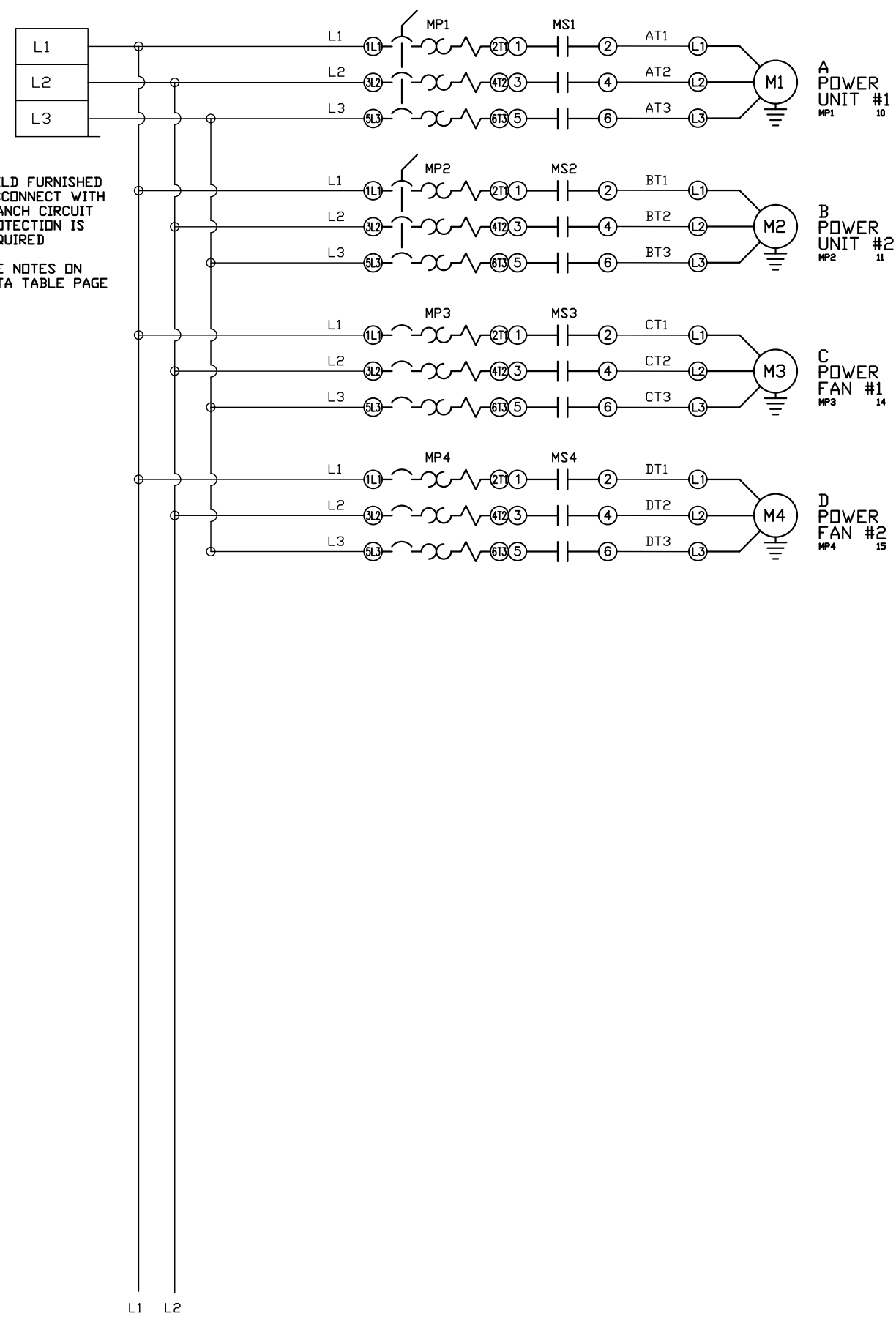


REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	01/25/17	PXEC0099	AKH	KMD
C-1	ADDED LUBRICATED VANE LAYOUT AND DATASHEET	10/08/18	PXEC0229	JLM	AJL



FIELD FURNISHED DISCONNECT WITH BRANCH CIRCUIT PROTECTION IS REQUIRED
SEE NOTES ON DATA TABLE PAGE

OPTIONAL:



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DRAWN BY	CHECKED BY	ENGINEERING APPROVAL
AKH	KMD	AKH
01/25/17	01/25/17	01/25/17

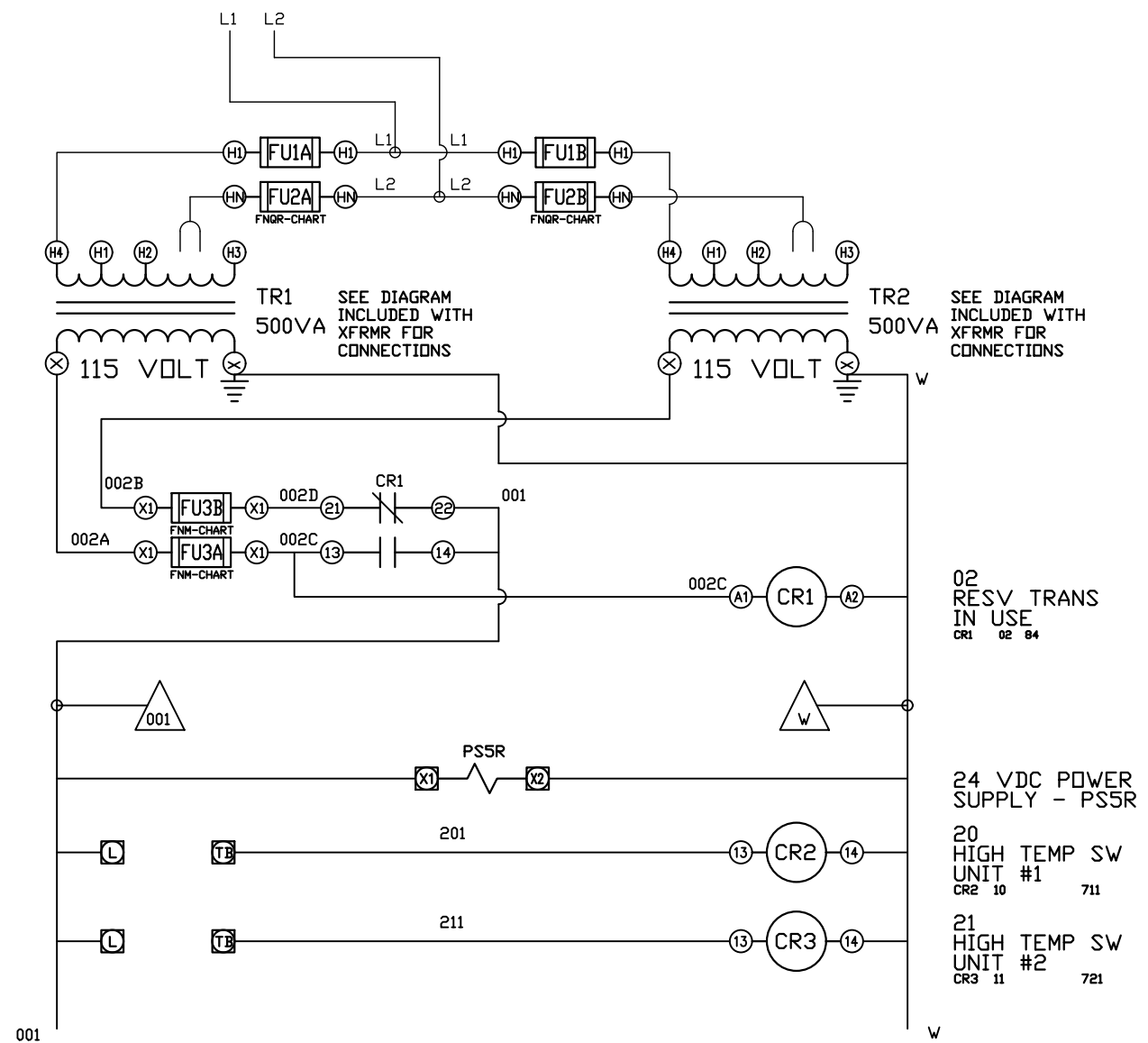
PANEL TYPE
DUPLEX MED VAC ENCLOSURE
NFPA, SUB

DWG. TYPE WIRING

DWG. NO.
PXMI-VES269

SHEET	SIZE
W-1	B

REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	01/25/17	PXEC0099	AKH	KMD
C-1	ADDED LUBRICATED VANE LAYOUT AND DATASHEET	10/08/18	PXEC0229	JLM	AJL



OPTIONAL:

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DRAWN BY	CHECKED BY	ENGINEERING APPROVAL
AKH	KMD	AKH
01/25/17	01/25/17	01/25/17

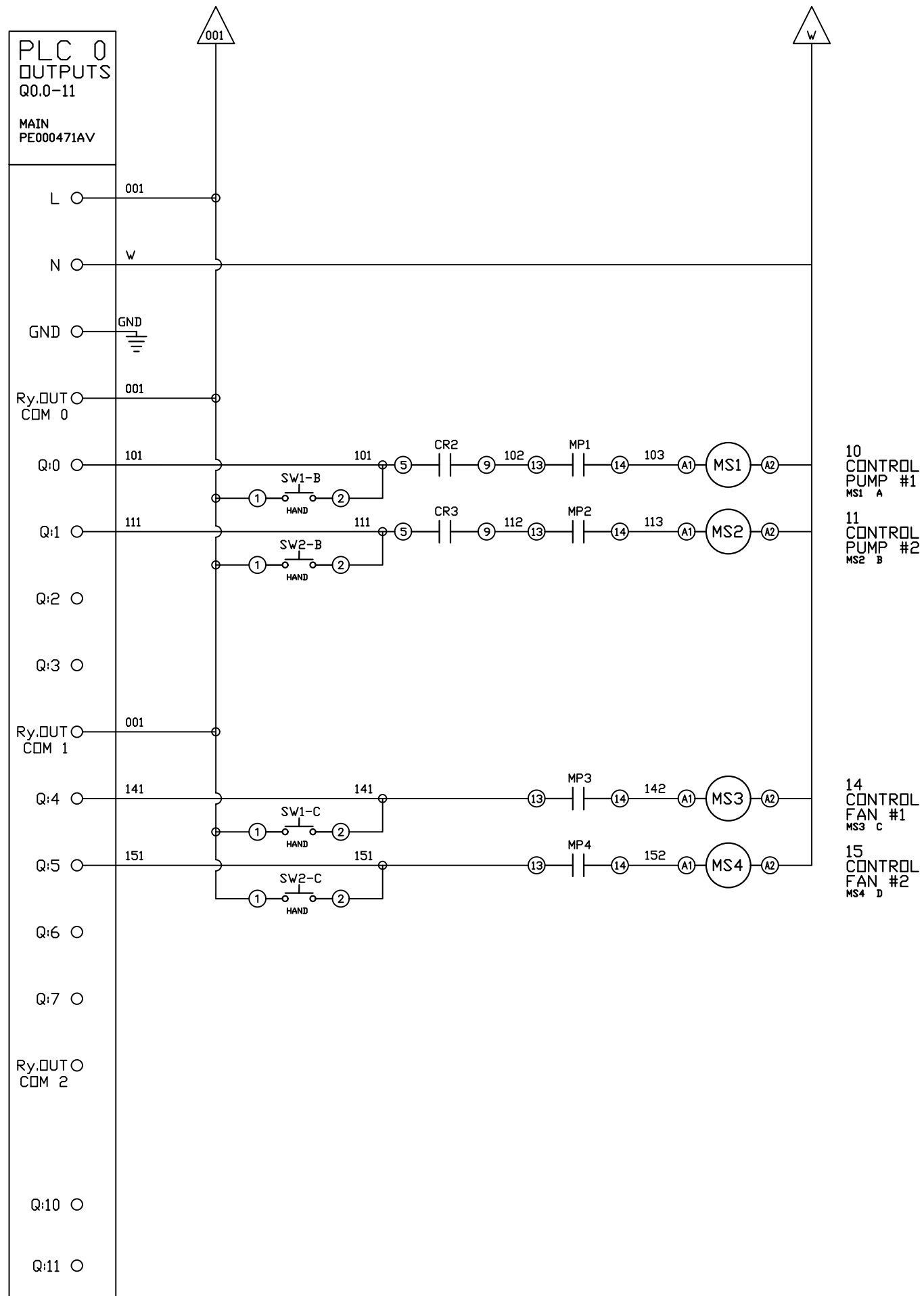
PANEL TYPE
DUPLEX MED VAC ENCLOSURE
NFWA, SUB

DWG. TYPE WIRING

DWG. NO.
PXMI-VES269

SHEET	SIZE
W-2	B

REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	01/25/17	PXEC0099	AKH	KMD
C-1	ADDED LUBRICATED VANE LAYOUT AND DATASHEET	10/08/18	PXEC0229	JLM	AJL



OPTIONAL:

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DRAWN BY	CHECKED BY	ENGINEERING APPROVAL
AKH	KMD	AKH
01/25/17	01/25/17	01/25/17

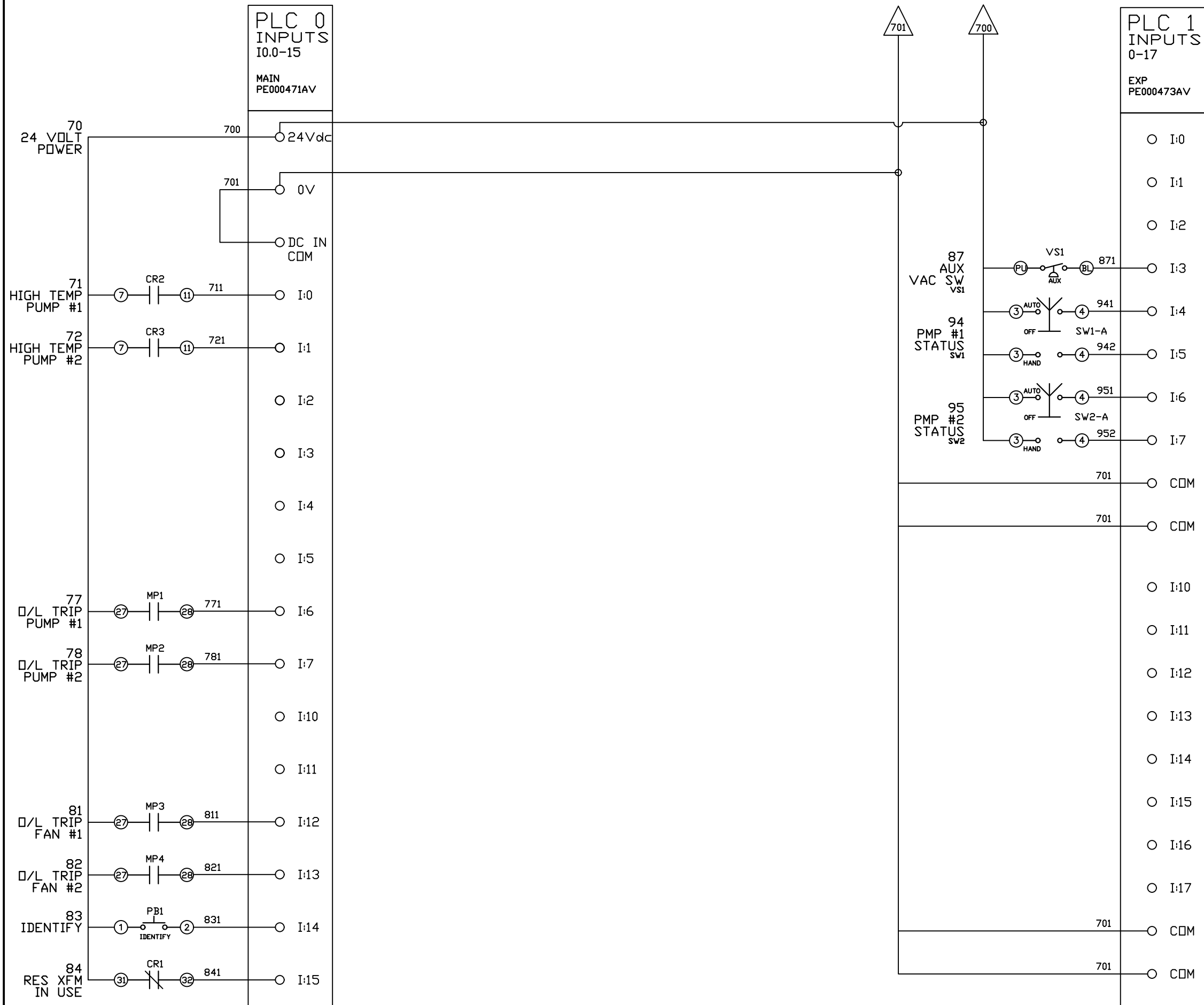
PANEL TYPE
DUPLEX MED VAC ENCLOSURE
NFWA, SUB

DWG. TYPE WIRING

DWG. NO.
PXMI-VES269

SHEET	SIZE
W-3	B

REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	01/25/17	PXEC0099	AKH	KMD
C-1	ADDED LUBRICATED VANE LAYOUT AND DATASHEET	10/08/18	PXEC0229	JLM	AJL



OPTIONAL:

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DRAWN BY	CHECKED BY	ENGINEERING APPROVAL
AKH	KMD	AKH
01/25/15	01/25/17	01/25/17

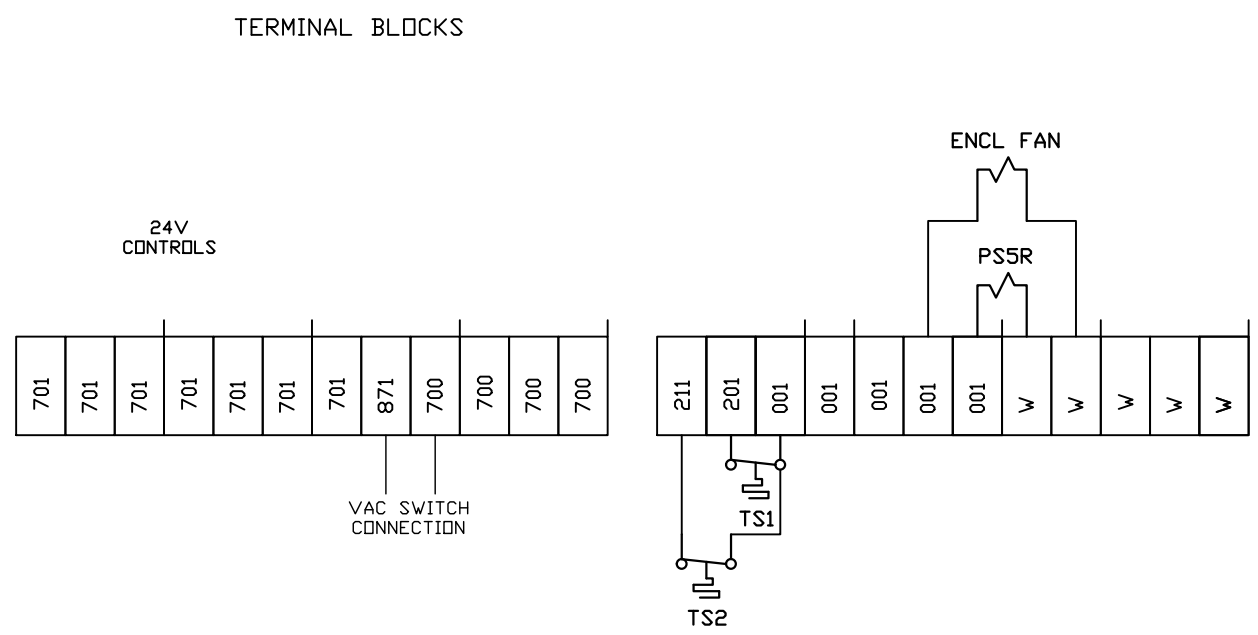
PANEL TYPE
DUPLEX MED VAC ENCLOSURE
NFPA, SUB

DWG. TYPE WIRING

DWG. NO.
PXMI-VES269

SHEET	SIZE
W-4	B

REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	01/25/17	PXEC0099	AKH	KMD
C-1	ADDED LUBRICATED VANE LAYOUT AND DATASHEET	10/08/18	PXEC0229	JLM	AJL



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
AKH	KMD	AKH
01/25/17	01/25/17	01/25/17

PANEL TYPE
DUPLEX MED VAC ENCLOSURE
NFPA, SUB

DWG. TYPE WIRING

DWG. NO.
PXMI-VES269

SHEET	SIZE
W-5	B

TABLE 1

PANEL DATA 3 ϕ - 50/60 Hz 500VA CONTROL CIRCUIT									
PANEL PART NUMBER	MOTOR SIZE EACH	POWER (V/PH)	PUMP MOTOR LOAD EACH (FLA)	FAN MOTOR LOAD EACH (FLA)	PANEL LOAD TOTAL (FLA)	(B) BRANCH CIRCUIT PROTECTION - PROVIDED BY INSTALLER			
						NON-TIME DELAY FUSE	TIME-DELAY FUSE	INVERSE-TIME CIRCUIT BREAKER	
PBMIVES26952CR	5	208V/3 ϕ	13.0	1.2	30.4	60A	45A	60A	
PBMIVES26972CR	7.5	208V/3 ϕ	19.0	1.2	42.4	90A	60A	80A	
PBMIVES269A2CR	10	208V/3 ϕ	25.0	1.2	54.4	110A	80A	100A	
PBMIVES269F2CR	15	208V/3 ϕ	37.5	1.2	79.4	175A	110A	150A	
PBMIVES26953CR	5	230V/3 ϕ	12.0	1.4	28.8	60A	40A	50A	
PBMIVES26973CR	7.5	230V/3 ϕ	18.0	1.4	40.8	80A	60A	70A	
PBMIVES269A3CR	10	230V/3 ϕ	23.0	1.4	50.8	100A	70A	90A	
PBMIVES269F3CR	15	230V/3 ϕ	35.0	1.4	74.8	150A	110A	150A	
PBMIVES26954CR	5	460V/3 ϕ	6.0	0.7	15.4	30A	25A	30A	
PBMIVES26974CR	7.5	460V/3 ϕ	9.0	0.7	21.4	45A	30A	40A	
PBMIVES269A4CR	10	460V/3 ϕ	11.5	0.7	26.4	60A	40A	45A	
PBMIVES269F4CR	15	460V/3 ϕ	17.5	0.7	38.4	80A	60A	70A	

NOTE- ADJUST OVERCURRENT PROTECTION DEVICE NOT TO EXCEED 115% OF MOTOR NAMEPLATE FLA VALUE

REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	01/25/17	PXEC0099	AKH	KMD
C-1	ADDED LUBRICATED VANE LAYOUT AND DATASHEET	10/08/18	PXEC0229	JLM	AJL

CONTROL TRANSFORMERS - 500VA					
FUSE		208	230	460	575
TYPE		VOLT	VOLT	380 VOLT	VOLT
FU1,2A FU1,2B	FNQR	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	16-18AWG	RED/BLK
0VAC	W	16-18AWG	WHT/BLK
24VDC	600-999	16-18AWG	PURPLE
0VDC	701	16-18AWG	PURPLE
GND	-	VARIES	GREEN
CUSTOMER SUPPLY	01-99	16-18AWG	YELLOW

OPTIONAL:



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DRAWN BY	CHECKED BY	ENGINEERING APPROVAL
AKH	KMD	AKH
01/25/17	01/25/17	01/25/17

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 WITH SHORT CIRCUIT PROTECTION FOR THIS ELECTRICAL ASSEMBLY. SEE TABLE 1-B/R ON DATA TABLE PAGE FOR REQUIREMENTS.
- ALL WIRES MUST BE LABELED ON BOTH ENDS
- TRANSFORMER IS SIZED FOR LOADS SHOWN ON DRAWING ONLY. DO NOT CONNECT ANY OTHER DEVICES
- Δ -INDICATES A DRAWING WIRE CONNECTION TO ANOTHER PAGE.

FIELD WIRING NOTES ON PAGE W-6

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.

PANEL TYPE
RIETSCHLE CLAW VAC
3PH SIMPLEX PANEL DATA

DWG. TYPE DATA

DWG. NO.
PXMI-VES269

SHEET	SIZE
D-1	B

TABLE 1

PANEL DATA 3Ø - 50/60 Hz 500VA CONTROL CIRCUIT						(B) BRANCH CIRCUIT PROTECTION - PROVIDED BY INSTALLER		
PANEL PART NUMBER	MOTOR SIZE EACH	POWER (V/PH)	PUMP MOTOR LOAD EACH (FLA)	FAN MOTOR LOAD EACH (FLA)	PANEL LOAD TOTAL (FLA)	NON-TIME DELAY FUSE	TIME-DELAY FUSE	INVERSE-TIME CIRCUIT BREAKER
PBMIVES26942AJ	4	208V/3Ø	15.2	1.2	34.8	70A	50A	60A
PBMIVES26952AJ	5	208V/3Ø	15.2	1.2	34.8	70A	50A	60A
PBMIVES26972AJ	7.5	208V/3Ø	22.2	1.2	48.8	100A	70A	90A
PBMIVES269A2AJ	10	208V/3Ø	29.5	1.2	63.4	125A	90A	110A
PBMIVES26943AJ	4	230V/3Ø	13.0	1.4	30.8	60A	45A	55A
PBMIVES26953AJ	5	230V/3Ø	13.0	1.4	30.8	60A	45A	55A
PBMIVES26973AJ	7.5	230V/3Ø	20.0	1.4	44.8	90A	65A	80A
PBMIVES269A3AJ	10	230V/3Ø	26.0	1.4	56.8	125A	80A	110A
PBMIVES26944AJ	4	460V/3Ø	7.2	0.7	16.4	35A	25A	30A
PBMIVES26954AJ	5	460V/3Ø	7.2	0.7	16.4	35A	25A	30A
PBMIVES26974AJ	7.5	460V/3Ø	10.0	0.7	23.4	45A	35A	40A
PBMIVES269A4AJ	10	460V/3Ø	13.0	0.7	29.4	60A	40A	50A

NOTE- ADJUST OVERCURRENT PROTECTION DEVICE NOT TO EXCEED
115% OF MOTOR NAMEPLATE FLA VALUE

REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	01/25/17	PXEC0099	AKH	KMD
C-1	ADDED LUBRICATED VANE LAYOUT AND DATASHEET	10/08/18	PXEC0229	JLM	AJL

CONTROL TRANSFORMERS - 500VA					
FUSE		208	230	460	575
TYPE		VOLT	VOLT	VOLT	VOLT
FU1,2A FU1,2B	FNQR	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	16-18AWG	RED/BLK
0VAC	W	16-18AWG	WHT/BLK
24VDC	600-999	16-18AWG	PURPLE
0VDC	701	16-18AWG	PURPLE
GND	-	VARIES	GREEN
CUSTOMER SUPPLY	01-99	16-18AWG	YELLOW

OPTIONAL:



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DRAWN BY	CHECKED BY	ENGINEERING APPROVAL
AKH	KMD	AKH
01/25/17	01/25/17	01/25/17

PANEL TYPE
RIETSCHLE LUBE VANE VAC
3PH SIMPLEX PANEL DATA

DWG. TYPE DATA
DWG. NO.
PXMI-VES269

SHEET D-1
SIZE B

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
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- ALL WIRES MUST BE LABELED ON BOTH ENDS
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- △ -INDICATES A DRAWING WIRE CONNECTION TO ANOTHER PAGE.

FIELD WIRING NOTES ON PAGE W-6

SEQUENCE OF OPERATIONS

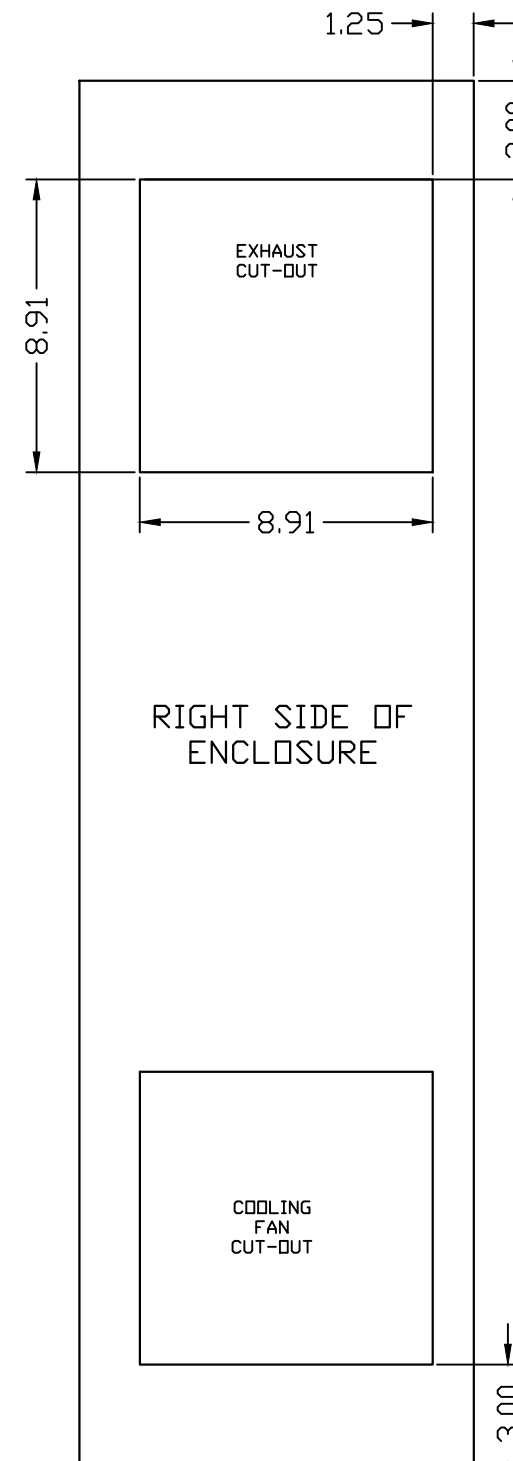
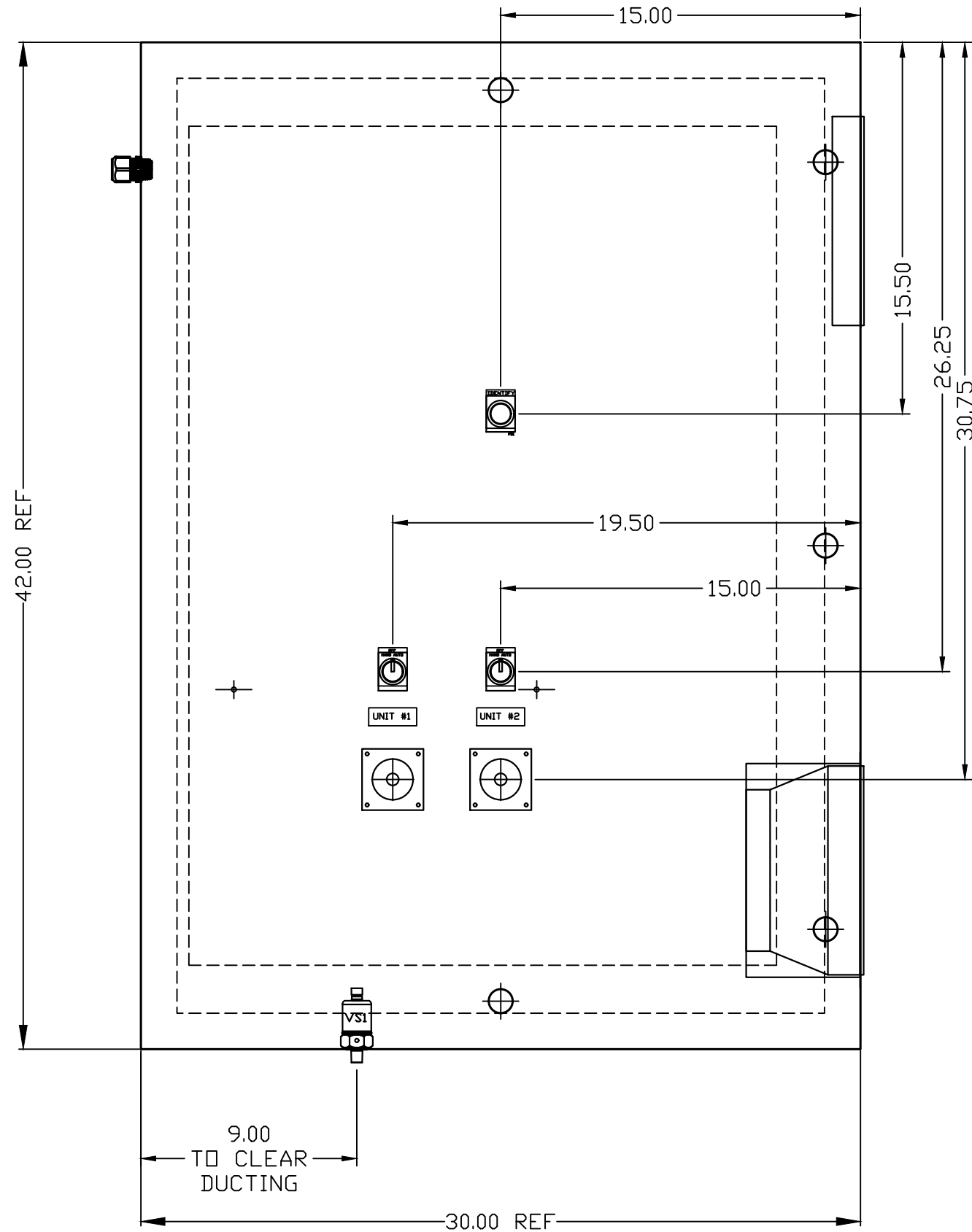
During normal operation the PBMI controller will signal the Lead pump to run when vacuum drops to lead cut-in set-point and run for a 10-minute minimum period before stopping when the vacuum reaches the lead cut-out set-point. Lead alternation to the next pump, will occur every 30-minutes. If demand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

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Additional information and descriptions can be accessed through the HMI "service info" screen by pressing Sequence of Operations button.

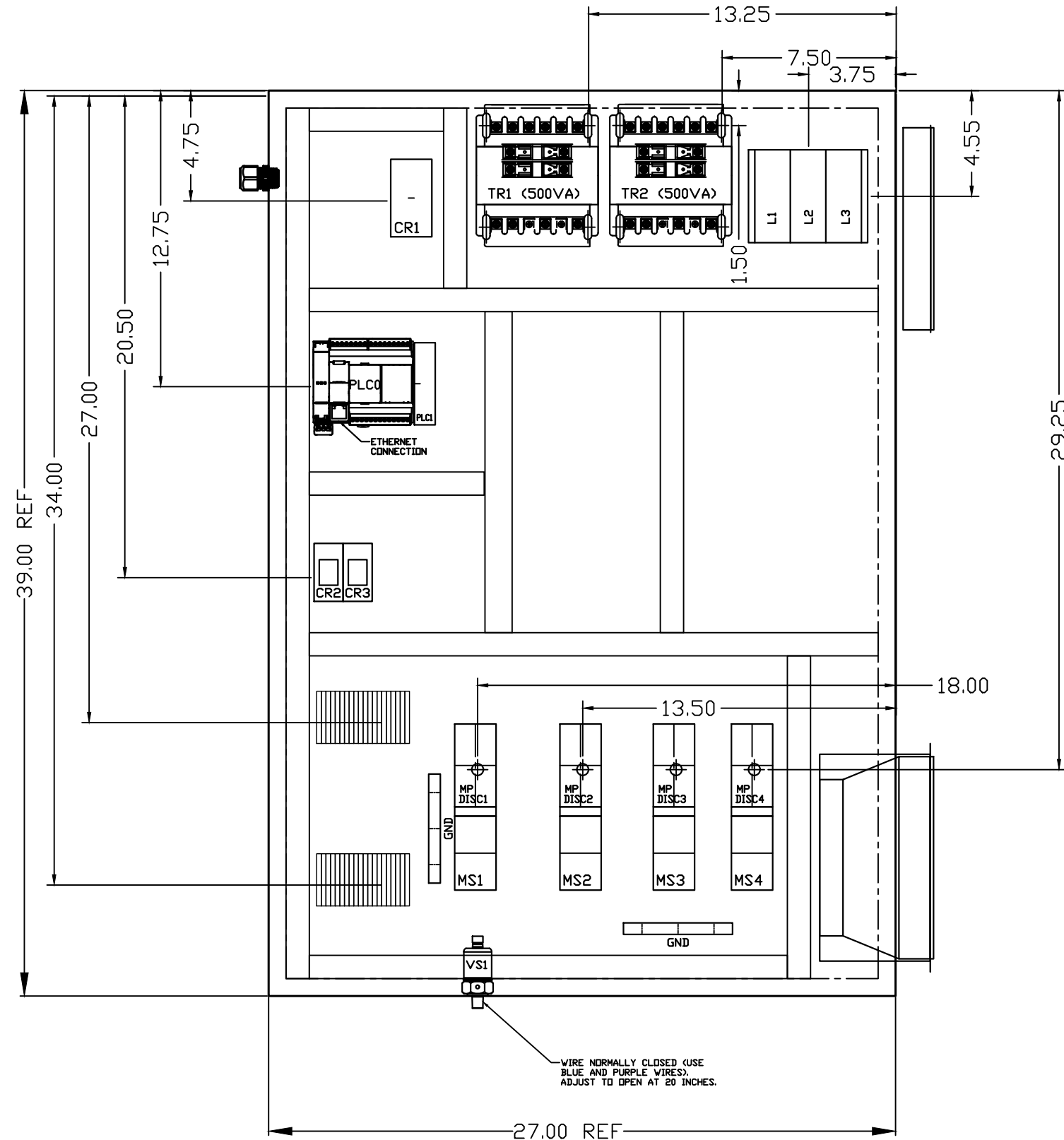
REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	01/25/17	PXEC0099	AKH	KMD
C-1	ADDED LUBRICATED VANE LAYOUT AND DATASHEET	10/08/18	PXEC0229	JLM	AJL

ETHERNET PASSTHROUGH CONNECTION. CONNECT TO ETHERNET RJ45 PORT ON PLC. DO NOT CONNECT TO SERIAL PORT.



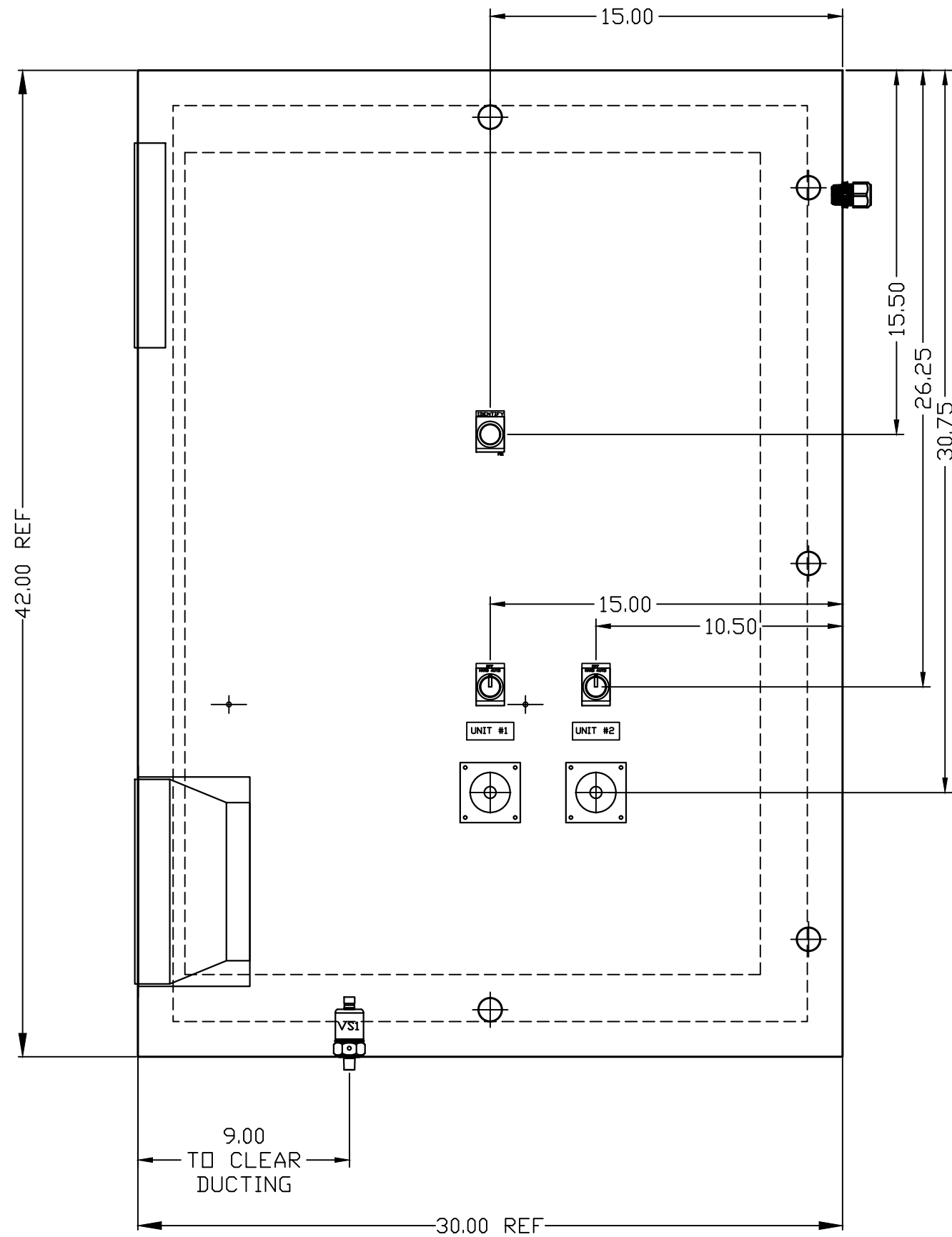
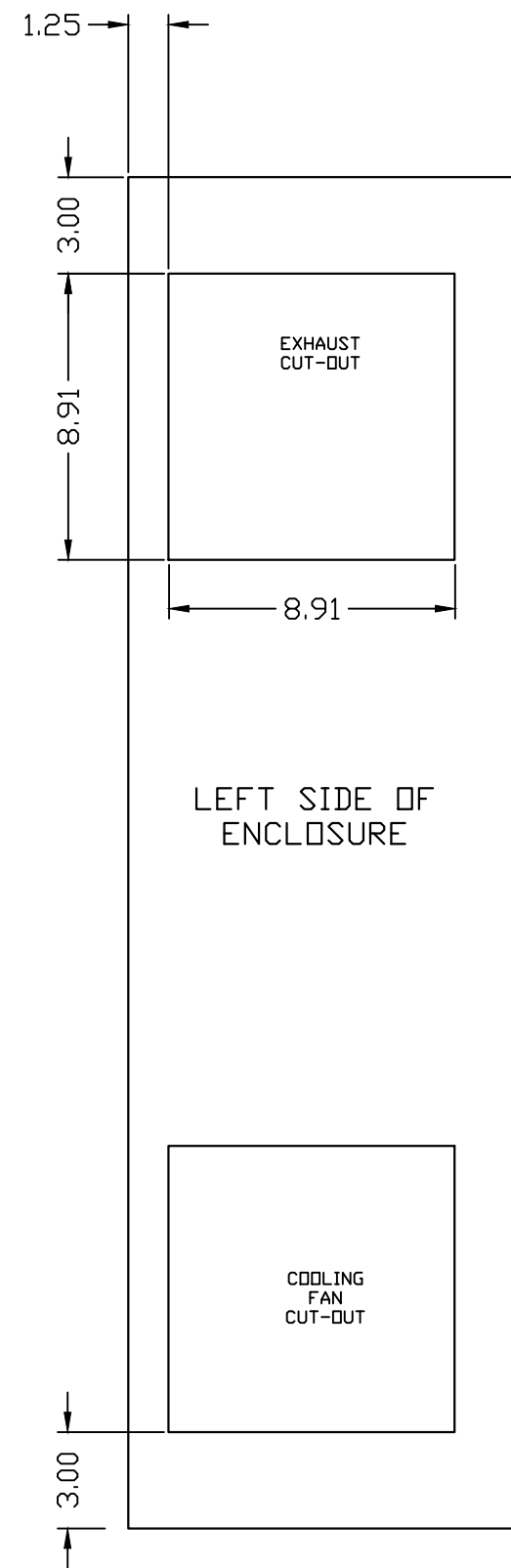
OPTIONAL:		
POWEREX PURE AIR TECHNOLOGY		
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DRAWN BY	CHECKED BY	ENGINEERING APPROVAL
AKH	KMD	AKH
01/25/17	01/25/17	01/25/17
PANEL TYPE		
DUPLEX MED VAC ENCLOSURE NFPA, SUB		
DWG. TYPE LAYOUT		
DWG. NO.		
PXMI-VES269		
SHEET		SIZE
L-1		B

REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	01/25/17	PXEC0099	AKH	KMD
C-1	ADDED LUBRICATED VANE LAYOUT AND DATASHEET	10/08/18	PXEC0229	JLM	AJL

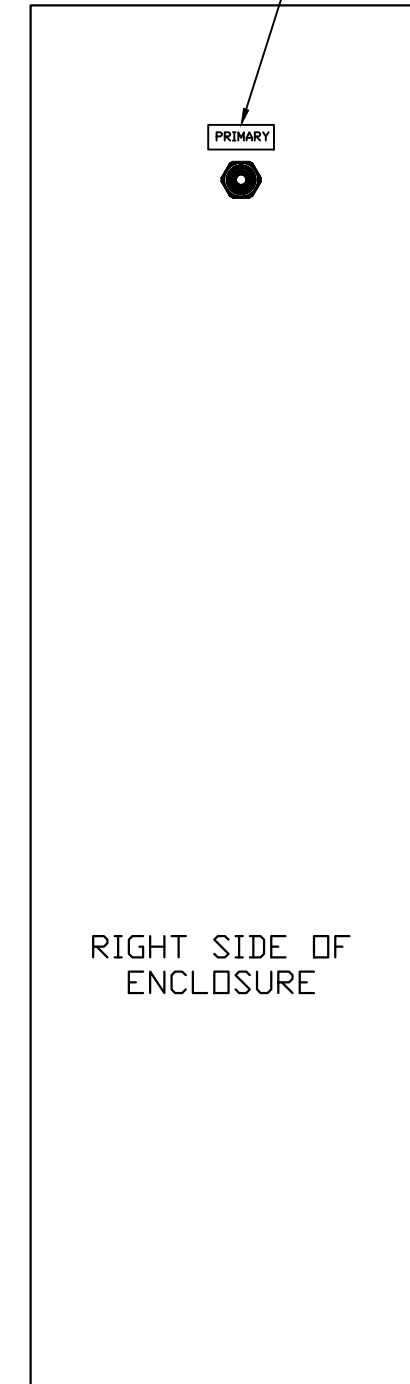


OPTIONAL:		
POWEREX PURE AIR TECHNOLOGY		
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DRAWN BY	CHECKED BY	ENGINEERING APPROVAL
AKH	KMD	AKH
01/25/17	01/25/17	01/25/17
PANEL TYPE		
DUPLEX MED VAC ENCLOSURE NFPA, SUB		
DWG. TYPE LAYOUT		
DWG. NO.		
PXMI-VES269		
SHEET		SIZE
L-2		B

REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	01/25/17	PXEC0099	AKH	KMD
C-1	ADDED LUBRICATED VANE LAYOUT AND DATASHEET	10/08/18	PXEC0229	JLM	AJL

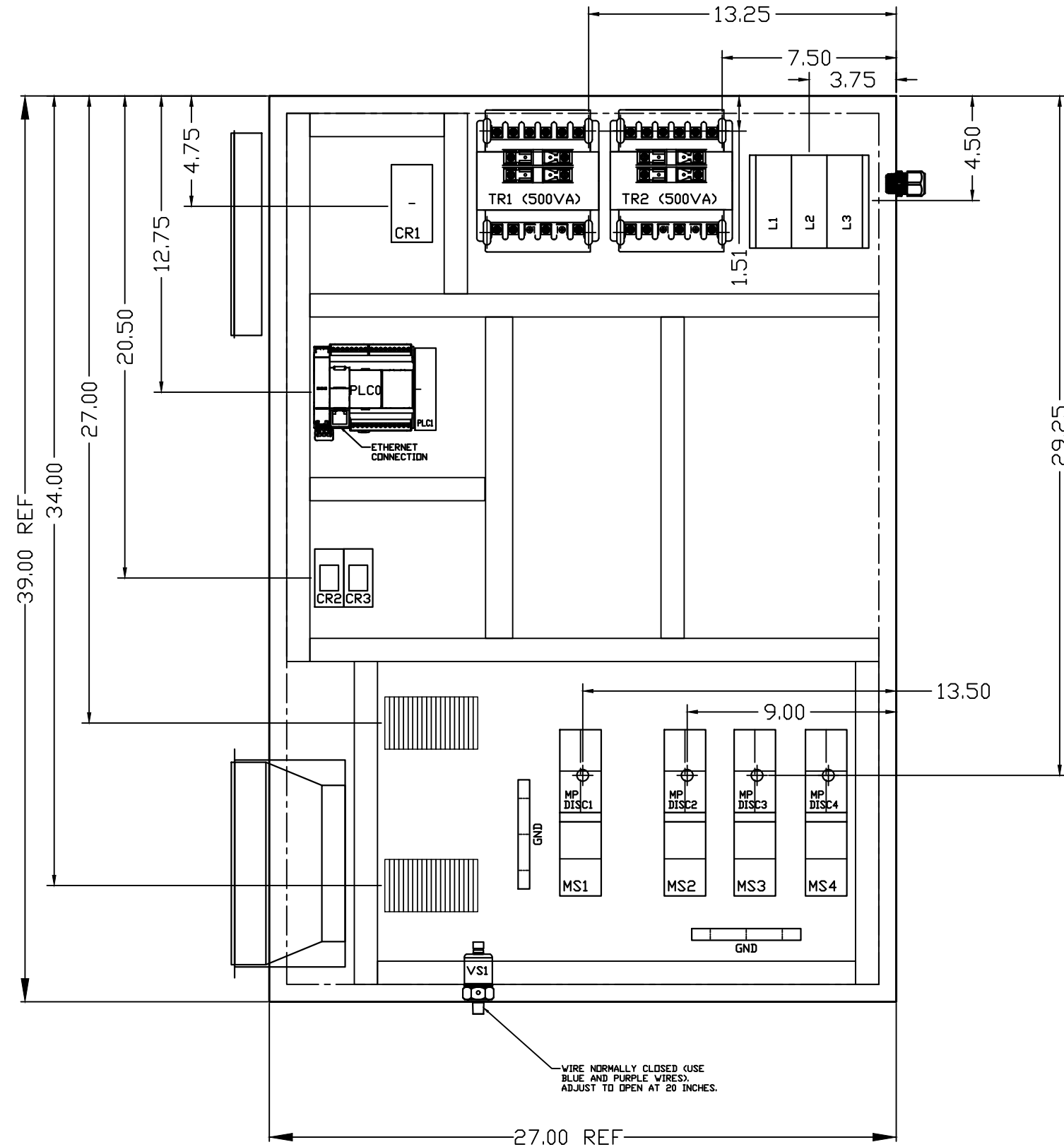


ETHERNET PASSTHROUGH CONNECTION. CONNECT TO ETHERNET RJ45 PORT ON PLC. DO NOT CONNECT TO SERIAL PORT.



OPTIONAL:		
POWEREX PURE AIR TECHNOLOGY		
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
AKH	KMD	AKH
01/25/17	01/25/17	01/25/17
PANEL TYPE		
DUPLEX MED VAC ENCLOSURE NFPA, SUB		
DWG. TYPE LAYOUT		
DWG. NO.		
PXMI-VES269		
SHEET		SIZE
L-1		B

REV	REVISION	DATE	ECN	NAME	CHKD
B-1	RELEASE TO PRODUCTION	01/25/17	PXEC0099	AKH	KMD
C-1	ADDED LUBRICATED VANE LAYOUT AND DATASHEET	10/08/18	PXEC0229	JLM	AJL



OPTIONAL:		
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DRAWN BY	CHECKED BY	ENGINEERING APPROVAL
AKH	KMD	AKH
01/25/17	01/25/17	01/25/17
PANEL TYPE		
DUPLEX MED VAC ENCLOSURE NFPA, SUB		
DWG. TYPE LAYOUT		
DWG. NO.		
PXMI-VES269		
SHEET		SIZE
L-2		B