

Vacuum System Electrical Diagrams (15-5032-1403 B)

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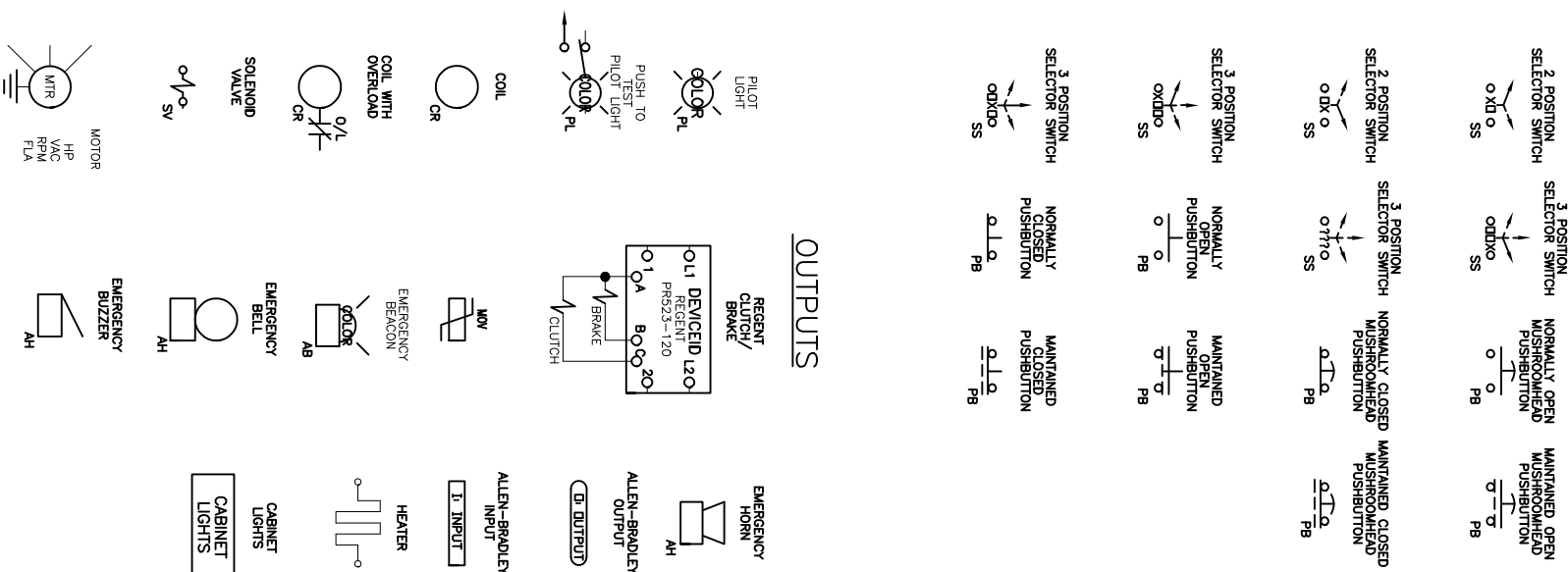
MODIFICATIONS RECORDING

ISSUE OF MODIF	DATE	WRITTEN BY	CHECKED BY	EVOLUTION OF THE DOCUMENT (Updated pages)	JUSTIFICATION OF THE MODIFICATION
Note: Recording of modifications are included in document					

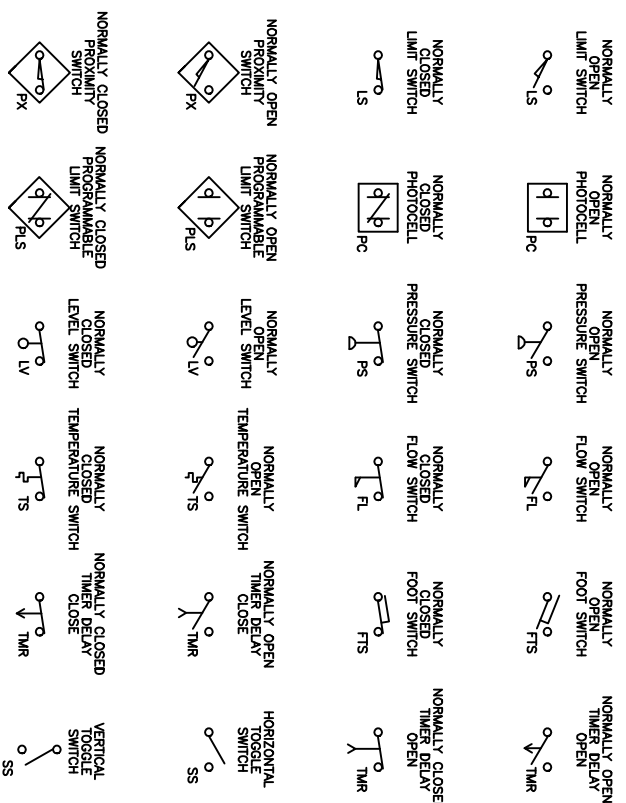
REVISIONS

CHG.	DATE	DWN.	CH'KD.	ENGR.	REV'D	DESCRIPTION
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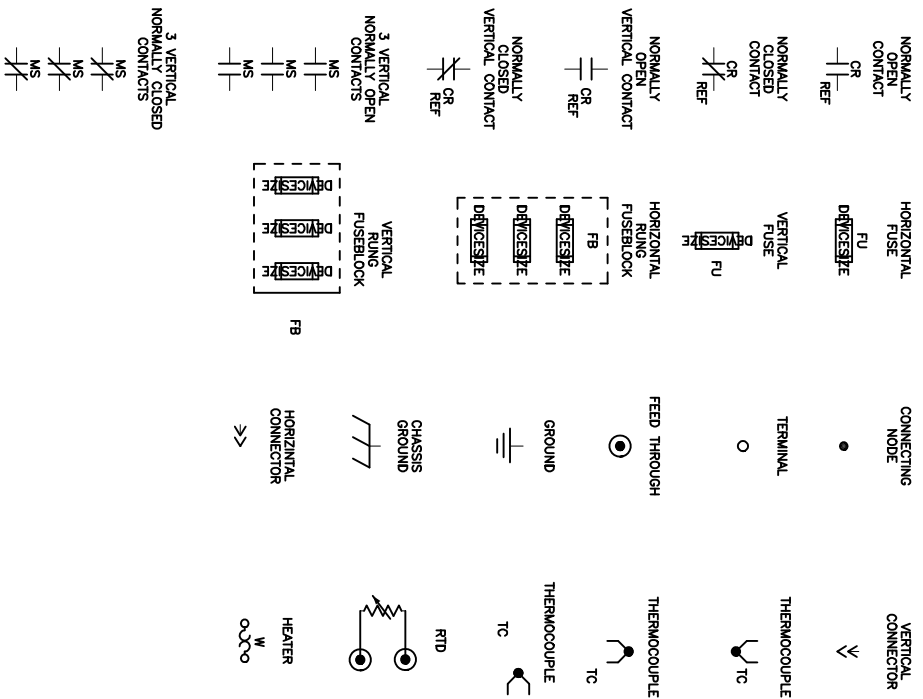
SELECTOR SWITCHES AND PUSHBUTTONS



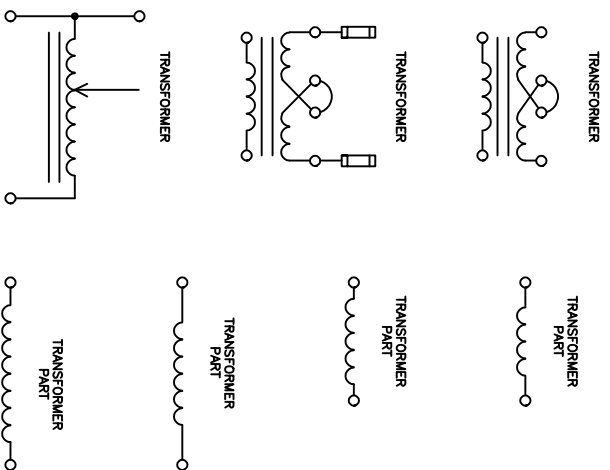
MISCELLANEOUS SWITCHES



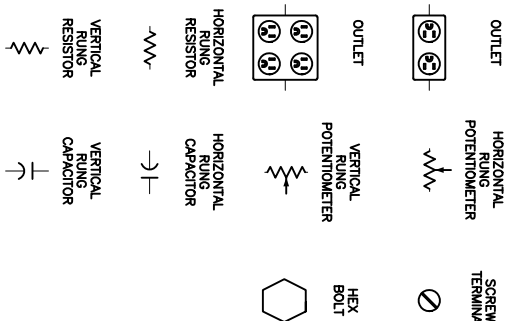
CONTACTS AND CONNECTORS



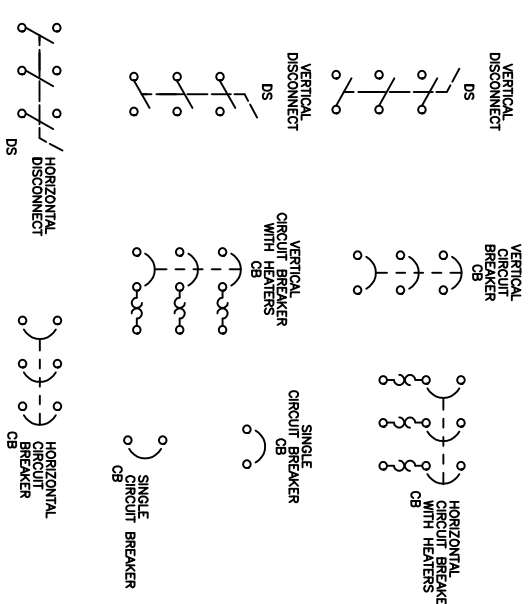
TRANSFORMERS



MISCELLANEOUS



DISCONNECTS AND CIRCUIT BREAKERS



GENERAL NOTES

- ALL 240/480 VAC WIRE IS TO BE #12 AWG BLACK UNLESS OTHERWISE NOTED.
- ALL 120 VAC POWER WIRING IS TO BE #12 AWG RED UNLESS OTHERWISE NOTED.
- ALL 120 VAC WIRING FED FROM 10A BREAKERS OR LESS TO BE #16 AWG RED UNLESS OTHERWISE NOTED. NEUTRALS TO BE WHITE.
- ALL 24 VDC OR LOWER WIRE IS TO BE #16 AWG BLUE WITH THE EXCEPTION OF WIRE TO CONNECTORS CAN BE 20 AWG UNLESS OTHERWISE NOTED ON PULL LIST.
- ALL PANEL WIRE IS TO BE TYPE MTW.
- ALL FIELD WIRE IS TO BE TYPE THHN.
- GROUNDS TO INDIVIDUAL DEVICES OMITTED FOR CLARITY. ALL WIRING TO COMPLY WITH NEC AND ANY GOVERNING BODY HAVING JURISDICTION.

(X) OR (XXX) INDICATES A TERMINAL NUMBER IN A VENDOR SUPPLIED ENCLOSURE OR AN INTERNAL FEED-THROUGH WIRE DESIGNATION

(XXXX) INDICATES TERMINAL BLOCK

(X) INDICATE EXTERNAL WIRE PULL OUTSIDE OF CONTROL ENCLOSURE. INTERNAL LETTER INDICATES PULL

(XXXX) INDICATES TERMINAL BLOCK

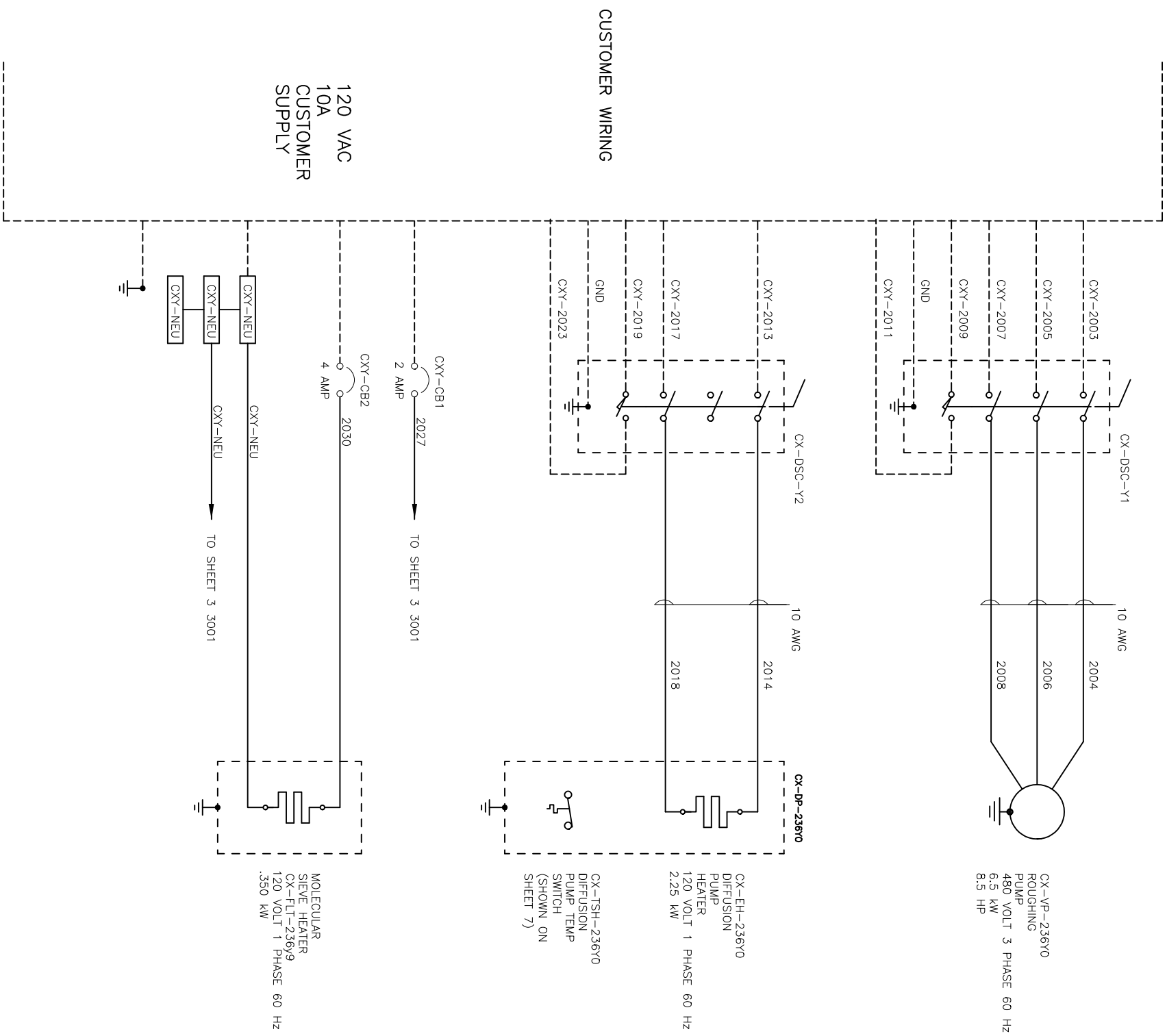
INFORMATION SHOWN ON THIS DRAWING IS PROPRIETARY AND IS NOT TO BE DISCLOSED OR TRANSMITTED TO UNAUTHORIZED PARTIES.

LBS		WORK ORDER		CONTRACT NO.		PART NUMBER		NO. RECD		NEXT ASSEMBLY		SIZE	
DRAWN		MJA		TOLERANCES		CHECKED		SPW		FRACTION		TITLE	
ENGINEER		MJA		.XXX		REVIEWED		SPW		ANGULAR		REL. DATE	
9/21/2016		SCALE		NONE		DRAWING NO.		15-5032-1403		CHG.		B	
<p>PHPK TECHNOLOGIES 2111 BUILDERS PLACE COLUMBUS, OHIO 43204 LCL5-II COLD BOX VACUUM SYSTEM ELECTRICAL LEGEND</p>													
DIMENSIONS ARE PROVIDED PRIOR TO SURFACE TREATMENTS UNLESS NOTED.													
SHEET 1 OF 7													

REVISIONS

CHG.	DATE	DWN.	CH'KD.	ENGR.	REV'D	DESCRIPTION
B	3/24/18	-	-	-		CORRECTED TYPOGRAPHICAL ERRORS

- 2001
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NOTES
 TAG DESIGNATION:
 CXX-(TAG #)
 FIRST "X" DESIGNATES SYSTEM (1 OR 2)
 FIRST "Y" DESIGNATES UPPER OR LOWER
 ("1" FOR UPPER "3" FOR LOWER COLD BOX)

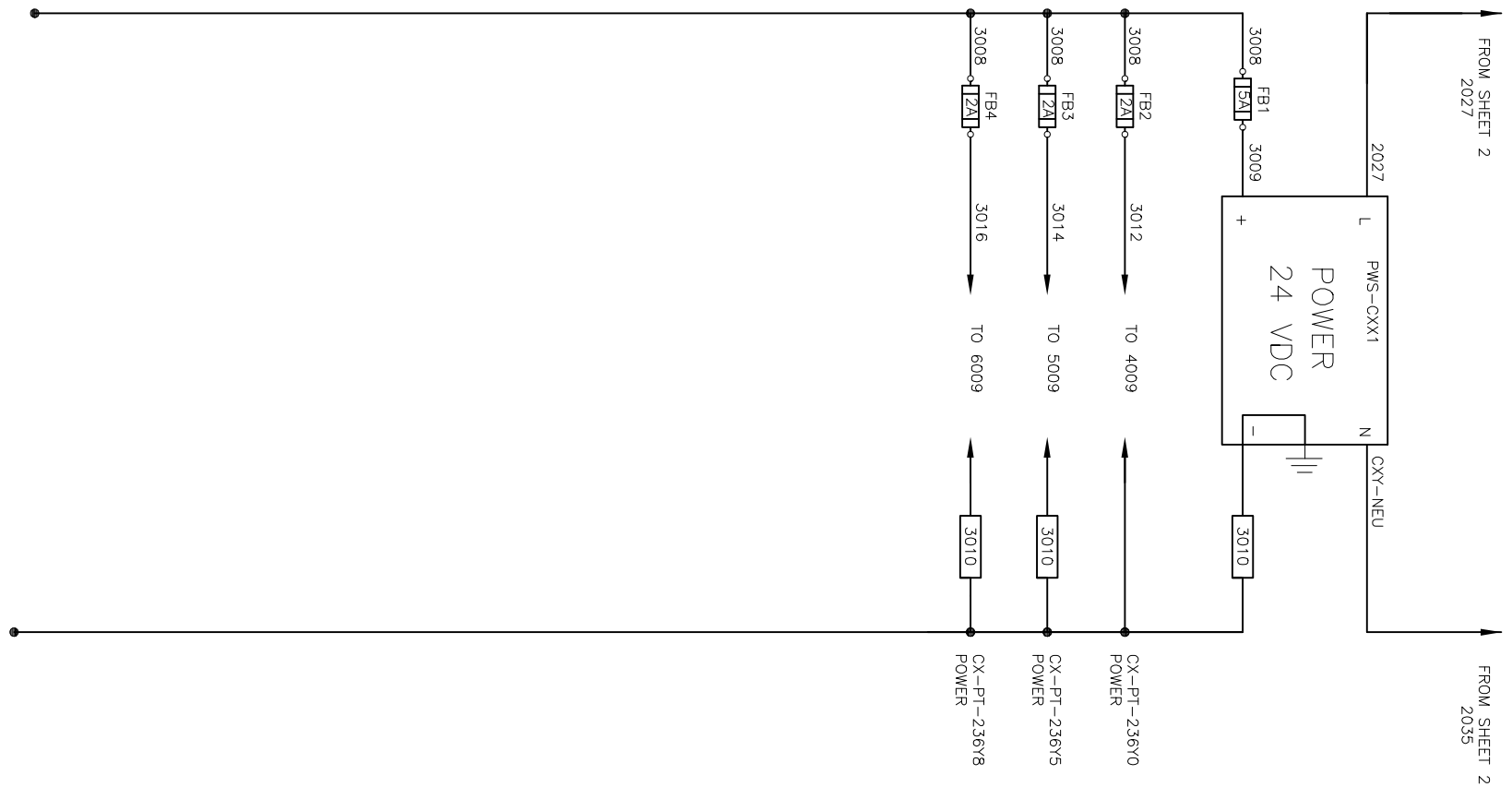
INFORMATION SHOWN ON THIS DRAWING IS PROPRIETARY AND THE SOLE PROPERTY OF PHPK AND IS NOT TO BE DISCLOSED OR TRANSMITTED TO UNAUTHORIZED PARTIES.

. LBS
WEIGHT	WORK ORDER	CONTRACT NO.	PART NUMBER	NO. REQ'D	NEXT ASSEMBLY
DRAWN	MJA	TOLERANCES	PHPK TECHNOLOGIES 2111 BUILDERS PLACE COLUMBUS, OHIO 43204		
CHECKED	SPW	FRACTION	LCIS-II COLD BOX VACUUM SYSTEM CUSTOMER CONNECTIONS		
ENGINEER	MJA	.XX	TITLE		
REVIEWED	SPW	.XXX	DRAWING NO.		
REL. DATE	9/21/2016	ANGULAR	SIZE		
DIMENSIONS ARE PROVIDED PRIOR TO SURFACE TREATMENTS UNLESS NOTED.			SCALE NONE		CHG.
			B		B
			15-5032-1403		B
			SHEET 2 OF 7		

REVISIONS

CHG.	DATE	DWN.	CH'KD.	ENGR.	REV'D	DESCRIPTION
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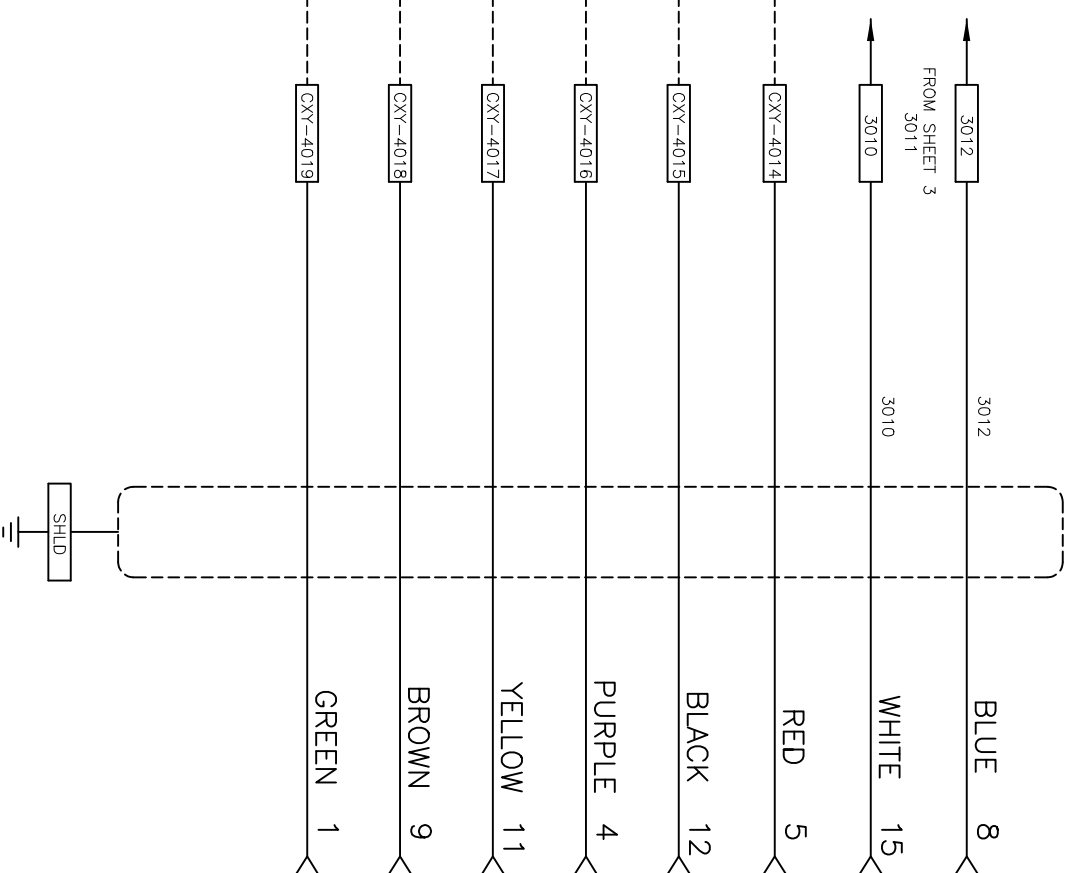
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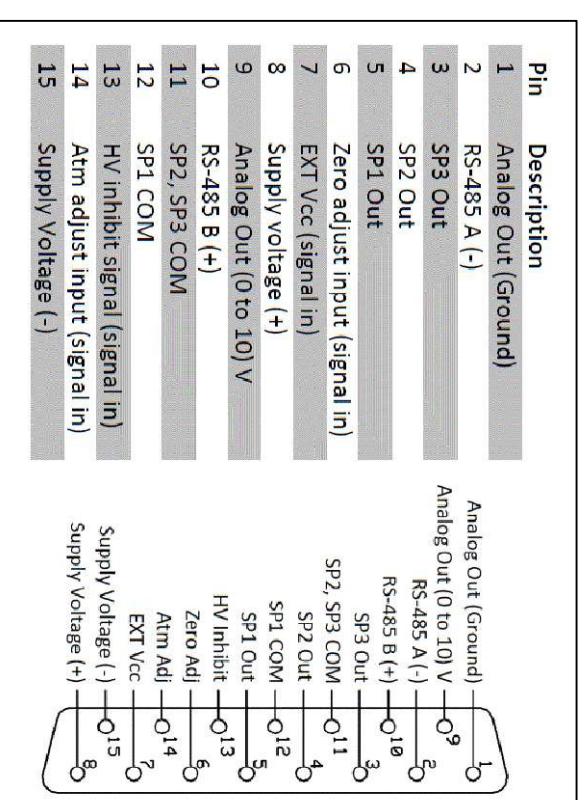
• LBS	WORK ORDER	CONTRACT NO.	PART NUMBER	NO. REQ'D	NEXT ASSEMBLY	SIZE
DRAWN	MJA	TOLERANCES	PHPK TECHNOLOGIES 2111 BUILDERS PLACE COLUMBUS, OHIO 43204 TITLE: LCIS-II COLD BOX VACUUM SYSTEM DC SUPPLY DRAWING NO. 15-5032-1403			
CHECKED	SPW	FRACTION	SIZE: B SCALE: NONE			
ENGINEER	MJA	.XX	CHG: B			
REVIEWED	SPW	.XXX	SHEET 3 OF 7			
REL. DATE	9/21/2016	ANGULAR	DIMENSIONS ARE PROVIDED PRIOR TO SURFACE TREATMENTS UNLESS NOTED.			

WIRE: ALPHA 1299C



CX-PT-236Y0

CHAMBER
VACUUM



TELEVAC

REVISIONS

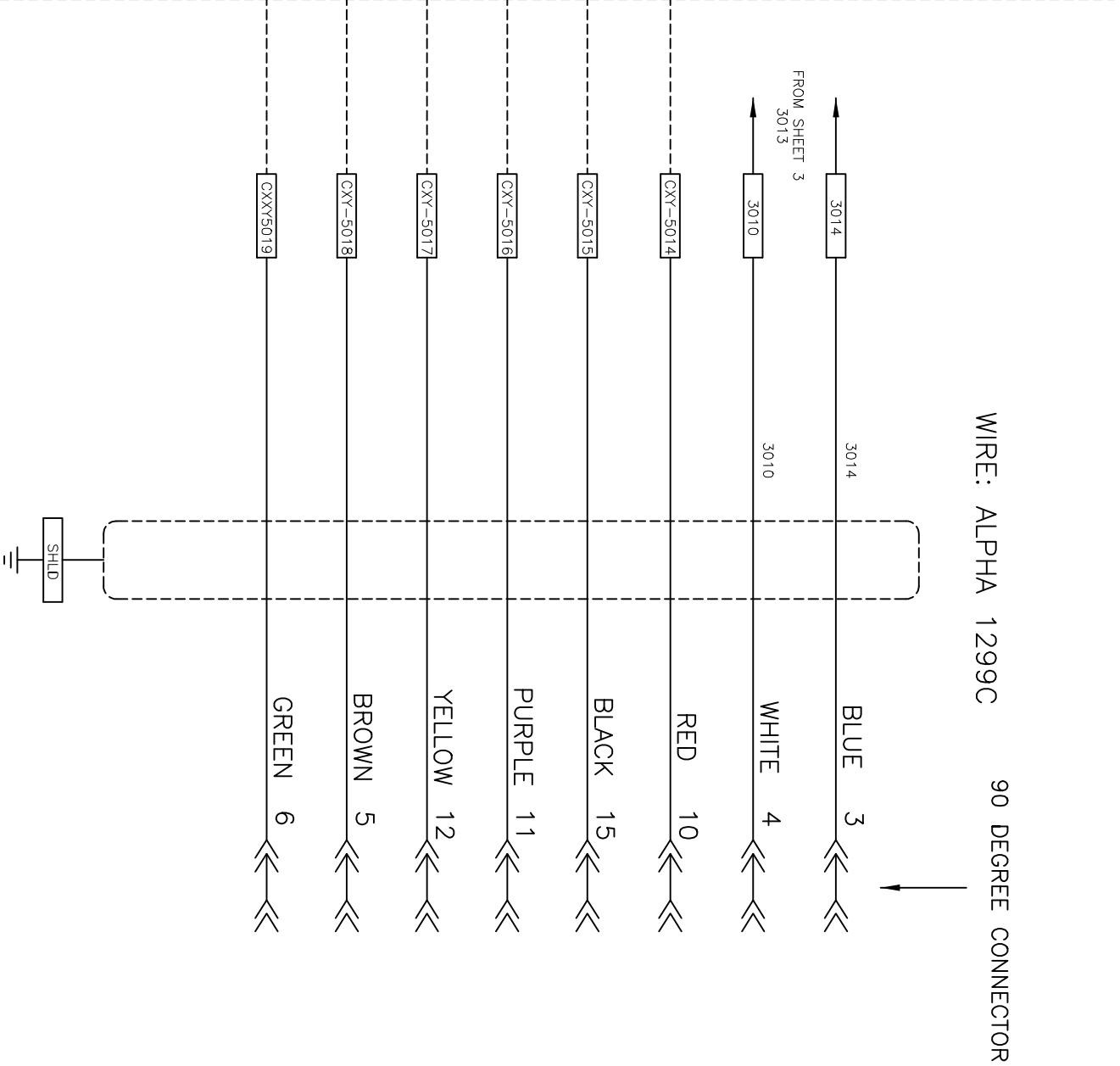
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. LBS		WORK ORDER		CONTRACT NO.		PART NUMBER		NO. REV'D		NEXT ASSEMBLY		SIZE	
DRAWN		MAA		TOLERANCES		DRAWING NO.		15-5032-1403		CHG.		B	
CHECKED		SPW		FRACTION		TITLE		LCLS-II COLD BOX VACUUM SYSTEM		CHG.		B	
ENGINEER		MAA		.XX		2111 BUILDERS PLACE COLUMBUS, OHIO 43204				CHG.		B	
REVIEWED		SPW		.XXX		CHAMBER VACUUM GAUGE				CHG.		B	
REL. DATE		9/21/2016		ANGULAR						SCALE		NONE	
DIMENSIONS ARE PROVIDED PRIOR TO SURFACE TREATMENTS UNLESS NOTED.										SHEET		4 OF 7	

REVISIONS						
CHG.	DATE	DWN.	CH'KD.	ENGR.	REV'D	DESCRIPTION
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CX-PT-236Y5
 DIFFUSION PUMP
 VACUUM

GRANVILLE-PHILLIPS

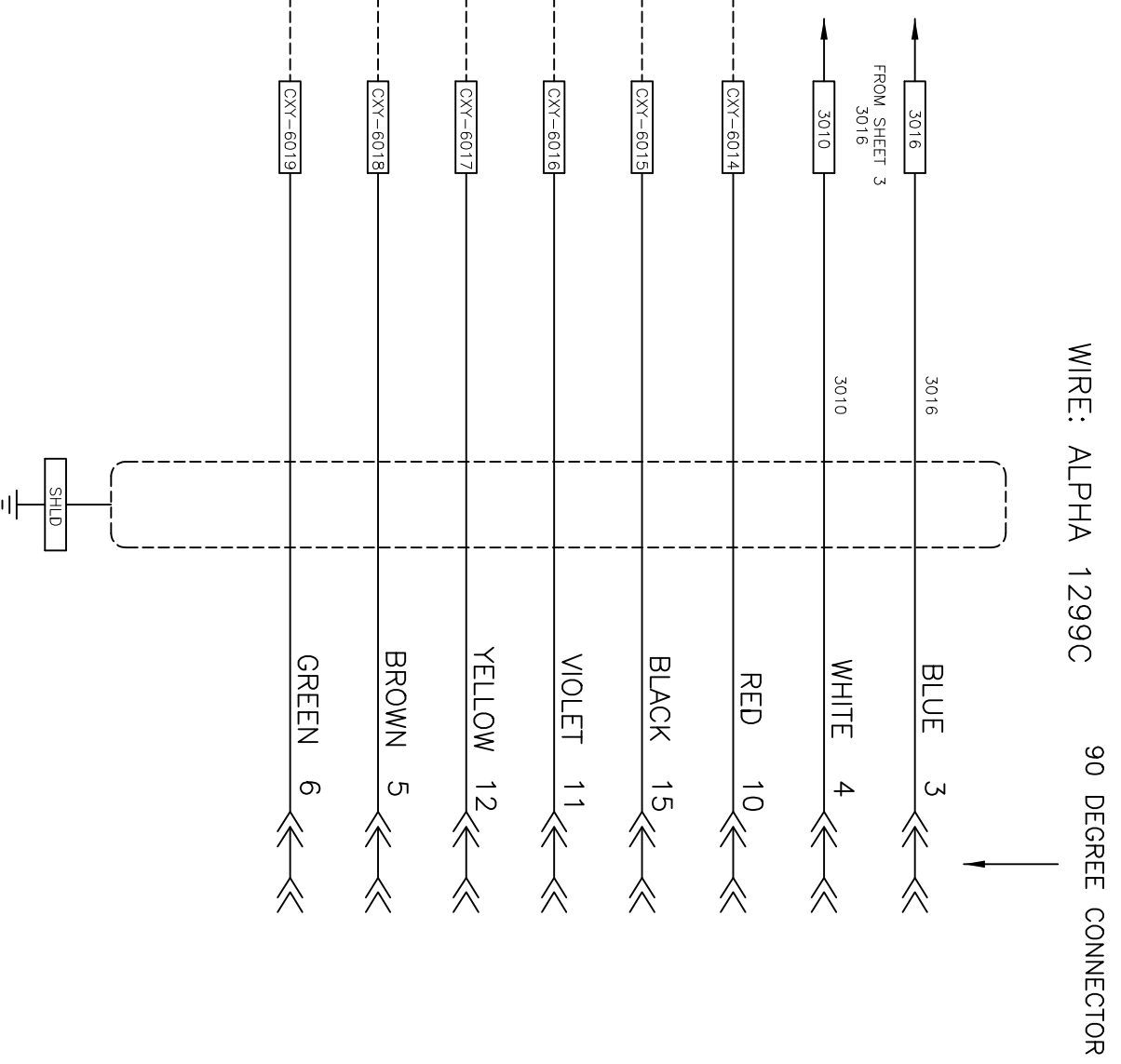
INFORMATION SHOWN ON THIS DRAWING IS PROPRIETARY AND THE SOLE PROPERTY OF PPK AND IS NOT TO BE DISCLOSED OR TRANSMITTED TO UNAUTHORIZED PARTIES.

WEIGHT	WORK ORDER	CONTRACT NO.	PART NUMBER	NO. REQ'D	NEXT ASSEMBLY	SIZE
DRAWN	MJA	TOLERANCES	PPK TECHNOLOGIES 2111 BUILDERS PLACE COLUMBUS, OHIO 43204			
CHECKED	SPW	FRACTION	LCLS-II COLD BOX VACUUM SYSTEM FORELINE VACUUM			
ENGINEER	MJA	.XX	TITLE			
REVIEWED	SPW	.XXX	SIZE			
REL. DATE	9/21/2016	ANGULAR	DRAWING NO.			
DIMENSIONS ARE PROVIDED PRIOR TO SURFACE TREATMENTS UNLESS NOTED.			SCALE		NONE	
			15-5032-1403		CHG. B	
			SHEET 5 OF 7			

REVISIONS

CHG.	DATE	DWN.	CH'KD.	ENGR.	REV'D	DESCRIPTION
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CX-PT-236Y8
FORELINE
VACUUM

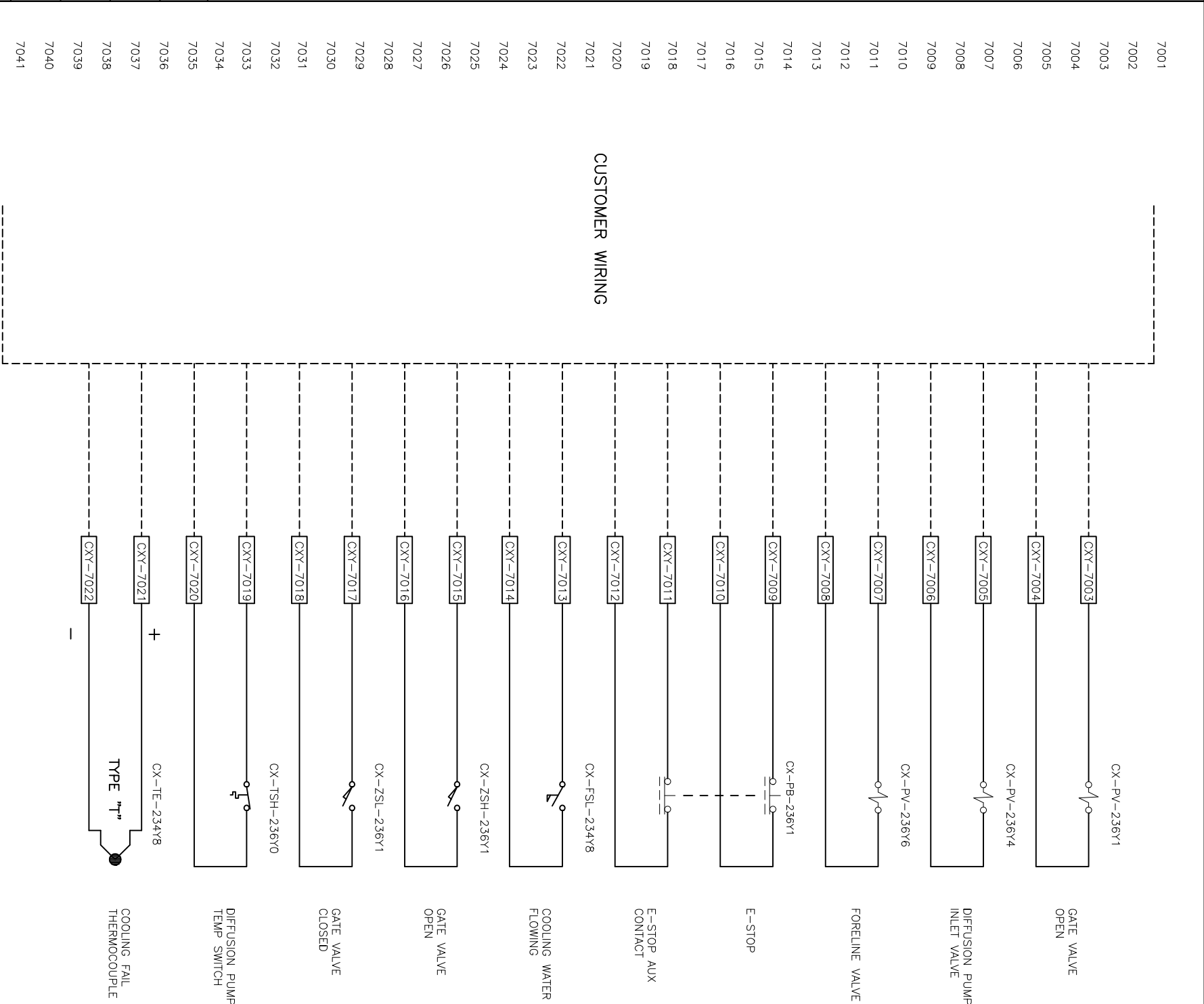
GRANVILLE-PHILLIPS

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. LBS	WORK ORDER	CONTRACT NO.	PART NUMBER	NO. REQ'D	NEXT ASSEMBLY	SIZE
DRAWN	M/A	TOLERANCES	PHPK TECHNOLOGIES 2111 BUILDERS PLACE COLUMBUS, OHIO 43204			
CHECKED	SPW	FRACTION	LCIS-II COLD BOX VACUUM SYSTEM ROUGHING PUMP VACUUM GAUGE			
ENGINEER	M/A	.XX	TITLE			
REVIEWED	SPW	.XXX	DRAWING NO.			
REL. DATE	9/21/2016	ANGULAR	SCALE NONE			
DIMENSIONS ARE PROVIDED PRIOR TO SURFACE TREATMENTS UNLESS NOTED.			SIZE		CHG.	
			B		15-5032-1403	
			B		SHEET 6 OF 7	

REVISIONS

CHG.	DATE	DWN.	CH'KD.	ENGR.	REV'D	DESCRIPTION
B	3/24/18	MJA	-	-		RE-LABELED DESCRIPTION CX-TE-324Y8 CHANGED TO T/C



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. LBS	WORK ORDER	CONTRACT NO.	PART NUMBER	NO. REV'D	NEXT ASSEMBLY	SIZE
	MJA		2111 BUILDERS PLACE COLUMBUS, OHIO 43204			
DRAWN	SPW	FRACTION	PHPK TECHNOLOGIES 2111 BUILDERS PLACE COLUMBUS, OHIO 43204 LCIS-II COLD BOX VACUUM SYSTEM CUSTOMER I/O INTERFACE			
CHECKED	MJA	.XXX				
ENGINEER	SPW	ANGULAR				
REVIEWED						
REL. DATE	9/21/2016		SIZE	DRAWING NO.	CHG.	
			B	15-5032-1403	B	
DIMENSIONS ARE PROVIDED PRIOR TO SURFACE TREATMENTS UNLESS NOTED.			SCALE	NONE	SHEET 7 OF 7	