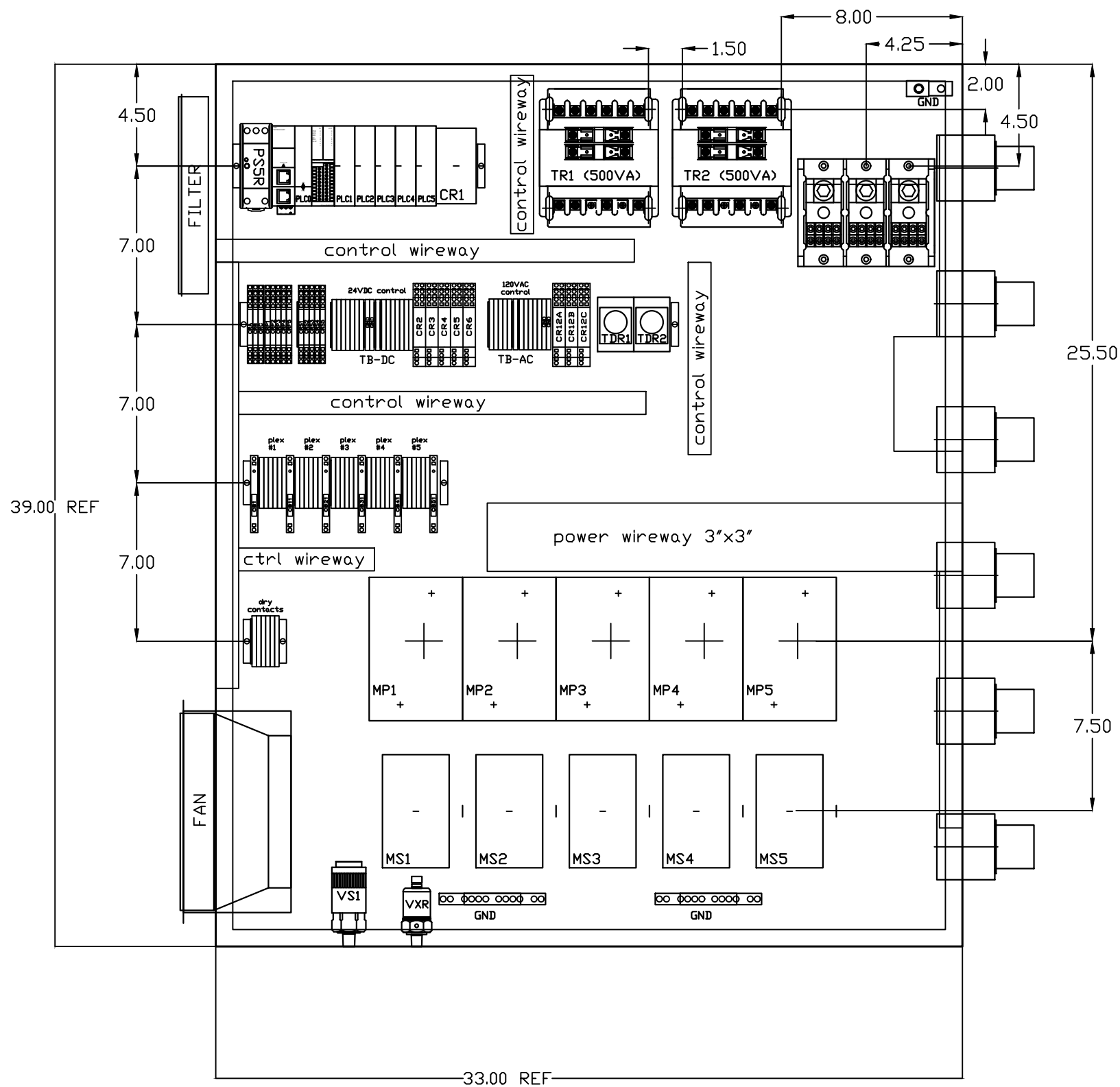
DWG. TYPE LAYOUT

DWG. NO. PXMI-V569

SHEET	SIZE
LB-1	B

PXMI-V569

REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	02/13/14	PXEC0066	AJL	KMD
G-1	ADD CB TO EXTERNAL DEVICES & DISCONNECT TO INPUT POWER	07/15/24	PXEC0628	SEK	JRD
H-1	PLEX ISOLATION UPDATES	08/04/25	PXEC0639	WMM	SEK



OPTIONAL:

CONFIDENTIAL DISCLOSURE:
This drawing is the property of POWEREX, INC. of
Marnon 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
AJL	KMD	KMD
02/13/14	02/13/14	02/13/14

PANEL TYPE

MED VACUUM PENTAPLEX
HMI, NFPA

DWG. TYPE LAYOUT

DWG. NO. PXMI-V569

SHEET	SIZE
LB-2	B

PXMI-V569

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)	02AB	3.4	19	30	25	25
	12AB	5	27	40	35	35
	22AB	6	32	45	40	45
	32AB	9	47	70	60	70
	42AB	15	77	110	90	100
	52AB	14.8	76	110	90	100
	72AB	26.2	133	200	175	175
	A2AB	33.4	169	250	200	225
	F2AB *	40.4	204	300	250	300
	G2AB *	62	312	450	400	450
	H2AB *	68	342	500	400	450
230V (3Ø)	03AB	3.4	19	30	25	25
	13AB	4.4	24	35	30	35
	23AB	5.4	29	40	35	40
	33AB	7.8	41	60	50	60
	43AB	13.2	68	100	80	90
	53AB	12.9	66.5	100	80	90
	73AB	20.9	106.5	150	125	150
	A3AB	26.2	133	200	175	175
	F3AB *	38.8	196	300	225	300
	G3AB *	52	262	400	350	350
	H3AB *	62	312	450	400	450
460V (3Ø)	04AB	2	12	20	15	20
	14AB	2.2	13	20	15	20
	24AB	2.7	15.5	25	20	25
	34AB	3.9	21.5	30	25	30
	44AB	6.6	35	50	40	50
	54AB	6.5	34.5	50	40	45
	74AB	10.5	54.5	80	70	80
	A4AB	13.1	67.5	100	80	90
	F4AB	19.4	99	150	125	150
	G4AB	26	132	200	175	175
	H4AB *	31	157	225	200	225
380V (3Ø)	08AB	N/A				
	18AB	2.5	14.5	20	20	20
	28AB	3.1	17.5	25	20	25
	38AB	4.6	25	35	30	35
	48AB	7.3	38.5	60	45	50
	58AB	7.7	40.5	60	50	60
	78AB	11.9	61.5	90	80	80
	A8AB	12.8	66	100	80	90
	F8AB	22.3	113.5	175	150	150
	G8AB *	28	142	200	175	200
	H8AB *	37	187	300	225	250

NOTES:

1. RECOMMENDED TIGHTENING TORQUES FOR WIRE TERMINALS:
208-575 VOLT POWER 35 POUND INCHES
120 VOLT POWER AND CONTROL VOLTAGE 15 POUND INCHES
2. PANEL GROUND MUST BE CONNECTED TO EARTH GROUND
3. 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 CLASS J TIME DELAY FUSES, PANEL SCCR IS 65kA. OTHERWISE, PANEL SCCR IS 5kA.
4. ALL WIRES MUST BE LABELED ON BOTH ENDS
5. TRANSFORMER IS SIZED FOR LOADS SHOWN ON DRAWING ONLY. DO NOT CONNECT ANY OTHER DEVICES
6. △ -INDICATES A DRAWING WIRE CONNECTION TO ANOTHER PAGE.
7. 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.

CONTROL TRANSFORMERS - 500VA						WIRE TYPE TABLE			
REPLACEMENT		208	230	460	575				
FUSE TYPE		VOLT	VOLT	380 VOLT	VOLT	VOLTAGE	WIRE NUMBERS	GAUGE	COLOR
FU1,2A	FNQR	6A	5A	5A	4A	120VAC	001-599,1100+	16-18AWG	RED/BLK
FU1,2B						0VAC	W	16-18AWG	WHT/BLK
FU3A,B	FNM	7A	7A	7A	7A	24VDC	600-1099	16-18AWG	PURPLE
						0VDC	601	16-18AWG	PURPLE
SEE XFRMR FOR CONNECTIONS						GND	-	VARIES	GREEN
						CUSTOMER SUPPLY	01-99	16-18AWG	YELLOW

SEQUENCE OF OPERATIONS

During normal operation the PBMI controller will signal the Lead pump to run when vacuum drops to lead cut-in set-point and run for a 10-minute minimum period before stopping when the vacuum reaches the lead cut-out set-point. Lead alternation to the next pump, will occur every 30-minutes. 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. 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.

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.

REV

REVISION

DATE

ECN

NAME

CHKD

B-1

RELEASE TO PRODUCTION

09/01/11

22545

BFH

CHR

C-1

FORMAT UPDATE

03/01/13

PXEC0038

BFH

CHR

OPTIONAL:

208V/230V/380V/460V



CONFIDENTIAL DISCLOSURE:

This drawing is the property of the CAMPBELL GROUP of the SCOTT FETZER COMPANY and 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

BFH

CHR

CHR

09/01/11

09/20/11

09/20/11

PANEL TYPE

BUSCH LUBRICATED VANE 3PH 5-PLEX PANEL DATA

DWG. TYPE

MISC

DWG. NO.

DATA TABLE

SHEET

D-1

SIZE

B

5-PLEX PANEL DATA

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)	22CB	6.6	35.0	50	45	50
	32CB	9.4	49.0	70	60	70
	42CB	10.4	54.0	80	70	80
	52CB	12.4	64.0	90	80	90
	62CB	16.4	84.0	125	100	110
	72CB	21.4	109.0	175	150	150
	A2CB	27.2	138.0	200	175	200
	F2CB *	40.5	204.5	300	250	300
230V (3Ø)	23CB	5.6	30.0	45	35	40
	33CB	8.4	44.0	70	60	60
	43CB	9.2	48.0	70	60	70
	53CB	11.4	59.0	90	70	80
	63CB	15.2	78.0	110	90	110
	73CB	17.2	88.0	125	110	125
	A3CB	23.6	120.0	175	150	175
	F3CB *	35.0	177.0	250	225	250
460V (3Ø)	24CB	2.8	16.0	25	20	20
	34CB	4.2	23.0	35	30	30
	44CB	4.6	25.0	35	30	35
	54CB	5.7	30.5	45	35	40
	64CB	7.6	40.0	60	50	60
	74CB	8.6	45.0	70	60	60
	A4CB	11.3	58.5	90	70	80
	F4CB	17.5	89.5	125	110	125
380V (3Ø) 50HZ	28CB	2.6	15.0	20	20	20
	38CB	3.8	21.0	30	25	30
	48CB	5.0	27.0	40	35	35
	58CB	5.1	27.5	40	35	35
	68CB	8.6	45.0	70	60	60
	78CB	9.3	48.5	70	60	70
	A8CB	10.5	54.5	80	70	70
	F8CB	14.5	74.5	110	90	100

- 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 CLASS J TIME DELAY 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.

CONTROL TRANSFORMERS - 500VA						WIRE TYPE TABLE			
REPLACEMENT		208	230	460	575				
FUSE TYPE		VOLT	VOLT	VOLT	VOLT	VOLTAGE	WIRE NUMBERS	GAUGE	COLOR
FU1,2A	FNQR	6A	5A	5A	4A	120VAC	001-599,1100+	16-18AWG	RED/BLK
FU1,2B						0VAC	W	16-18AWG	WHT/BLK
						24VDC	600-1099	16-18AWG	PURPLE
FU3A,B	FNM	7A	7A	7A	7A	0VDC	601	16-18AWG	PURPLE
						GND	-	VARIES	GREEN
						CUSTOMER SUPPLY	01-99	16-18AWG	YELLOW
SEE XFRMR FOR CONNECTIONS									

SEQUENCE OF OPERATIONS

During normal operation the PBMI controller will signal the Lead pump to run when vacuum drops to lead cut-in set-point and run for a 10-minute minimum period before stopping when the vacuum reaches the lead cut-out set-point. Lead alternation to the next pump, will occur every 30-minutes. 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. 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.

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.

REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	09/01/11	22545	BFH	CHR
C-1	CHANGED 10HP FLA VALUES	09/14/12	PXEC0013	BFH	CHR
D-1	FORMAT UPDATE	03/01/13	PXEC0038	BFH	CHR
E-1	UPDATED 52CB FLA DATA	01/22/14	PXEC0067	DMS	KMD
E-2	UPDATED 32CB FLA DATA	04/11/14	PXEC0067	DMS	KMD
F-1	UPDATED DATA - NEW NEMA MOTORS	06/14/16	PXEC0149	KMD	DMS

OPTIONAL:

200V/230V/380V/460V



CONFIDENTIAL DISCLOSURE:
This drawing is the property of the CAMPBELL GROUP of the SCOTT FETZER COMPANY and 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
BFH	CHR	CHR
09/01/11	09/20/11	09/20/11

PANEL TYPE
BUSCH CLAW VACUUM
3PH 5-PLEX PANEL DATA

DWG. TYPE MISC

DWG. NO.
DATA TABLE

SHEET D-1	SIZE B
--------------	-----------

5-PLEX PANEL DATA