

# 01CJC21

## BATTERY STORAGE

## CONTROL CABINET

REVISIONS			P G I E R U S <small>This document contains information confidential to Siemens Energy, Inc. It is submitted in confidence and is to be used solely for the purpose for which it is furnished and returned on request. This document and such information is not to be reproduced, transmitted, disclosed or used otherwise, in whole or in part, without the written authorization from Siemens Energy, Inc.</small>	CUSTOMER: VIONIX		TITLE: SPPA-T3000 BATTERY STORAGE CONTROL TITLE SHEET		TYPE YA	IDENTIFICATION CODE +01CJC21 .00000	SHT 01	REV. 0
REV.	DESCRIPTION	APVD/DATE		PROJECT NO.: 20618	ENGINEER: SYED ANWAR	PROJECT MANAGER: J. TROKE	DRAWN: JSK DATE: 01/25/18		PSEUDO: WBS:		
0	FOR REVIEW	01/25/18	<b>SIEMENS</b>	PLANT: SHIRLEY		SCALE NONE	CLASS 	SIZE B	DRAWING NO. 20618YA+01CJC2100000-01		

Plot Date\_Time 1/29/2018 2:03 PM

**A. DRAWING NUMBER DEFINITION**

**20618YS=01CJC21GN001-01**



1. PROJECT NUMBER
2. DRAWING TYPE (YA, YD, YS, etc.)
3. + FOR LOCATION, = FOR FUNCTION
4. UNIT NUMBER
5. FUNCTION CODE FOR CABINET
6. SEQUENTIAL NUMBER
7. EQUIPMENT CODE
8. EQUIPMENT CODE NUMBER
9. SHEET NUMBER

**DRAWING TYPES:**

- YA - TITLE SHEET, LEGEND SHEET
- YB - INDEX SHEET
- YC - CABLE LIST
- YD - ASSEMBLY OVERVIEW
- YL - BILL OF MATERIALS
- YS - CIRCUIT DIAGRAM

**EQUIPMENT CODES:**

- 00 - DRAWING TYPES (YA, YB, YD)
- GN - NETWORK DETAILS
- EV - PROFIBUS DETAILS
- GW - POWER & GROUNDING OVERVIEW

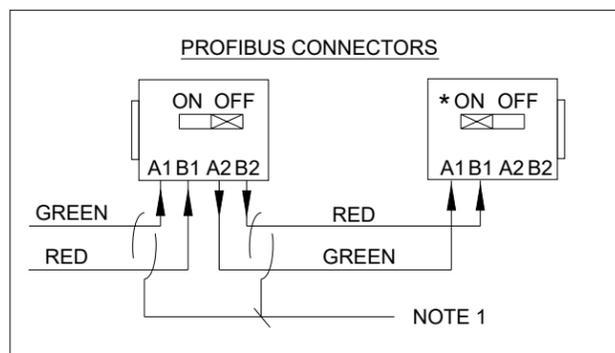
**EQUIPMENT CODE NUMBER**

- 000 - CRY / FO DRAWINGS
- 001 - BOP DRAWINGS
- 002 - CT DRAWINGS
- 003 - ST DRAWINGS
- 004 - HRSG DRAWINGS

**B. DEVICE ID'S, FUNCTION CODES, AND LOCATION CODES**

1. DEVICE ID'S IDENTIFY EACH COMPONENT ON THE SCHEMATIC DRAWINGS. DEVICE ID'S ARE ALWAYS PRECEDED BY A "-". A DEVICE ID CONSISTS OF A SINGLE LETTER CODE, FOLLOWED BY A SEQUENTIAL NUMBER. THE SEQUENTIAL NUMBERS START OVER WHEN THE LOCATION CHANGES.
2. FUNCTION CODES ARE ALWAYS PRECEDED BY A "=" SIGN AND APPEAR IN THE TITLE BLOCK.
3. LOCATION CODES ARE ALWAYS PRECEDED BY A "+". THE LOCATION CODE APPEARS IN THE TITLE BLOCK, OR ABOVE A COMPONENT.

**C. TYPICAL PROFIBUS CONNECTIONS**



**NOTES**

1. USE SIEMENS PART NO. 6XV1830-0EH10 PROFIBUS CABLE.
2. \* DENOTES SIEMENS PROFIBUS CONNECTOR TERMINATOR SWITCH IN THE "ON" POSITION.

**D. WIRE/CABLE CROSS REFERENCE STRUCTURE**

**TYPE 1**

WHEN CROSS-REFERENCING TO DIFFERENT SHEETS WITHIN THE SAME FUNCTION CODE AND SAME CABINET, THE DESTINATION PAGE NUMBER IS PREFIXED BY A DASH AND FOLLOWED BY THE X/Y ZONE OF THE TARGET PAGE SEPERATED BY A DOT.



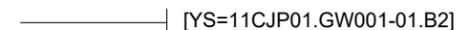
**TYPE 2**

WHEN CROSS-REFERENCING TO DIFFERENT SHEETS AND FUNCTION CODES WITHIN THE SAME CABINET, THE FUNCTION CODE IS IDENTIFIED BEFORE THE PAGE NUMBER.



**TYPE 3**

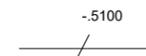
WHEN CROSS-REFERENCING TO DIFFERENT SHEETS AND FUNCTION CODES, AND TO A DIFFERENT CABINET, THE WHOLE CABINET DRAWING NUMBER APPEARS AS SHOWN BELOW.



**E. CABLE NUMBERS**

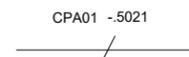
**TYPE 1**

WHEN CROSS-REFERENCING TO DIFFERENT SHEETS WITHIN THE SAME CABINET THE SEQUENTIAL CABLE TYPE CODE NUMBER IS USED, PREFIXED BY A PERIOD.



**TYPE 2**

WHEN CROSS-REFERENCING EXTERNALLY, THE SOURCE CABINET NAME IS USED FOLLOWED BY THE SEQUENTIAL CABLE TYPE CODE.



**CABLE TYPE CODES**

- 1500 SERIES : POWER CABLES < 60V
- 2000 SERIES : POWER / TRIP SIGNALS CABLES > 60V
- 4800 SERIES : INTERCONNECT/FAULT/TRIP SIGNALS CABLES
- 5000 SERIES : NETWORK CABLES  
(5000 - 5099 APPLICATION AND AUTOMATION)
- (5100 - 5199 PROFIBUS)

**F. BOM ITEM NUMBERS**

THE CIRCLED NUMBER IN THIS SYMBOL REFERS TO THE BILL OF MATERIALS ITEM NUMBER.



NOTE: FOR FURTHER INFORMATION, REFER TO SIEMENS ENERGY SITE PREPARATION MANUAL.

REVISIONS			P G I E R U S This document contains information confidential to Siemens Energy, Inc. It is submitted in confidence and is to be used solely for the purpose for which it is furnished and returned on request. This document and such information is not to be reproduced, transmitted, disclosed or used otherwise, in whole or in part, without the written authorization from Siemens Energy, Inc.	CUSTOMER: VIONIX		TITLE: SPPA-T3000 BATTERY STORAGE CONTROL LEGEND SHEET		TYPE YA	IDENTIFICATION CODE +01CJC21 .00000	SHT 02	REV. 0
REV.	DESCRIPTION	APVD/DATE		PROJECT NO.: 20618	ENGINEER: SYED ANWAR	PROJECT MANAGER: J. TROKE	DRAWN: JSK	PSEUDO:			
0	FOR REVIEW	01/25/18				DATE: 01/25/18	WBS:				
			<b>SIEMENS</b>	PLANT: SHIRLEY	SCALE NONE	CLASS ➡	SIZE B	DRAWING NO. 20618YA+01CJC2100000-02			

ITEM	DWG_NUMBER	DESCRIPTION	REV
1	20618YA+01CJC2100000-01	TITLE SHEET	0
2	20618YA+01CJC2100000-02	LEGEND SHEET	0
3	20618YB+01CJC2100000-01	DRAWING INDEX	0
4	20618YL+01CJC2100000-01	BILL OF MATERIALS	0
5	20618YL+01CJC2100000-02	BILL OF MATERIALS	0
6	20618YL+01CJC2100000-03	BILL OF MATERIALS	0
7	20618YD+01CJC2100000-01	ASSEMBLY OVERVIEW	0
8	20618YD+01CJC2100000-02	ASSEMBLY OVERVIEW	0
9	20618YD+01CJC2100000-03	ASSEMBLY OVERVIEW	0
10	20618YD+01CJC2100000-04	ASSEMBLY OVERVIEW	0
11	20618YD+01CJC2100080-01	ASSEMBLY OVERVIEW	0
12	20618YD+01CJC21AA001-01	POWER DISTRIBUTION	0
13	20618YD+01CJC21BA001-01	POWER DISTRIBUTION	0
14	20618YD+01CJC21CA001-01	CPU 1515 / SCALANCE X208	0
15	20618YD+01CJC21DA001-01	ET 200SP	0
16	20618YD+01CJC21TA001-01	UPS 1500 VA, 120VAC, 6 OUTLET	0
17	20618YD+01CJC21VA001-01	120VAC POWER DISTRIBUTION UNIT	0
18	20618YD+01CJC21WA001-01	BMS - RUGGED EMBEDDED COMPUTER	0
19	20618YD+01CJC21XA001-01	DL320E - THIN CLIENT	0
20	20618YD+01CJC21ZA001-01	UPS 1500 VA, 120VAC, 6 OUTLET	0
21	20618YS=01CJC21DA001-01	SM134 AI 4x4-20mA (2/4-WIRE)	0
22	20618YS=01CJC21DA002-01	SM134 AI 4x4-20mA (2/4-WIRE)	0
23	20618YS=01CJC21DA003-01	SM135 AO 4x4-20mA (2-WIRE)	0
24	20618YS=01CJC21DA004-01	SM131 DI 8 x 24VDC	0
25	20618YS=01CJC21DA005-01	SM131 DI 8 x 24VDC	0
26	20618YS=01CJC21DA006-01	SM131 DI 8 x 24VDC	0
27	20618YS=01CJC21DA007-01	SM131 DI 8 x 24VDC	0
28	20618YS=01CJC21DA008-01	SM132 DOx8 (RELAY) 120VAC, 10A	0
29	20618YS=01CJC21DA009-01	SM132 DOx8 (RELAY) 120VAC, 10A	0
30	20618YS=01CJC21GN000-01	NETWORK DETAILS	0
31	20618YS=01CJC21GW001-01	INTERNAL POWER SUPPLY 24VDC	0
32	20618YS=01CJC21GW001-02	INTERNAL 24VDC POWER DISTRIBUTION	0
33	20618YS=01CJC21GW001-03	INTERNAL 24VDC POWER DISTRIBUTION	0
34	20618YS=01CJC21GW001-99	CABINET FAULT ALARMS	0
35	20618YS=01CJC21GW003-01	INCOMING 120VAC POWER DISTRIBUTION	0
36	20618YS=01CJC21GW003-02	CABINET UPS	0
37	20618YS=01CJC21GW003-03	DOOR MOUNTED FAN	0

REVISIONS		
REV.	DESCRIPTION	APVD/DATE
0	FOR REVIEW	01/25/18

**P G I E R U S**

This document contains information confidential to Siemens Energy, Inc. It is submitted in confidence and is to be used solely for the purpose for which it is furnished and returned on request. This document and such information is not to be reproduced, transmitted, disclosed or used otherwise, in whole or in part, without the written authorization from Siemens Energy, Inc.

SIEMENS

CUSTOMER: <b>VIONIX</b>		TITLE: <b>SPPA-T3000 BATTERY STORAGE CONTROL DRAWING INDEX</b>		TYPE <b>YB</b>	IDENTIFICATION CODE <b>+01CJC21 .00000</b>	SHT <b>01</b>	REV. <b>0</b>
PROJECT NO.: <b>20618</b>		PROJECT MANAGER: <b>J. TROKE</b>		DRAWN: <b>JSK</b>		PSEUDO:	
ENGINEER: <b>SYED ANWAR</b>		SCALE <b>NONE</b>		DATE: <b>01/25/18</b>		WBS:	
PLANT: <b>SHIRLEY</b>		CLASS 		SIZE <b>B</b>		DRAWING NO. <b>20618YB+01CJC2100000-01</b>	

Plot Date\_Time 1/29/2018 2:03 PM

Item	Part#	Qty	Description	Manufacturer
1	I9434	1	C0610-4XDA, 611x916x2288, AC, REV1	Hoffman
2	A1101412017	2	NAMEPLATE, 2" H x 3" W	United Engraving
3	A1101419011	2	WARNING LABEL	United Engraving
5	95020CF004	2	VERTICAL CENTER SUPPORT, REV1A	Jaeger
6	95020CI168	1	PNL, 100 x 80mm, COMM GND BUS, REV1C	Jaeger
7	95020ME105	1	BUS BAR, GROUNDING, 170mm X 32mm, REV1	Amf
8	A1HJBBCHHAF	2	STANDOFF, INSULATED, 1 INCH HIGH, 1 INCH DIA, 2165-1A	Weidmuller
9	A1110220021	1	GROUND PAD, CABINET MOUNT	Emka
10	95020CI227	1	PNL, 170 x 65mm, CEP & SHLD BUS, REV1B	Jaeger
11	95020CI290	2	19" RACK, SUPPORT, 64 x 1210mm, REV1A	Jaeger
12	95020CI363	4	19" RACK, SUPPORT, 64 x 748mm, REV1	Jaeger
13	95020CI415	4	PNL, F&R, 483 x 220mm, 19" RACK, REV1	Jaeger
14	95020CI416	1	PNL, REAR, 580 x 1190mm, REV1 (MODIFIED PER DWG -80)	Jaeger
15	DP1N191020	1	POWER DISTRIBUTION UNIT, 19" RACK MNT, OUTLET 2 FRONT, 8 BACK, 20A	Hoffman
19	SK3110000	0	TEMPERATURE THERMOSTAT	Rittal
20	1201442	31	END CLAMP - E/UK	Phoenix Contact
21	0810588	31	GBS 5-25X12	Phoenix Contact
23	3044128	3	UNIVERSAL GROUND TERMINAL BLOCK - UT 4-PE	Phoenix Contact
24	5ST30100HG	2	AUX CONTACT FOR 5SJ4 CIRCUIT BREAKER, 1NO/1NC	Siemens
25	5SJ41107HG40	1	CIRCUIT BREAKER, 1POLE, THERMMAG 10A C-CURVE, 240VAC/60VDC	Siemens
26	8WA1821	2	BARRIER	Siemens
27	3004524	6	UNIVERSAL TERMINAL BLOCK - UK 6 N	Phoenix Contact
28	3003020	1	COVER PLATE; 1.8 MM, COLOR GRAY	Phoenix Contact
29	2866776	1	POWER SUPPLY, INPUT: 85-264VAC/90-350VDC, OUT: 24 VDC 20A	Phoenix Contact
30	5SJ41207HG40	1	CIRCUIT BREAKER, 1POLE, THERMMAG 20A C-CURVE, 240VAC/125VDC	Siemens
31	3600P10SI2A	10	CIRCUIT BREAKER, 1POLE, THERMMAG 2A, 240VAC/65VDC, 1NO/1NC	Eta
32	Y30058111	16	RETAINING CLIP FOR CB ETA 3600 SERIES	Eta
33	3600P10SI1A	2	CIRCUIT BREAKER, 1POLE, THERMMAG 1A, 240VAC/65VDC, 1NO/1NC	Eta
34	3047028	1	TERMINAL BLOCK END COVER, D-UT 2.5/10, GRAY	Phoenix Contact
35	3044076	6	UNIVERSAL TERMINAL BLOCK - UT 2,5	Phoenix Contact
36	51217340	1	TERMINAL BLOCK, POWER DISTRIBUTION 2x24, 300V, 30AMPS	Wago
37	51114116	1	COMB-STYLE JUMPER BAR; 2 WAY	Wago
38	17PLUSQ0200	8	PLUG-IN SOCKET, AC 250 V; DC 80 V	Eta
39	17PLUSQA0LR	2	SET ENDPLATES TB LEFT + RIGHT	Eta
40	X22200502	2	BUSBAR 32A RED (500mm)	Eta

REVISIONS		
REV.	DESCRIPTION	APVD/DATE
0	FOR REVIEW	01/25/18

**P G I E R U S**

This document contains information confidential to Siemens Energy, Inc. It is submitted in confidence and is to be used solely for the purpose for which it is furnished and returned on request. This document and such information is not to be reproduced, transmitted, disclosed or used otherwise, in whole or in part, without the written authorization from Siemens Energy, Inc.

SIEMENS

CUSTOMER: VIONIX  
PROJECT NO.: 20618  
ENGINEER: SYED ANWAR  
PLANT: SHIRLEY

TITLE: SPPA-T3000 BATTERY STORAGE CONTROL BILL OF MATERIALS  
PROJECT MANAGER: J. TROKE  
SCALE: NONE  
CLASS:   
SIZE: B

TYPE: YL	IDENTIFICATION CODE: +.01CJC21 .00000	SHT: 01	REV: 0
DRAWN: JSK		PSEUDO:	
DATE: 01/25/18		WBS:	
DRAWING NO. 20618YL+01CJC2100000-01			

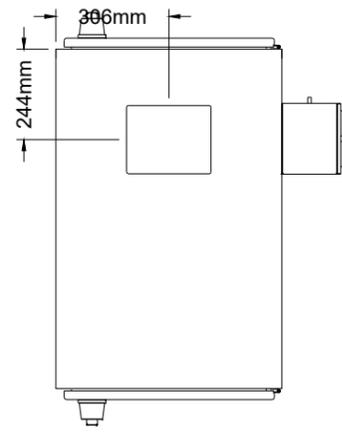
Item	Part#	Qty	Description	Manufacturer
41	6GK75421AX000XE0	1	TCP/IP COMMUNICATIONS MODULE CM 1542-1 FOR SIMATIC 1500 SERIES	Siemens
42	X22206601	2	SIGNAL LOOP - JUMPER FOR 3600 SERIES	Eta
43	6ES75152AM000AB0	1	CPU 1515-2 PN WITH 2 PROFINET PORTS AND 3.5MB ON BOARD MEMORY	Siemens
44	6ES79548LP010AA0	1	SIMATIC S7, MEMORY CARD FOR S7-1X00 CPU, 3,3 V FLASH, 2 GBYTE	Siemens
45	6ES75901AB600AA0	1	MOUNTING RAIL 160MM	Siemens
46	6ES71556AA000BN0	1	IM 155-6 PN ST INTERFACE MODULE WITH BUS ADAPTER BA2xRJ45 AND SERVER MODULE	Siemens
47	DL320E	1	HP PROLIANT DL320E GEN8 V2 SERVER	Hp
50	SPC19912	1	POWER CORD 12FT	Pro Power
51	SMT1500RM2U	2	UPS 1500 VA, 6 OUTLET, SMART-UPS, 120VAC, W/ USB, RACK MOUNT	Apc
52	AP9630	2	NETWORK MANAGEMENT CARD	Apc
53	17422B110	3	CABLE, COMPUTER POWER, 12FT, 2 COND	Newark
55	6GK52080BA102AA3	4	SCALANCE X208, MANAGED IE SWITCH, 8 X 10/100MBIT/S RJ45 PORTS	Siemens
59	AJCUSTOM	9	HARNESS - KIT FOR 20 PIN CONNECTORS PER HWKEY (FRONT CONNECTOR INCLUDED)	Siemens
60	6ES71346GD000BA1	2	AI 4xI 2-/4-WIRE ST	Siemens
61	6ES71936BP000DA0	4	BU TYPE A0, 16 PUSH-IN, 2 INFEED TERM. SEPARATE (DIGITAL/ANALOG, MAX. 24VDC/10A)	Siemens
62	6ES71936BP000BA0	5	BU TYPE A0, 16 PUSH-IN, 2 INFEED TERM. JUMPERED (DIGITAL/ANALOG, 24VDC/10A)	Siemens
63	6ES71356HD000BA1	1	AQ 4xU/I ST	Siemens
65	6ES71316BF000BA0	4	DI 8x24VDC ST	Siemens
66	6ES71326BF000BA0	2	DQ 8x24VDC/0.5A ST	Siemens
67	3600P10SI3A	1	CIRCUIT BREAKER, 1POLE, THERMMAG 3A, 240VAC/65VDC, 1NO/1NC	Eta
68	3600P10SI5A	1	CIRCUIT BREAKER, 1POLE, THERMMAG 5A, 240VAC/65VDC, 1NO/1NC	Eta
69	3047303	8	SPACER PLATE, COMPENSATES FOR LEVEL OFFSET, 2.5MM THICK	Phoenix Contact
70	3044636	23	TERMINAL BLOCK, DOUBLE, UTTB 2,5	Phoenix Contact
71	3047293	8	END COVER, D-UTTB 2.5/4, WIDTH 2.2MM, GRAY	Phoenix Contact
72	3044720	32	TERMINAL BLOCK, DOUBLE, UTTB 4-TG, 26-10AWG, 5A, 600V	Phoenix Contact
73	3036820	32	FUSE PLUG, P-FU 5X20 LED 24, 120KOHM	Phoenix Contact
74	GMA100MA	32	FUSE, 5 X 20MM, FAST ACTING, 100mA, 250VAC	Bussmann
75	2967620	16	RELAY, 24 VDC COIL, SPDT 10A, PLC-RSC-24DC/21HC, BASE&RELAY	Phoenix Contact
80	ASA5505SECBUNK9	1	ROUTER CISCO ASA 5505 WITH SECURITY PLUS LICENSE, MULTI-UNIT APPL. FIREWALL	Cisco
81	ASA5505RACKMNT	1	RACK MOUNT KIT FOR ASA5505	Cisco
82	CONSNTAS5SBK9	1	CISCO SMARTNET EXTENDED SERVICE AGREEMENT (ASA 5505)	Cisco
83	CISCO891F	0	CISCO 891 ETHERNET SECURITY ROUTER	Cisco
84	95020CI333	0	19" RACK, BRACKET, CISCO 891, REV1C	Jaeger
85	95020CI334	0	BRACKET, SUPPORT, CISCO 891, REV1B	Jaeger
86	95020CI358	0	PNL, BRACKET SUPPORT, CISCO ROUTER, REV1	Jaeger

REVISIONS			P G I E R U S This document contains information confidential to Siemens Energy, Inc. It is submitted in confidence and is to be used solely for the purpose for which it is furnished and returned on request. This document and such information is not to be reproduced, transmitted, disclosed or used otherwise, in whole or in part, without the written authorization from Siemens Energy, Inc.	CUSTOMER: VIONIX		TITLE: SPPA-T3000 BATTERY STORAGE CONTROL BILL OF MATERIALS		TYPE	IDENTIFICATION CODE	SHT	REV.
REV.	DESCRIPTION	APVD/DATE		PROJECT NO.:	PROJECT MANAGER:	YL	+01CJC21 .00000	02	0		
0	FOR REVIEW	01/25/18	<b>SIEMENS</b>	ENGINEER: SYED ANWAR	J. TROKE	DRAWN: JSK		PSEUDO:			
				PLANT: SHIRLEY	SCALE	CLASS	SIZE	DATE: 01/25/18			
					NONE	→	B	DRAWING NO. 20618YL+01CJC2100000-02			

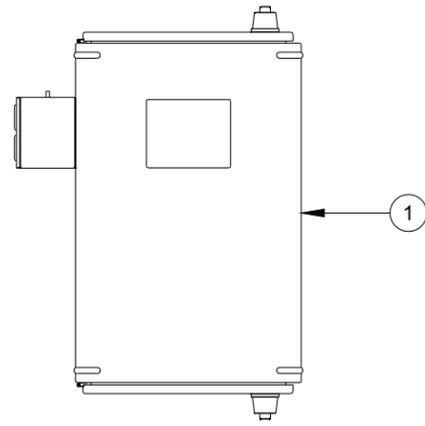
Item	Part#	Qty	Description	Manufacturer
87	6DU20000AA000EA3	1	THIN CLIENT, WINDOWS 7 ULTIMATE LICENSE	Siemens Ag
88	42802	0	EXTENDER, LINDY USB 4X1.1 50M	Lindy
89	32667	0	DVI REPEATER / EXTENDER, 80m	Lindy
90	3044720	2	TERMINAL BLOCK, DOUBLE, UTTB 4-TG, 26-10AWG, 5A, 600V	Phoenix Contact
91	3209248	2	FUSE PLUG, WITH LED FOR 12..30VDC, P-FU 5X20 LED 24-5	Phoenix Contact
92	GMA1A	2	FUSE, 5 X 20MM, FAST ACTING, 1A, 250VAC	Bussmann
93	DNRMA19168K1	2	19" RACK MOUNT SHELF	Allied
401	T3232BS5W043FT	6	CAT5, PATCH, SHIELDED, RJ45 TO RJ45, 3 FEET, BLUE	Anixter
402	T3232BS5W09150FT	18	CAT5, PATCH, SHIELDED, RJ45 TO RJ45, 150 FEET, GRAY	Anixter
407	T3232BS5W046FT	4	CAT5, PATCH, SHIELDED, RJ45 TO RJ45, 6 FEET, BLUE	Anixter
408	T3232DS5083FT	1	CAT5, CROSSOVER, SHIELDED, RJ45 TO RJ45, 3 FEET, BLUE	Anixter

REVISIONS			P G I E R U S This document contains information confidential to Siemens Energy, Inc. It is submitted in confidence and is to be used solely for the purpose for which it is furnished and returned on request. This document and such information is not to be reproduced, transmitted, disclosed or used otherwise, in whole or in part, without the written authorization from Siemens Energy, Inc.	CUSTOMER: VIONIX	TITLE: SPPA-T3000 BATTERY STORAGE CONTROL BILL OF MATERIALS	TYPE YL	IDENTIFICATION CODE +01CJC21 .00000	SHT 03	REV. 0
REV.	DESCRIPTION	APVD/DATE		PROJECT NO.: 20618	PROJECT MANAGER: J. TROKE	DRAWN: JSK	PSEUDO:		
0	FOR REVIEW	01/25/18	<b>SIEMENS</b>	ENGINEER: SYED ANWAR	PLANT: SHIRLEY	SCALE NONE	CLASS 	SIZE B	DRAWING NO. 20618YL+01CJC2100000-03
						DATE: 01/25/18	WBS:		

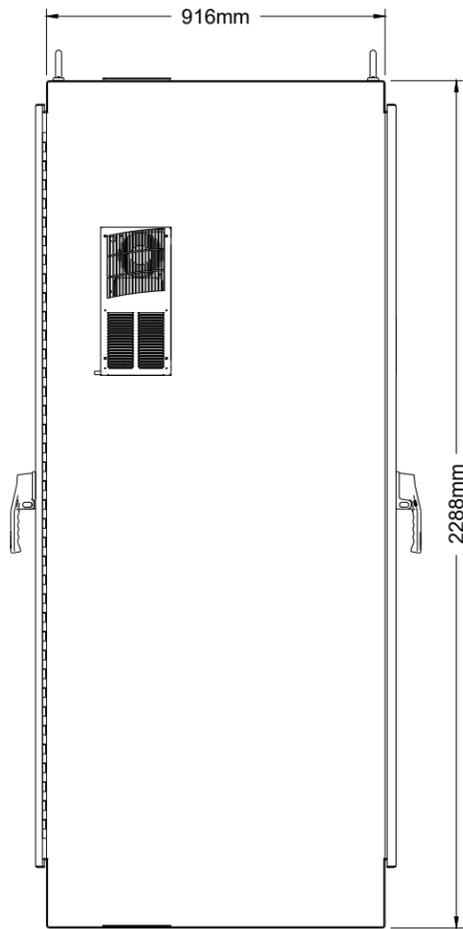
Plot Date\_Time 1/29/2018 2:03 PM



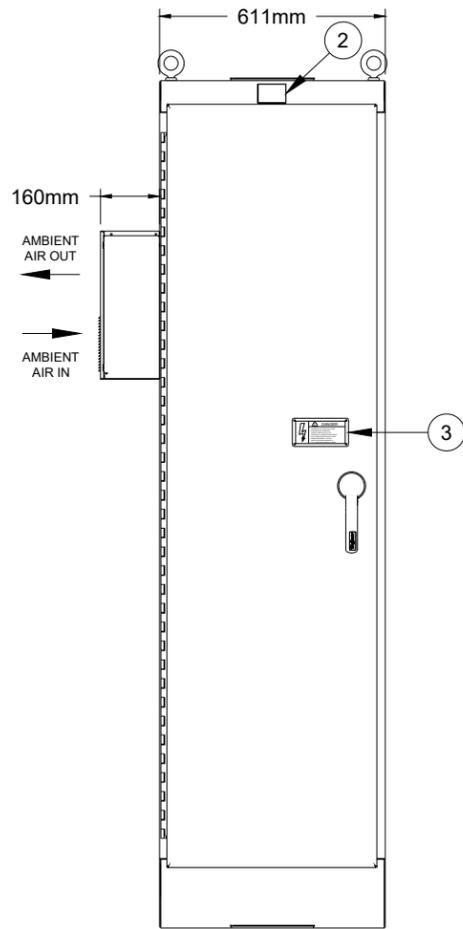
**BOTTOM VIEW**



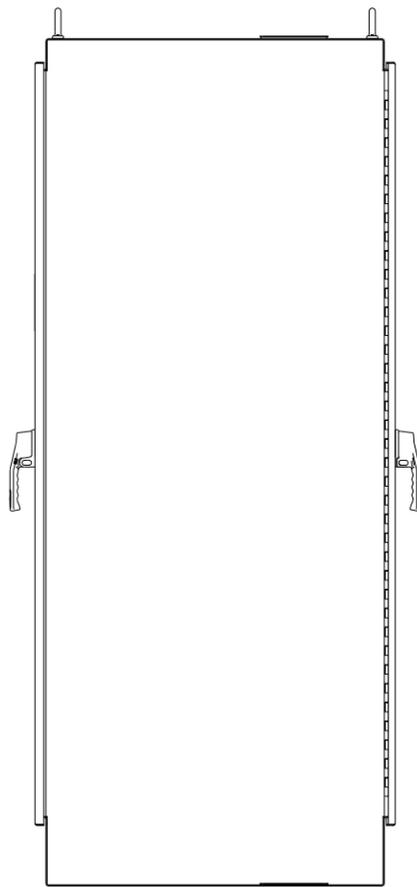
**TOP VIEW**



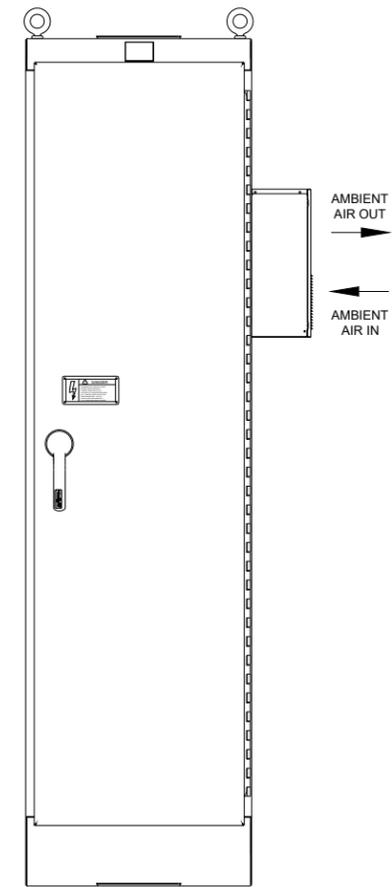
**LEFT SIDE VIEW**



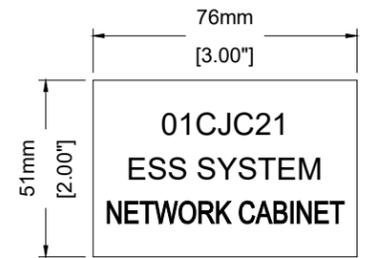
**FRONT VIEW**



**RIGHT SIDE VIEW**



**REAR VIEW**



**NAMEPLATE DETAIL**

- NOTES:**
- CABINET RATING IS NEMA 4X WITH AC / HEATER PACKAGE, HOFFMAN P/N T150116G151.
  - CABINET FINISHED STAINLESS STEEL PER ASTM D1535.
  - USE SPREADER BARS WHEN LIFTING CABINET FROM BOTTOM.
  - ALL CABLE ENTRY AND EXIT IS FROM THE TOP OR BOTTOM OF THE CABINET.
  - MEETS UBC SEISMIC ZONE 4 REQUIREMENTS.

REVISIONS		
REV.	DESCRIPTION	APVD/DATE
0	FOR REVIEW	01/25/18

**P G I E R U S**

This document contains information confidential to Siemens Energy, Inc. It is submitted in confidence and is to be used solely for the purpose for which it is furnished and returned on request. This document and such information is not to be reproduced, transmitted, disclosed or used otherwise, in whole or in part, without the written authorization from Siemens Energy, Inc.

**SIEMENS**

CUSTOMER: **VIONIX**

PROJECT NO.: **20618**

ENGINEER: **SYED ANWAR**

PLANT: **SHIRLEY**

TITLE: **SPPA-T3000 BATTERY STORAGE CONTROL ASSEMBLY OVERVIEW**

PROJECT MANAGER: **J. TROKE**

SCALE: **NONE**

CLASS:

SIZE: **B**

TYPE: <b>YD</b>	IDENTIFICATION CODE: <b>+01CJC21 .00000</b>	SHT: <b>01</b>	REV.: <b>0</b>
DRAWN: <b>JSK</b>		PSEUDO:	
DATE: <b>01/25/18</b>		WBS:	
DRAWING NO.: <b>20618YD+01CJC210000-01</b>			

A B C D E F G H J K

1

2

3

4

5

6

7

1

2

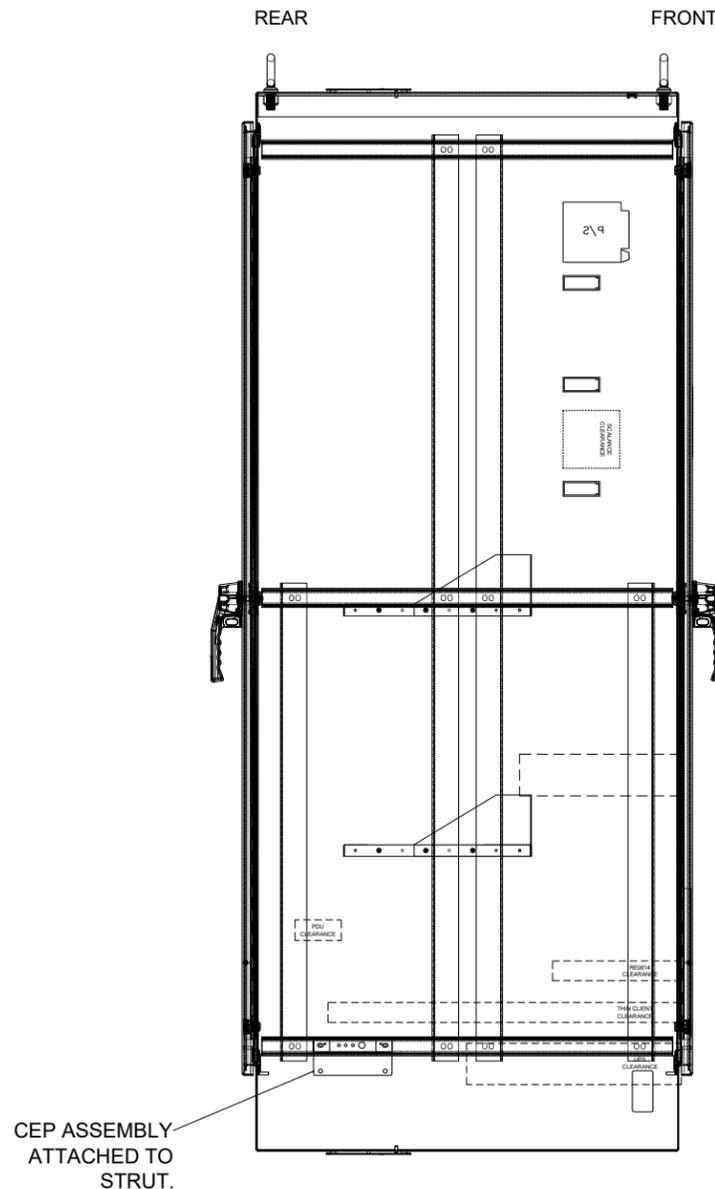
3

4

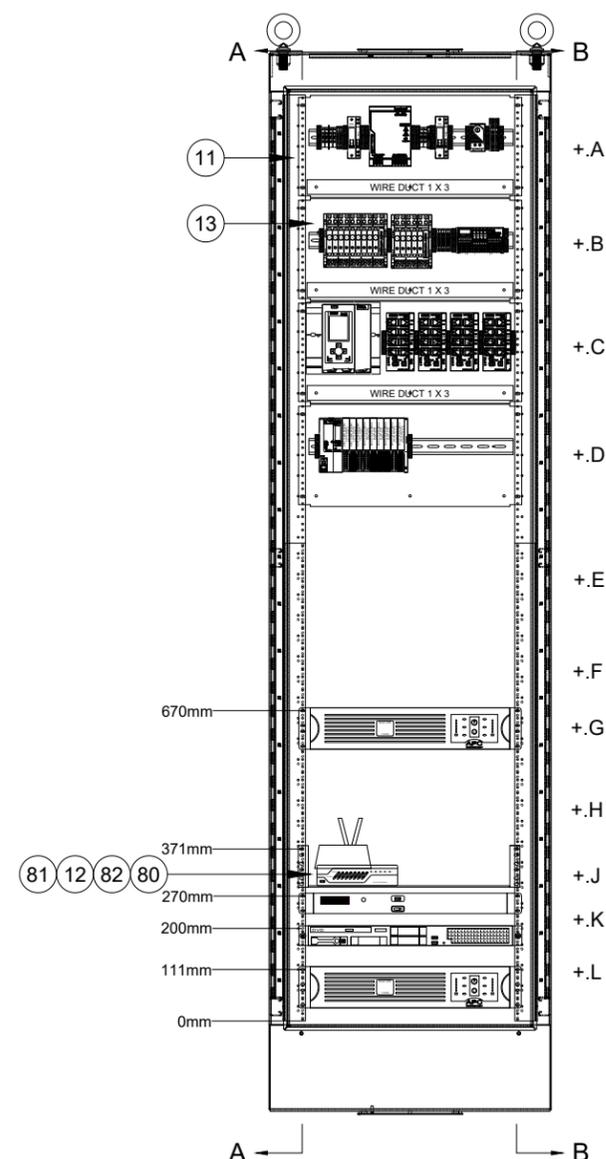
5

6

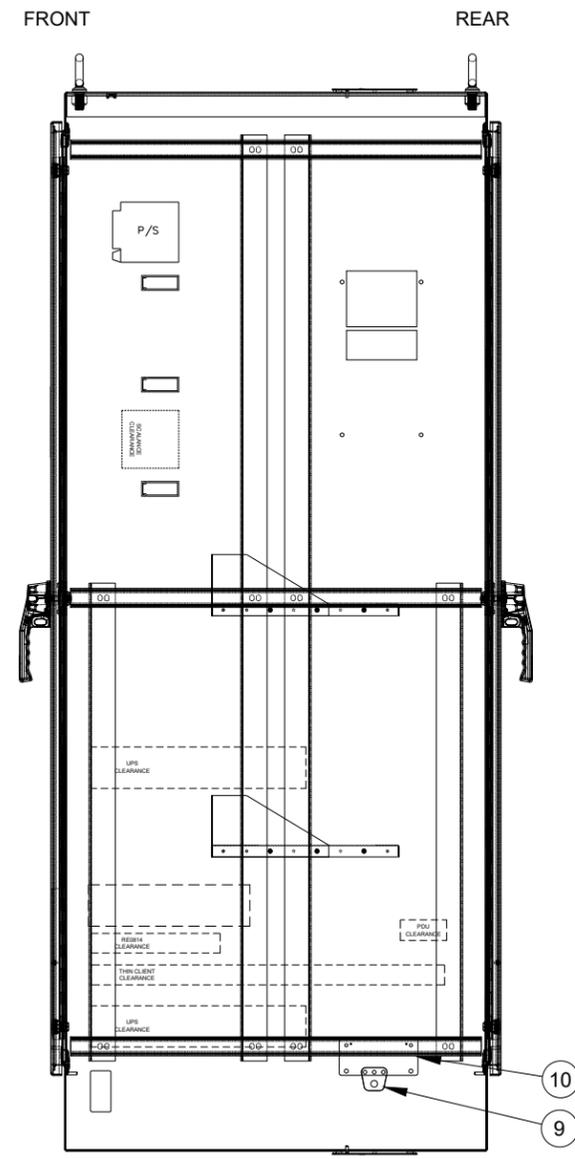
7



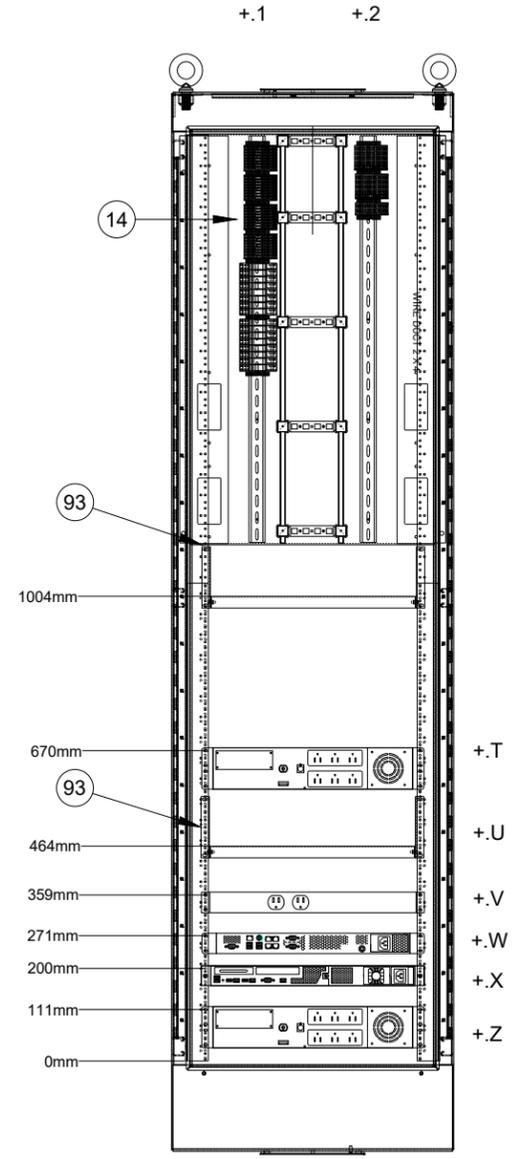
**RIGHT INSIDE VIEW  
(SECTION B-B)**



**FRONT VIEW**



**LEFT INSIDE VIEW  
(SECTION A-A)**



**REAR VIEW**

Plot Date\_Time 1/29/2018 2:04 PM

REVISIONS		
REV.	DESCRIPTION	APVD/DATE
0	FOR REVIEW	01/25/18

**P G I E R U S**

This document contains information confidential to Siemens Energy, Inc. It is submitted in confidence and is to be used solely for the purpose for which it is furnished and returned on request. This document and such information is not to be reproduced, transmitted, disclosed or used otherwise, in whole or in part, without the written authorization from Siemens Energy, Inc.

**SIEMENS**

CUSTOMER: VIONIX  
PROJECT NO.: 20618  
ENGINEER: SYED ANWAR  
PLANT: SHIRLEY

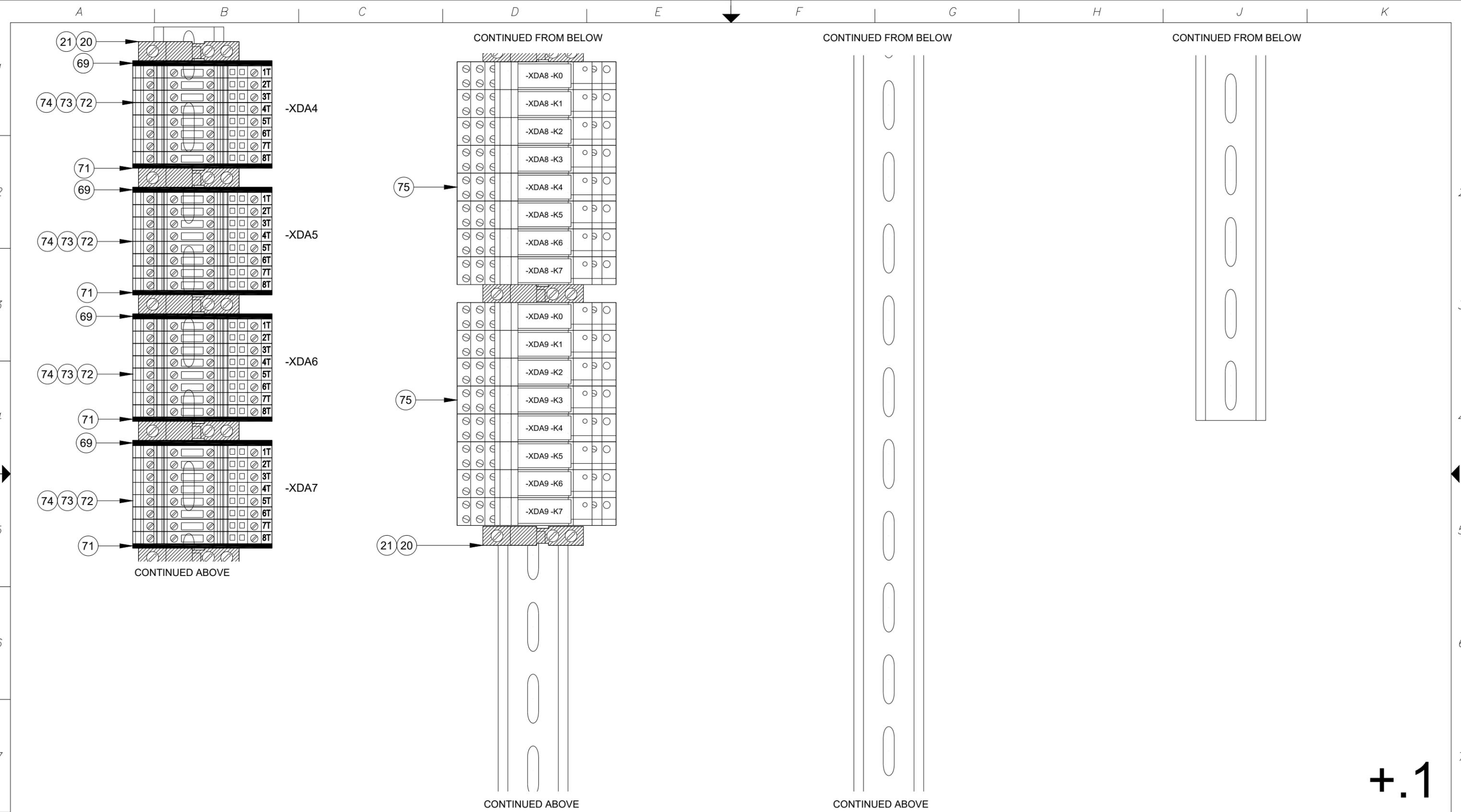
TITLE: SPPA-T3000 BATTERY STORAGE CONTROL ASSEMBLY OVERVIEW  
PROJECT MANAGER: J. TROKE  
SCALE: NONE  
CLASS: B

TYPE: YD	IDENTIFICATION CODE: +.01CJC21 .00000	SHT: 02	REV: 0
DRAWN: JSK		PSEUDO:	
DATE: 01/25/18		WBS:	
DRAWING NO. 20618YD+01CJC210000-02			

A B C D E F G H J K

8

8



REVISIONS		
REV.	DESCRIPTION	APVD/DATE
0	FOR REVIEW	01/25/18

**P G I E R U S**

This document contains information confidential to Siemens Energy, Inc. It is submitted in confidence and is to be used solely for the purpose for which it is furnished and returned on request. This document and such information is not to be reproduced, transmitted, disclosed or used otherwise, in whole or in part, without the written authorization from Siemens Energy, Inc.

**SIEMENS**

CUSTOMER:  
**VIONIX**

PROJECT NO.:  
**20618**

ENGINEER:  
**SYED ANWAR**

PLANT:  
**SHIRLEY**

TITLE:  
**SPPA-T3000  
BATTERY STORAGE CONTROL  
ASSEMBLY OVERVIEW**

PROJECT MANAGER:  
**J. TROKE**

SCALE  
**NONE**

CLASS

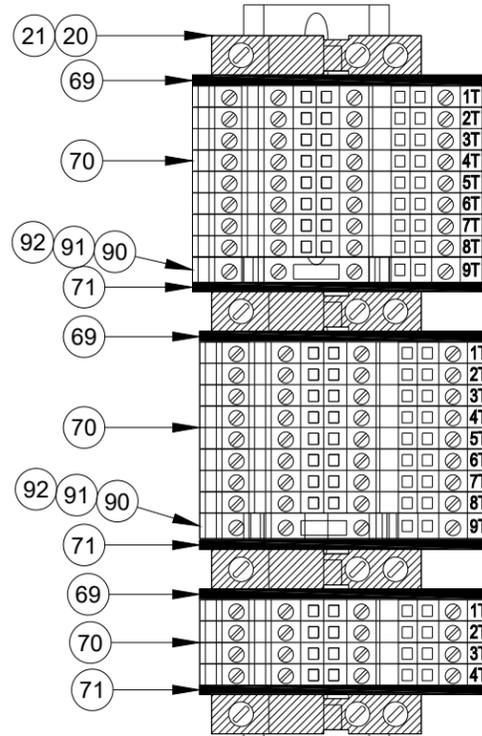
SIZE  
**B**

TYPE <b>YD</b>	IDENTIFICATION CODE <b>+01CJC21 .00000</b>	SHT <b>03</b>	REV. <b>0</b>
DRAWN: <b>JSK</b>		PSEUDO:	
DATE: <b>01/25/18</b>		WBS:	
DRAWING NO. <b>20618YD+01CJC210000-03</b>			

CONTINUED FROM BELOW

CONTINUED FROM BELOW

CONTINUED FROM BELOW



-XDA1

-XDA2

-XDA3

CONTINUED ABOVE

CONTINUED ABOVE

CONTINUED ABOVE

**+.2**

REVISIONS		
REV.	DESCRIPTION	APVD/DATE
0	FOR REVIEW	01/25/18

**P G I E R U S**

This document contains information confidential to Siemens Energy, Inc. It is submitted in confidence and is to be used solely for the purpose for which it is furnished and returned on request. This document and such information is not to be reproduced, transmitted, disclosed or used otherwise, in whole or in part, without the written authorization from Siemens Energy, Inc.

**SIEMENS**

CUSTOMER:  
**VIONIX**

PROJECT NO.:  
**20618**

ENGINEER:  
**SYED ANWAR**

PLANT:  
**SHIRLEY**

TITLE:  
**SPPA-T3000  
BATTERY STORAGE CONTROL  
ASSEMBLY OVERVIEW**

PROJECT MANAGER:  
**J. TROKE**

SCALE  
**NONE**

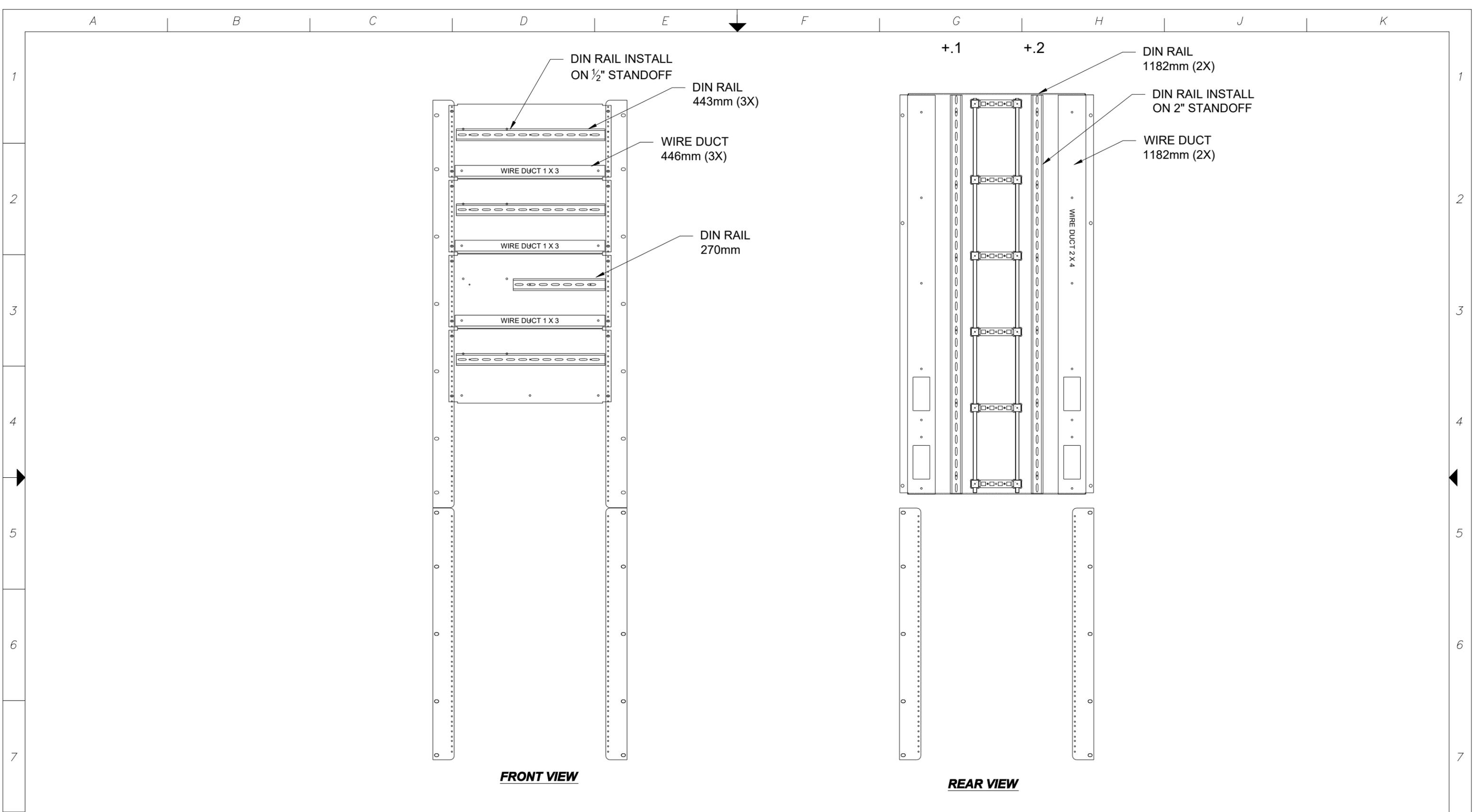
CLASS

SIZE  
**B**

TYPE <b>YD</b>	IDENTIFICATION CODE <b>+01CJC21 .00000</b>	SHT <b>04</b>	REV. <b>0</b>
DRAWN: <b>JSK</b>		PSEUDO:	
DATE: <b>01/25/18</b>		WBS:	
DRAWING NO. <b>20618YD+01CJC2100000-04</b>			

Plot Date\_Time 1/29/2018 2:04 PM

A B C D E F G H J K



**FRONT VIEW**

**REAR VIEW**

REVISIONS		
REV.	DESCRIPTION	APVD/DATE
0	FOR REVIEW	01/25/18

**P G I E R U S**

This document contains information confidential to Siemens Energy, Inc. It is submitted in confidence and is to be used solely for the purpose for which it is furnished and returned on request. This document and such information is not to be reproduced, transmitted, disclosed or used otherwise, in whole or in part, without the written authorization from Siemens Energy, Inc.

SIEMENS

CUSTOMER:  
**VIONIX**

PROJECT NO.:  
**20618**

ENGINEER:  
**SYED ANWAR**

PLANT:  
**SHIRLEY**

TITLE:  
**SPPA-T3000  
BATTERY STORAGE CONTROL  
ASSEMBLY OVERVIEW**

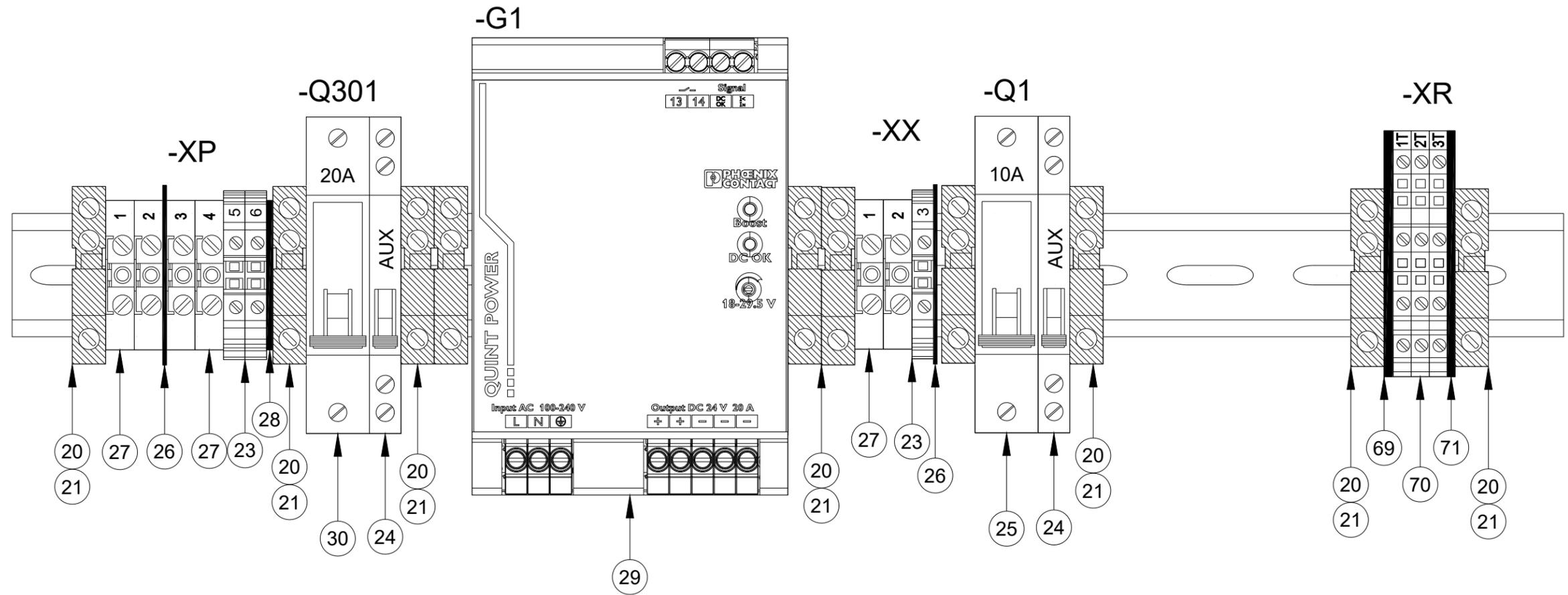
PROJECT MANAGER:  
**J. TROKE**

SCALE  
**NONE**

CLASS

SIZE  
**B**

TYPE <b>YD</b>	IDENTIFICATION CODE <b>+01CJC21 .00080</b>	SHT <b>01</b>	REV. <b>0</b>
DRAWN: <b>JSK</b>		PSEUDO:	
DATE: <b>01/25/18</b>		WBS:	
DRAWING NO. <b>20618YD+01CJC2100080-01</b>			



**+.A**

REVISIONS		
REV.	DESCRIPTION	APVD/DATE
0	FOR REVIEW	01/25/18

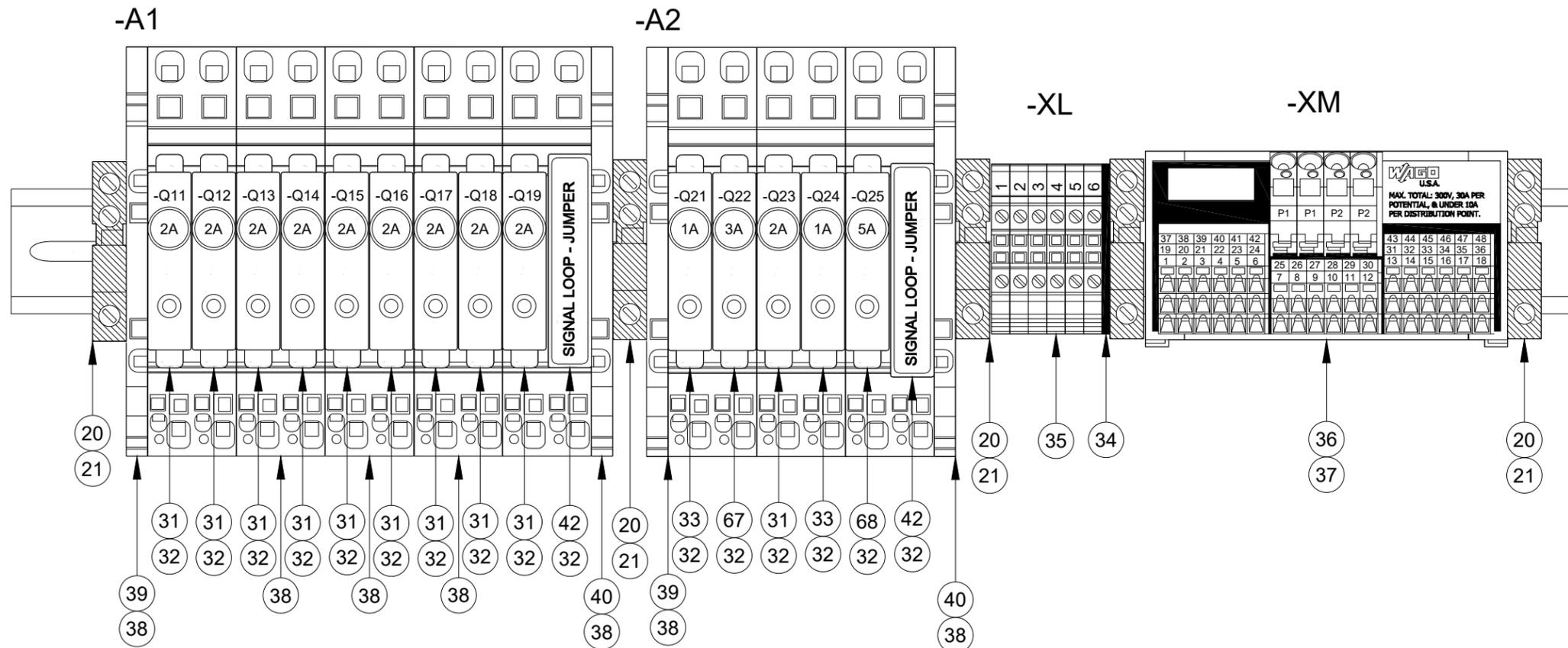
**P G I E R U S**  
 This document contains information confidential to Siemens Energy, Inc. It is submitted in confidence and is to be used solely for the purpose for which it is furnished and returned on request. This document and such information is not to be reproduced, transmitted, disclosed or used otherwise, in whole or in part, without the written authorization from Siemens Energy, Inc.

**SIEMENS**

CUSTOMER:  
**VIONIX**  
 PROJECT NO.:  
**20618**  
 ENGINEER:  
**SYED ANWAR**  
 PLANT:  
**SHIRLEY**

TITLE:  
**SPPA-T3000  
 BATTERY STORAGE CONTROL  
 POWER DISTRIBUTION**  
 PROJECT MANAGER:  
**J. TROKE**

TYPE YD	IDENTIFICATION CODE +.01CJC21 .AA001	SHT 01	REV. 0
DRAWN: JSK		PSEUDO:	
DATE: 01/25/18		WBS:	
DRAWING NO. 20618YD+01CJC21AA001-01			



**+.B**

REVISIONS		
REV.	DESCRIPTION	APVD/DATE
0	FOR REVIEW	01/25/18

**P G I E R U S**

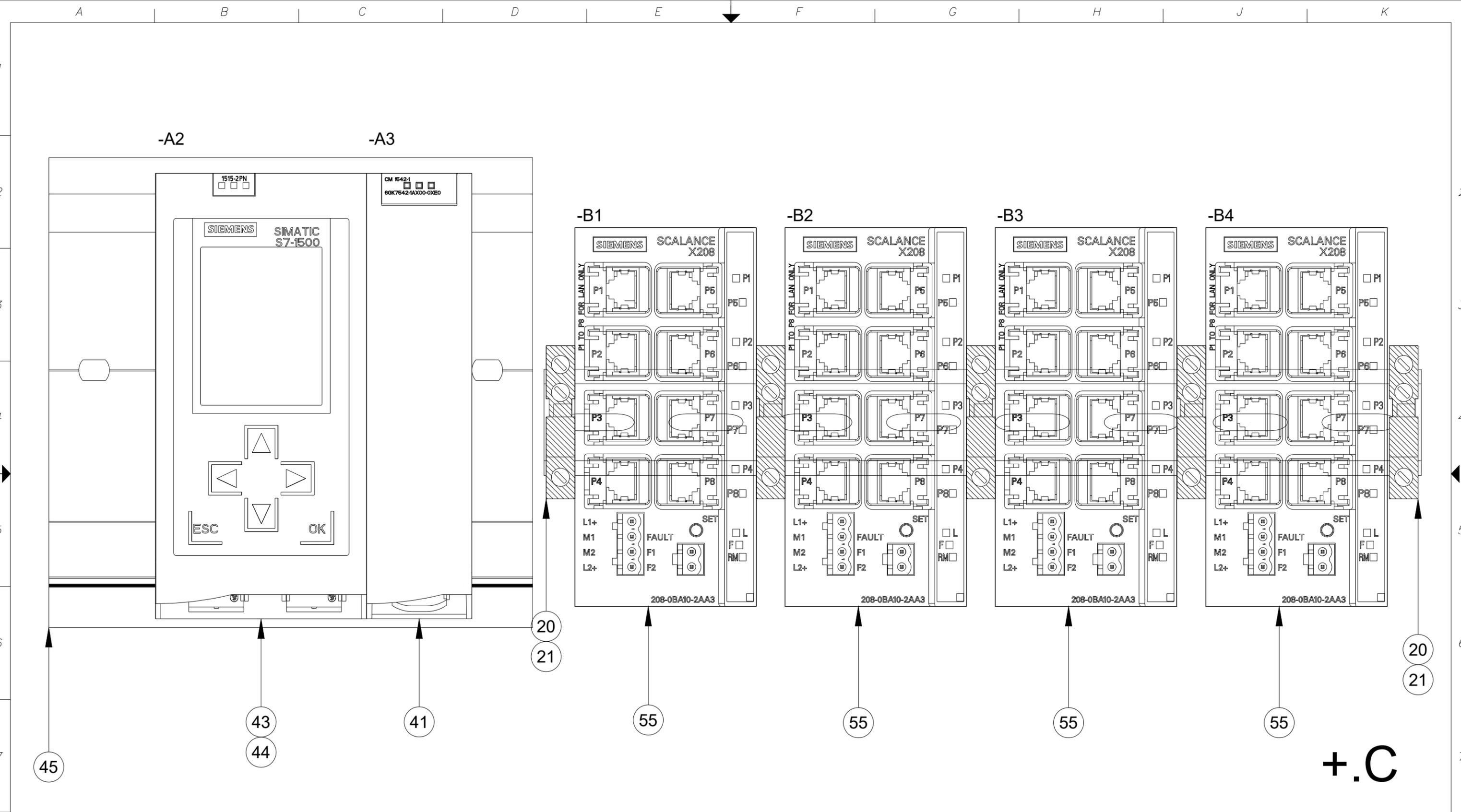
This document contains information confidential to Siemens Energy, Inc. It is submitted in confidence and is to be used solely for the purpose for which it is furnished and returned on request. This document and such information is not to be reproduced, transmitted, disclosed or used otherwise, in whole or in part, without the written authorization from Siemens Energy, Inc.

**SIEMENS**

CUSTOMER: VIONIX  
 PROJECT NO.: 20618  
 ENGINEER: SYED ANWAR  
 PLANT: SHIRLEY

TITLE: SPPA-T3000  
 BATTERY STORAGE CONTROL  
 POWER DISTRIBUTION  
 PROJECT MANAGER: J. TROKE  
 SCALE: NONE  
 CLASS: B  
 SIZE: B

TYPE: YD	IDENTIFICATION CODE: +.01CJC21 .BA001	SHT: 01	REV: 0
DRAWN: JSK		PSEUDO:	
DATE: 01/25/18		WBS:	
DRAWING NO. 20618YD+01CJC21BA001-01			



**+ .C**

Plot Date\_Time 1/29/2018 2:04 PM

REVISIONS		
REV.	DESCRIPTION	APVD/DATE
0	FOR REVIEW	01/25/18

**P G I E R U S**

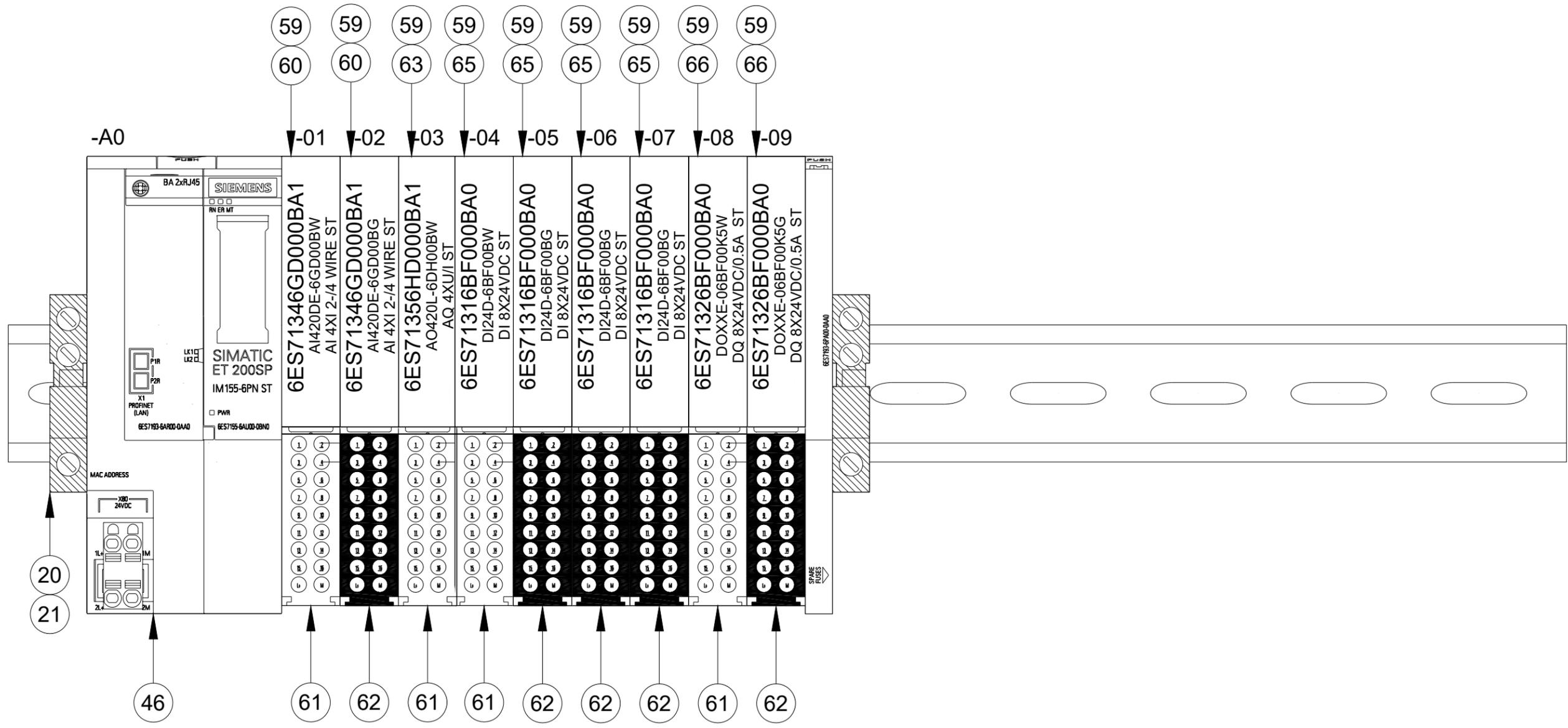
This document contains information confidential to Siemens Energy, Inc. It is submitted in confidence and is to be used solely for the purpose for which it is furnished and returned on request. This document and such information is not to be reproduced, transmitted, disclosed or used otherwise, in whole or in part, without the written authorization from Siemens Energy, Inc.

**SIEMENS**

CUSTOMER: VIONIX  
 PROJECT NO.: 20618  
 ENGINEER: SYED ANWAR  
 PLANT: SHIRLEY

TITLE: SPPA-T3000  
 BATTERY STORAGE CONTROL  
 CPU 1515 / SCALANCE X208  
 PROJECT MANAGER: J. TROKE  
 SCALE: NONE  
 CLASS:   
 SIZE: B

TYPE: YD	IDENTIFICATION CODE: +.01CJC21.CA001	SHT: 01	REV: 0
DRAWN: JSK		PSEUDO:	
DATE: 01/25/18		WBS:	
DRAWING NO.: 20618YD+01CJC21CA001-01			



**+ .D**

Plot Date\_Time 1/29/2018 2:04 PM

REVISIONS		
REV.	DESCRIPTION	APVD/DATE
0	FOR REVIEW	01/25/18

**P G I E R U S**

This document contains information confidential to Siemens Energy, Inc. It is submitted in confidence and is to be used solely for the purpose for which it is furnished and returned on request. This document and such information is not to be reproduced, transmitted, disclosed or used otherwise, in whole or in part, without the written authorization from Siemens Energy, Inc.

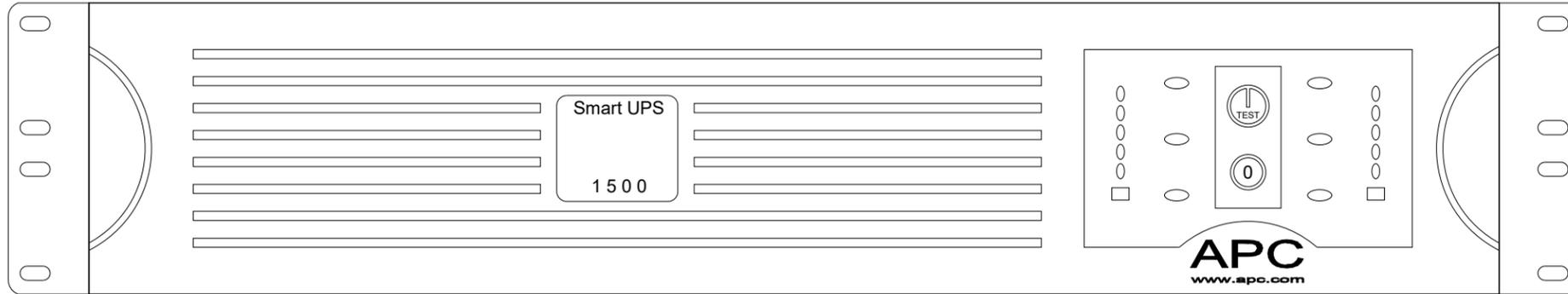
**SIEMENS**

CUSTOMER: VIONIX  
 PROJECT NO.: 20618  
 ENGINEER: SYED ANWAR  
 PLANT: SHIRLEY

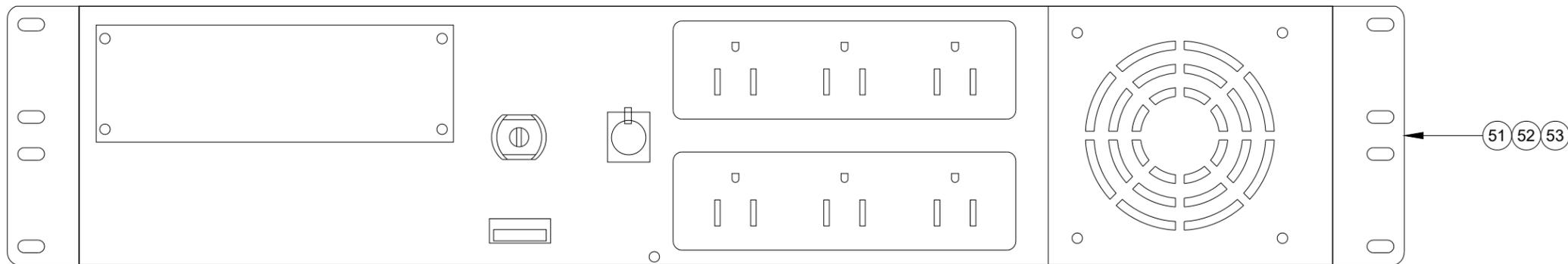
TITLE: SPPA-T3000 BATTERY STORAGE CONTROL ET 200SP  
 PROJECT MANAGER: J. TROKE  
 SCALE: NONE  
 CLASS:

TYPE: YD	IDENTIFICATION CODE: +.01CJC21 .DA001	SHT: 01	REV: 0
DRAWN: JSK		PSEUDO:	
DATE: 01/25/18		WBS:	
DRAWING NO. 20618YD+01CJC21DA001-01			

-UPS2



**FRONT VIEW**



**REAR VIEW**

**+ .T**

REVISIONS		
REV.	DESCRIPTION	APVD/DATE
0	FOR REVIEW	01/25/18

**P G I E R U S**  
 This document contains information confidential to Siemens Energy, Inc. It is submitted in confidence and is to be used solely for the purpose for which it is furnished and returned on request. This document and such information is not to be reproduced, transmitted, disclosed or used otherwise, in whole or in part, without the written authorization from Siemens Energy, Inc.

**SIEMENS**

CUSTOMER:  
**VIONIX**  
 PROJECT NO.:  
**20618**  
 ENGINEER:  
**SYED ANWAR**  
 PLANT:  
**SHIRLEY**

TITLE:  
**SPPA-T3000  
 BATTERY STORAGE CONTROL  
 UPS 1500 VA, 120VAC, 6 OUTLET**  
 PROJECT MANAGER:  
**J. TROKE**

TYPE YD	IDENTIFICATION CODE +01CJC21.TA001	SHT 01	REV. 0
DRAWN: JSK		PSEUDO:	
DATE: 01/25/18		WBS:	
DRAWING NO. 20618YD+01CJC21TA001-01			

SCALE  
NONE



CLASS  
SIZE  
**B**

A B C D E F G H J K

1

1

2

2

3

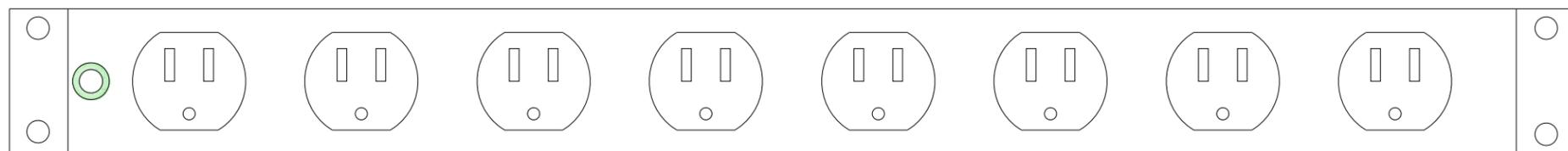
3



**FRONT VIEW**

4

4



**REAR VIEW**

5

5

6

6

7

7

**+ .V**

8

8

Plot Date\_Time 1/29/2018 2:04 PM

REVISIONS		
REV.	DESCRIPTION	APVD/DATE
0	FOR REVIEW	01/25/18

**P G I E R U S**

This document contains information confidential to Siemens Energy, Inc. It is submitted in confidence and is to be used solely for the purpose for which it is furnished and returned on request. This document and such information is not to be reproduced, transmitted, disclosed or used otherwise, in whole or in part, without the written authorization from Siemens Energy, Inc.

**SIEMENS**

CUSTOMER:  
**VIONIX**

PROJECT NO.:  
**20618**

ENGINEER:  
**SYED ANWAR**

PLANT:  
**SHIRLEY**

TITLE: **SPPA-T3000  
BATTERY STORAGE CONTROL  
120VAC POWER DISTRIBUTION UNIT**

PROJECT MANAGER:  
**J. TROKE**

SCALE: **NONE**

CLASS: **B**

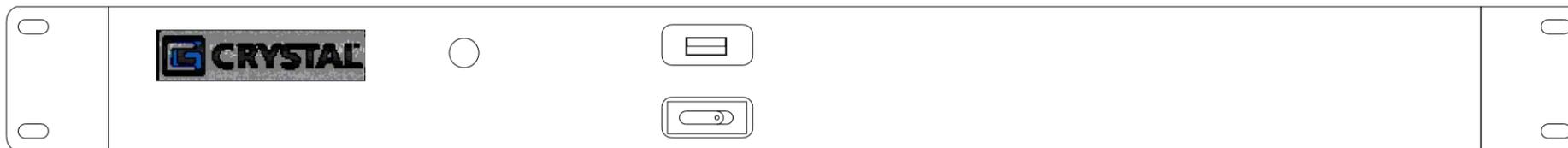
TYPE	IDENTIFICATION CODE	SHT	REV.
YD	+01CJC21.VA001	01	0
DRAWN: JSK		PSEUDO:	
DATE: 01/25/18		WBS:	
DRAWING NO. <b>20618YD+01CJC21VA001-01</b>			

A B C D E F G H J K

A B C D E F G H J K

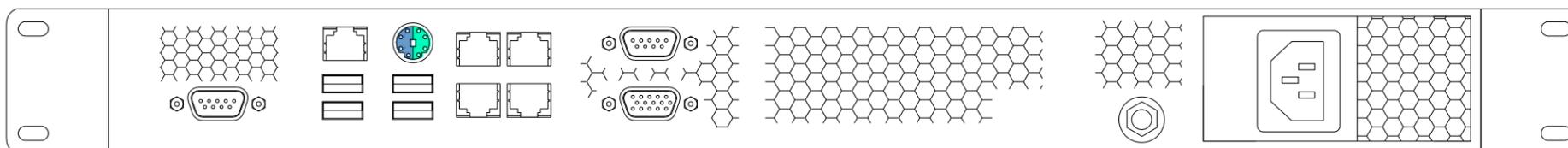
**NOTE 1**

**+.J**



**FRONT VIEW**

**+.W**



**REAR VIEW**

**+.W**

NOTE:  
1. RUGGED EMBEDDED COMPUTER IS PROVIDED BY OTHERS.

REVISIONS			P G I E R U S This document contains information confidential to Siemens Energy, Inc. It is submitted in confidence and is to be used solely for the purpose for which it is furnished and returned on request. This document and such information is not to be reproduced, transmitted, disclosed or used otherwise, in whole or in part, without the written authorization from Siemens Energy, Inc.	CUSTOMER: VIONIX		TITLE: SPPA-T3000 BATTERY STORAGE CONTROL BMS - RUGGED EMBEDDED COMPUTER		TYPE YD	IDENTIFICATION CODE +01CJC21 .WA001	SHT 01	REV. 0
REV.	DESCRIPTION	APVD/DATE		PROJECT NO.: 20618	ENGINEER: SYED ANWAR	PROJECT MANAGER: J. TROKE	DRAWN: JSK DATE: 01/25/18		PSEUDO: WBS:		
0	FOR REVIEW	01/25/18	<b>SIEMENS</b>	PLANT: SHIRLEY	SCALE NONE	CLASS ↻	SIZE B	DRAWING NO. 20618YD+01CJC21WA001-01			

A B C D E F G H J K

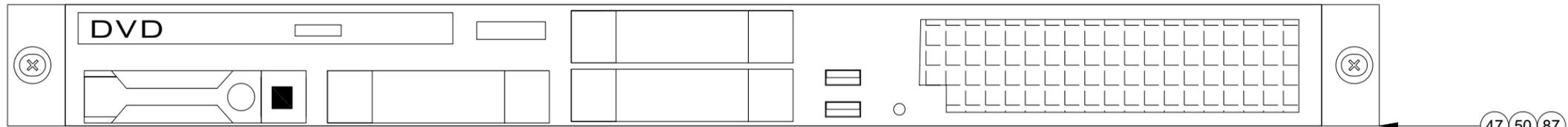
A B C D E F G H J K

1

1

2

2



47 50 87

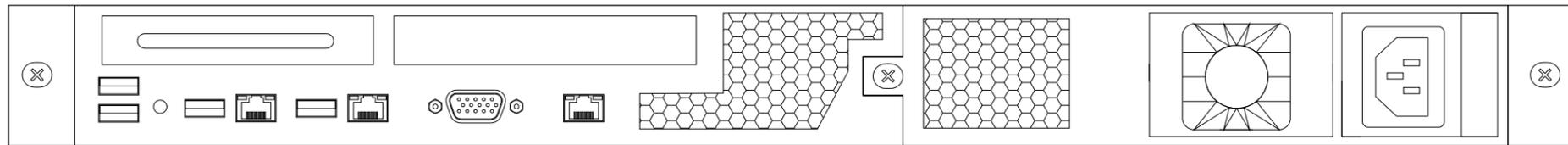
**FRONT VIEW**

3

3

4

4



**REAR VIEW**

5

5

6

6

7

7

**+ .X**

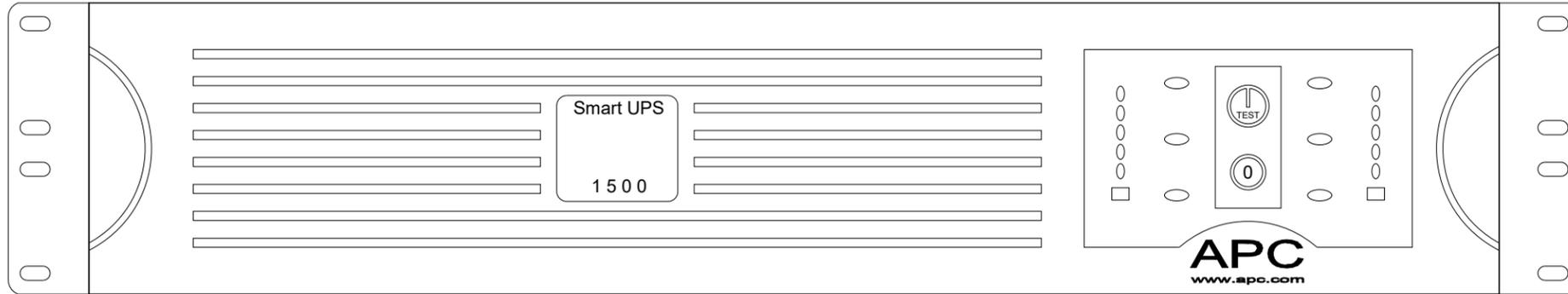
Plot Date\_Time 1/29/2018 2:04 PM

A B C D E F G H J K

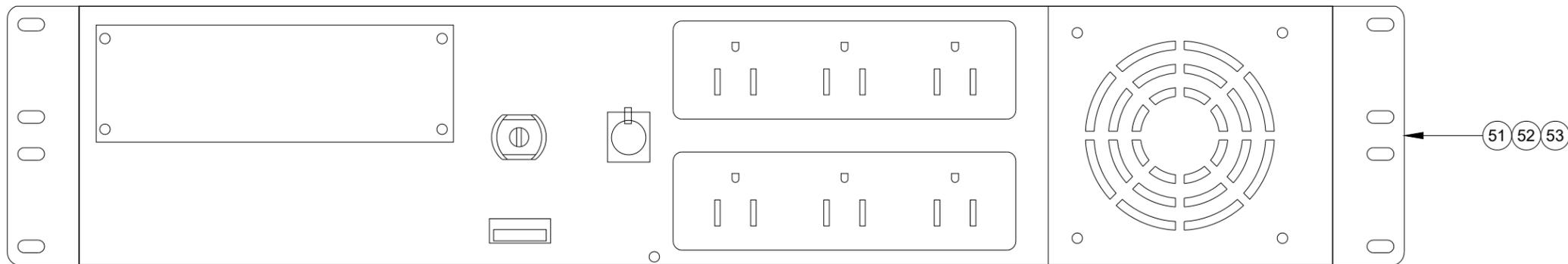
REVISIONS			P G I E R U S This document contains information confidential to Siemens Energy, Inc. It is submitted in confidence and is to be used solely for the purpose for which it is furnished and returned on request. This document and such information is not to be reproduced, transmitted, disclosed or used otherwise, in whole or in part, without the written authorization from Siemens Energy, Inc. <b>SIEMENS</b>	CUSTOMER: VIONIX	TITLE: SPPA-T3000 BATTERY STORAGE CONTROL DL320E - THIN CLIENT	TYPE YD	IDENTIFICATION CODE +01CJC21.XA001	SHT 01	REV. 0	
REV.	DESCRIPTION	APVD/DATE		PROJECT NO.: 20618	ENGINEER: SYED ANWAR	PROJECT MANAGER: J. TROKE	DRAWN: JSK DATE: 01/25/18		PSEUDO: WBS:	
0	FOR REVIEW	01/25/18		PLANT: SHIRLEY	SCALE NONE	CLASS ➡	SIZE B	DRAWING NO. 20618YD+01CJC21XA001-01		

8

**-UPS1**



**FRONT VIEW**



**REAR VIEW**

**+Z**

REVISIONS		
REV.	DESCRIPTION	APVD/DATE
0	FOR REVIEW	01/25/18

**P G I E R U S**  
 This document contains information confidential to Siemens Energy, Inc. It is submitted in confidence and is to be used solely for the purpose for which it is furnished and returned on request. This document and such information is not to be reproduced, transmitted, disclosed or used otherwise, in whole or in part, without the written authorization from Siemens Energy, Inc.

**SIEMENS**

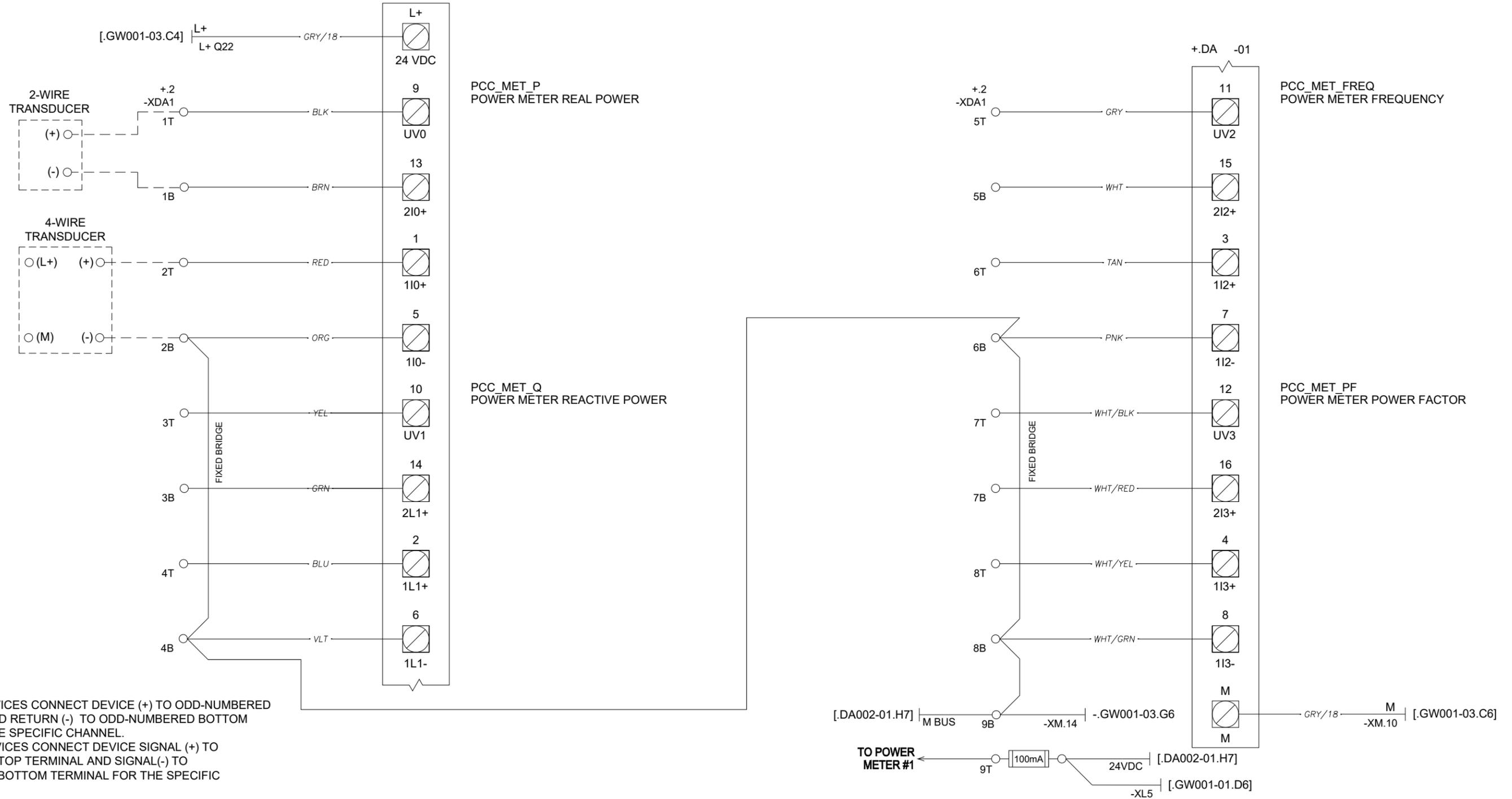
CUSTOMER: **VIONIX**  
 PROJECT NO.: **20618**  
 ENGINEER: **SYED ANWAR**  
 PLANT: **SHIRLEY**

TITLE: **SPPA-T3000 BATTERY STORAGE CONTROL UPS 1500 VA, 120VAC, 6 OUTLET**  
 PROJECT MANAGER: **J. TROKE**  
 SCALE: **NONE**  
 CLASS: **B**

TYPE	IDENTIFICATION CODE	SHT	REV.
YD	+01CJC21.ZA001	01	0
DRAWN: <b>JSK</b>		PSEUDO:	
DATE: <b>01/25/18</b>		WBS:	
DRAWING NO. <b>20618YD+01CJC21ZA001-01</b>			

AI420DE-6GD00BW

6ES71346GD000BA1  
4-CH ANALOG IN  
+.DA -01



NOTES:  
1. FOR 2-WIRE DEVICES CONNECT DEVICE (+) TO ODD-NUMBERED TOP TERMINAL AND RETURN (-) TO ODD-NUMBERED BOTTOM TERMINAL FOR THE SPECIFIC CHANNEL.  
2. FOR 4-WIRE DEVICES CONNECT DEVICE SIGNAL (+) TO EVEN-NUMBERED TOP TERMINAL AND SIGNAL(-) TO EVEN-NUMBERED BOTTOM TERMINAL FOR THE SPECIFIC CHANNEL.

Plot Date\_Time 1/29/2018 2:04 PM

REVISIONS		
REV.	DESCRIPTION	APVD/DATE
0	FOR REVIEW	01/25/18

**P G I E R U S**

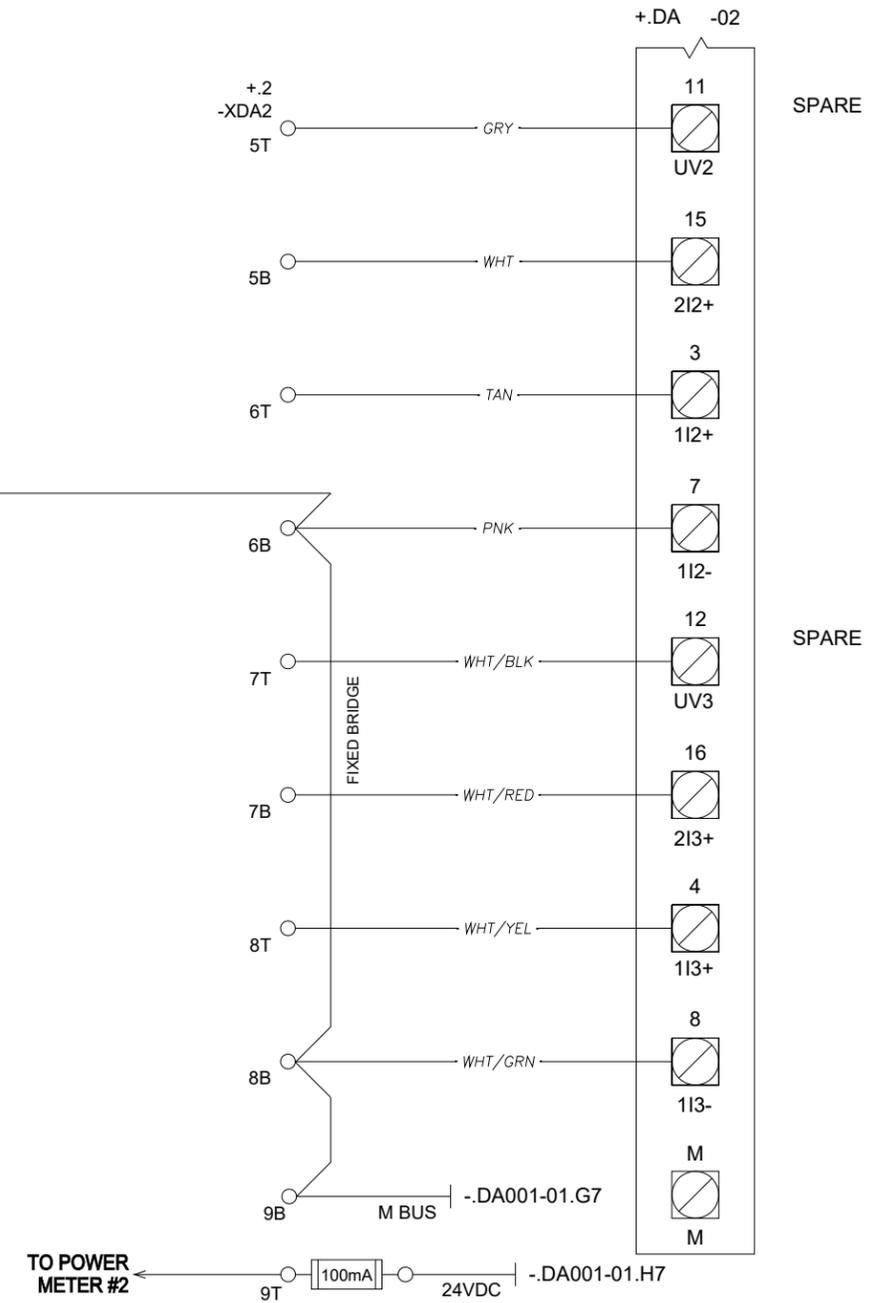
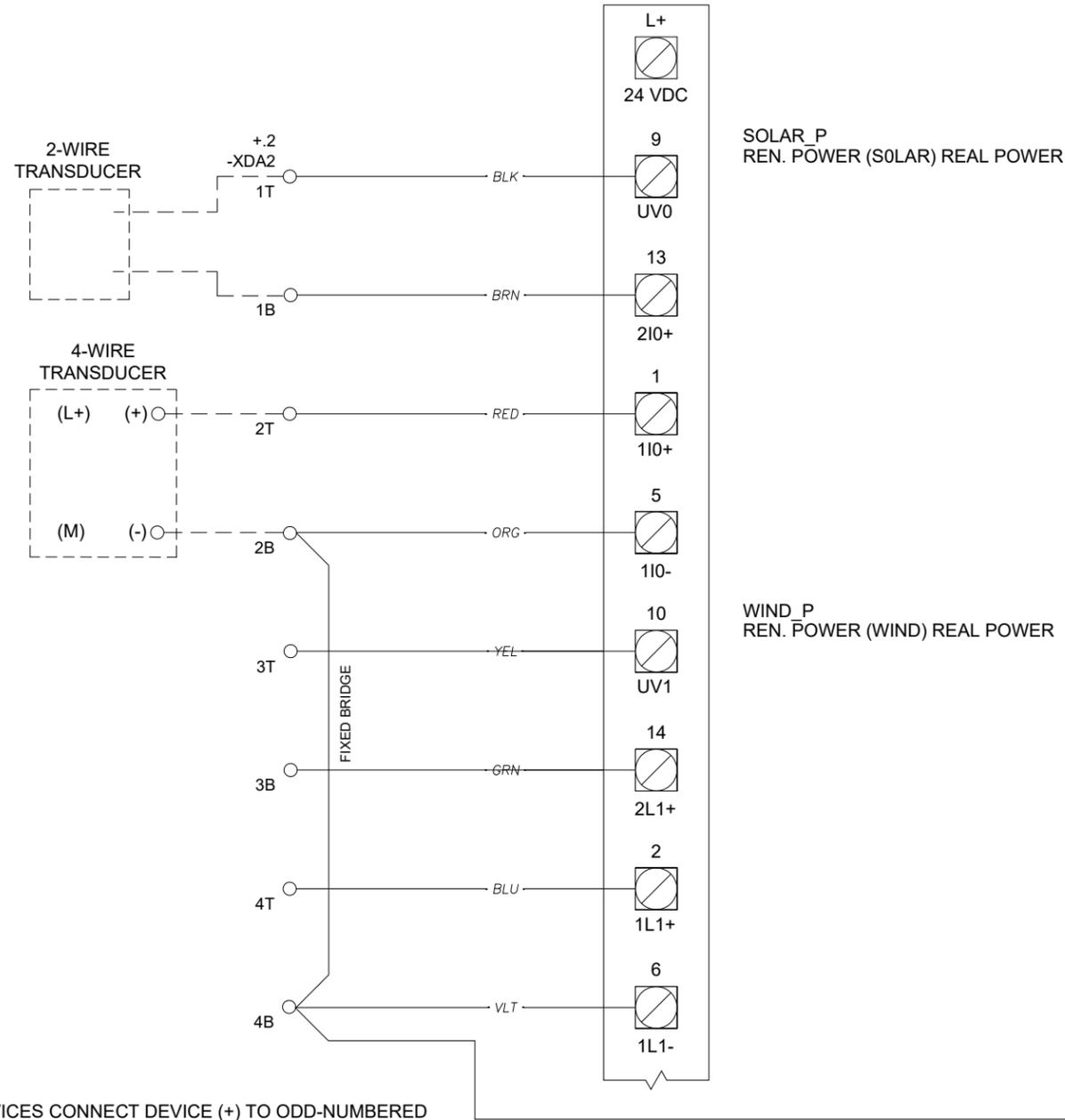
This document contains information confidential to Siemens Energy, Inc. It is submitted in confidence and is to be used solely for the purpose for which it is furnished and returned on request. This document and such information is not to be reproduced, transmitted, disclosed or used otherwise, in whole or in part, without the written authorization from Siemens Energy, Inc.

SIEMENS

CUSTOMER: <b>VIONIX</b>		TITLE: <b>SPPA-T3000 BATTERY STORAGE CONTROL SM134 AI 4x4-20mA (2/4-WIRE)</b>		TYPE YS	IDENTIFICATION CODE =01CJC21 .DA001	SHT 01	REV. 0
PROJECT NO.: <b>20618</b>		PROJECT MANAGER: <b>J. TROKE</b>		DRAWN: JSK DATE: 01/25/18		PSEUDO: WBS:	
ENGINEER: <b>SYED ANWAR</b>		SCALE NONE		CLASS B		DRAWING NO. 20618YS=01CJC21DA001-01	
PLANT: <b>SHIRLEY</b>		SIZE B					

AI420DE-6GD00BG

6ES71346GD000BA1  
4-CH ANALOG IN  
+.DA -02



NOTES:  
1. FOR 2-WIRE DEVICES CONNECT DEVICE (+) TO ODD-NUMBERED TOP TERMINAL AND RETURN (-) TO ODD-NUMBERED BOTTOM TERMINAL FOR THE SPECIFIC CHANNEL.  
2. FOR 4-WIRE DEVICES CONNECT DEVICE SIGNAL (+) TO EVEN-NUMBERED TOP TERMINAL AND SIGNAL(-) TO EVEN-NUMBERED BOTTOM TERMINAL FOR THE SPECIFIC CHANNEL.

REVISIONS		
REV.	DESCRIPTION	APVD/DATE
0	FOR REVIEW	01/25/18

**P G I E R U S**  
This document contains information confidential to Siemens Energy, Inc. It is submitted in confidence and is to be used solely for the purpose for which it is furnished and returned on request. This document and such information is not to be reproduced, transmitted, disclosed or used otherwise, in whole or in part, without the written authorization from Siemens Energy, Inc.

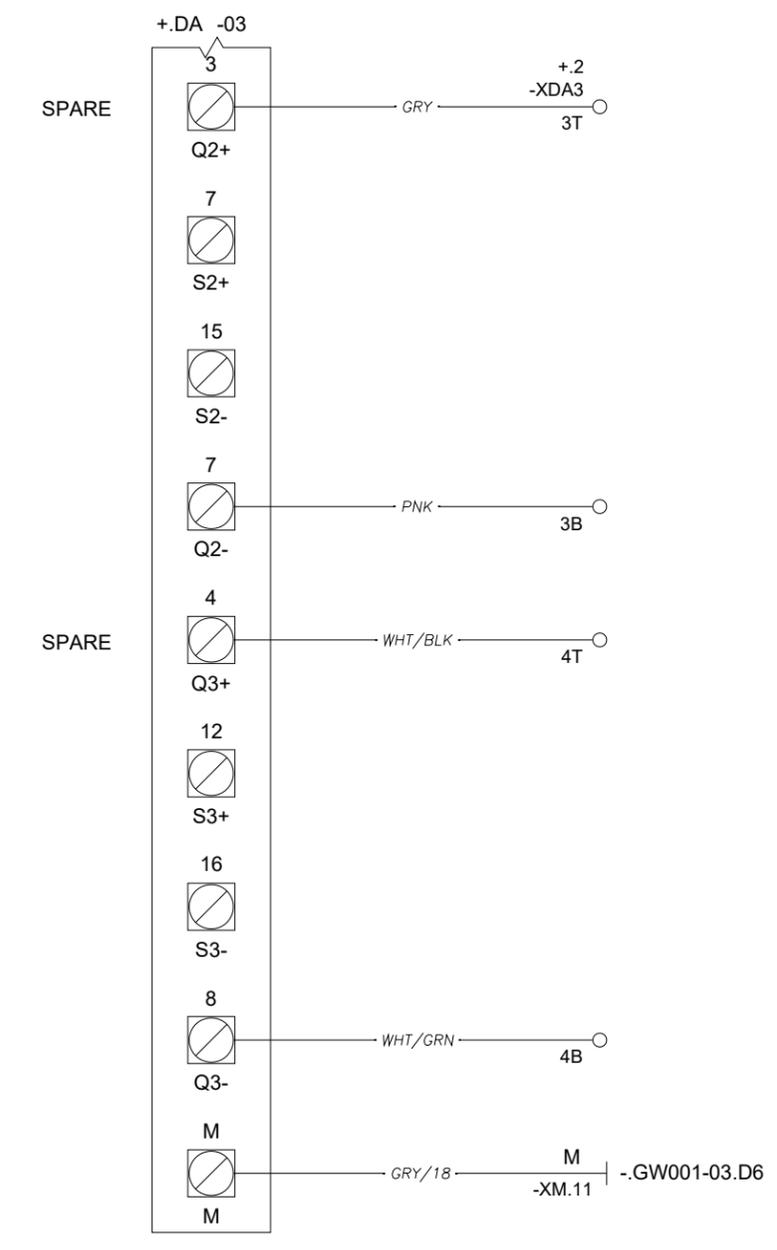
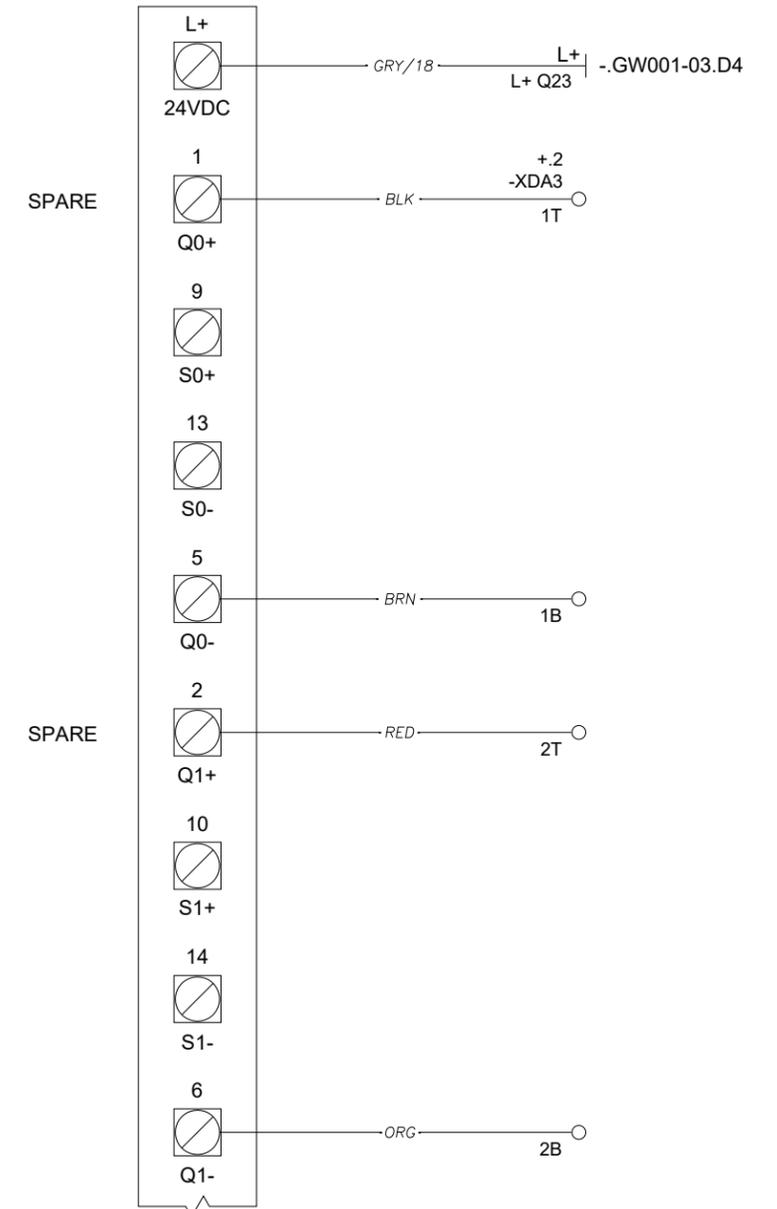


CUSTOMER:  
**VIONIX**  
PROJECT NO.:  
**20618**  
ENGINEER:  
**SYED ANWAR**  
PLANT:  
**SHIRLEY**

TITLE:  
**SPPA-T3000  
BATTERY STORAGE CONTROL  
SM134 AI 4x4-20mA (2/4-WIRE)**  
PROJECT MANAGER:  
**J. TROKE**

TYPE YS	IDENTIFICATION CODE =.01CJC21 .DA002	SHT 01	REV. 0
DRAWN: JSK		PSEUDO:	
DATE: 01/25/18		WBS:	
DRAWING NO. 20618YS=01CJC21DA002-01			

AO420L-6DH00BW  
 AJCUSTOM  
 6ES71356HD000BA1  
 4-CH ANALOG OUT  
 +.DA -03

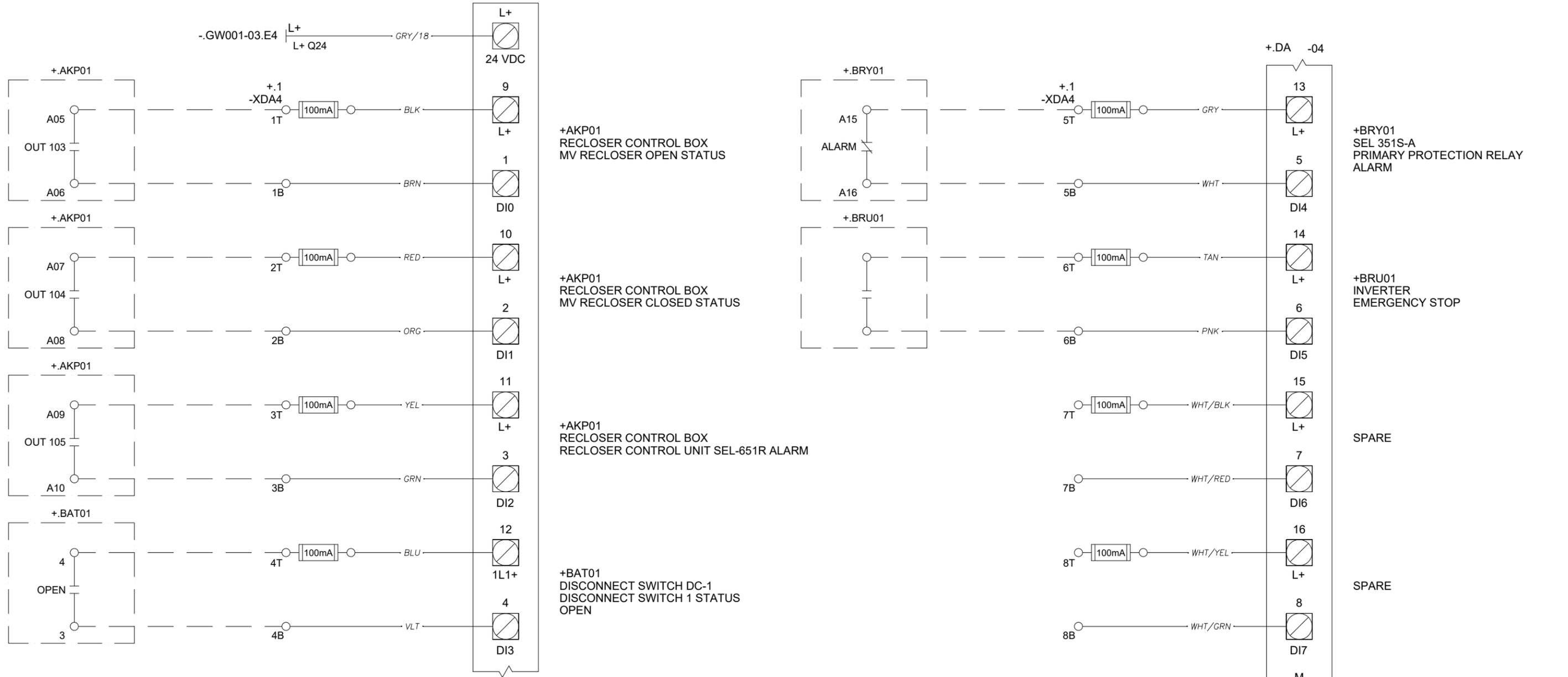


NOTES:  
 1. REFER TO GW001 POWER DISTRIBUTION DRAWING.

REVISIONS			<b>P G I E R U S</b> <small>This document contains information confidential to Siemens Energy, Inc. It is submitted in confidence and is to be used solely for the purpose for which it is furnished and returned on request. This document and such information is not to be reproduced, transmitted, disclosed or used otherwise, in whole or in part, without the written authorization from Siemens Energy, Inc.</small> <b>SIEMENS</b>	CUSTOMER:	TITLE:	TYPE	IDENTIFICATION CODE	SHT	REV.
REV.	DESCRIPTION	APVD/DATE		VIONIX	SPPA-T3000 BATTERY STORAGE CONTROL SM135 AO 4x4-20mA (2-WIRE)	YS	=.01CJC21 .DA003	01	0
0	FOR REVIEW	01/25/18		PROJECT NO.: 20618	PROJECT MANAGER: J. TROKE	DRAWN: JSK DATE: 01/25/18		PSEUDO: WBS:	
Plot Date_Time 1/29/2018 2:04 PM			PLANT: SHIRLEY	SCALE NONE	CLASS ➡	SIZE B	DRAWING NO. 20618YS=01CJC21DA003-01		

DI24D-6BF00BW

6ES71316BF00BA0  
8CH DIGITAL IN  
+.DA -04



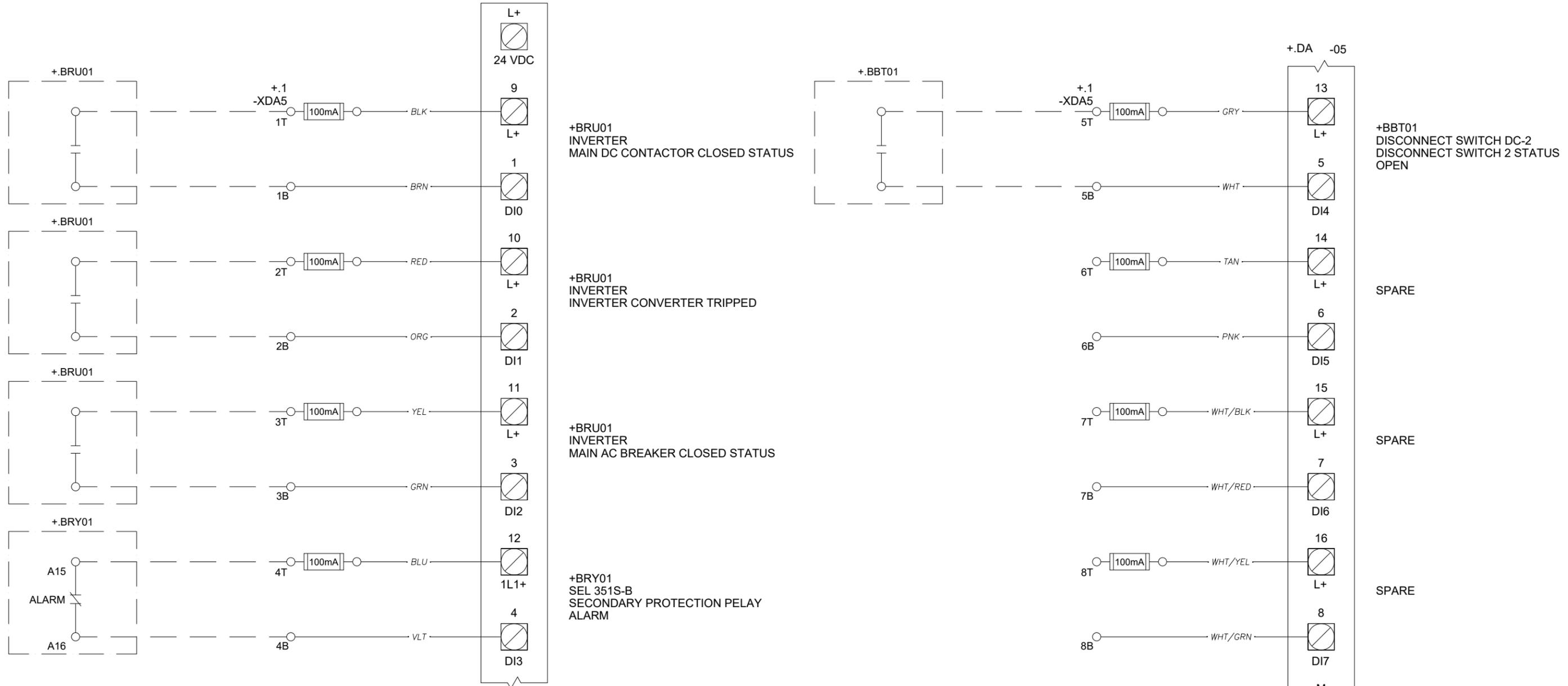
NOTES:  
1. REFER TO GW001 POWER DISTRIBUTION DRAWING.

REVISIONS			P G I E R U S This document contains information confidential to Siemens Energy, Inc. It is submitted in confidence and is to be used solely for the purpose for which it is furnished and returned on request. This document and such information is not to be reproduced, transmitted, disclosed or used otherwise, in whole or in part, without the written authorization from Siemens Energy, Inc.	CUSTOMER: VIONIX	TITLE: SPPA-T3000 BATTERY STORAGE CONTROL SM131 DI 8 x 24VDC	TYPE YS	IDENTIFICATION CODE =.01CJC21 .DA004	SHT 01	REV. 0	
REV.	DESCRIPTION	APVD/DATE		PROJECT NO.: 20618	PROJECT MANAGER: J. TROKE	DRAWN: JSK	PSEUDO:			
0	FOR REVIEW	01/25/18		ENGINEER: SYED ANWAR		DATE: 01/25/18	WBS:			
Plot Date_Time 1/29/2018 2:04 PM				PLANT: SHIRLEY	SCALE NONE	CLASS B	SIZE B	DRAWING NO. 20618YS=01CJC21DA004-01		



DI24D-6BF00BG

6ES71316BF00BA0  
8CH DIGITAL IN  
+.DA -05

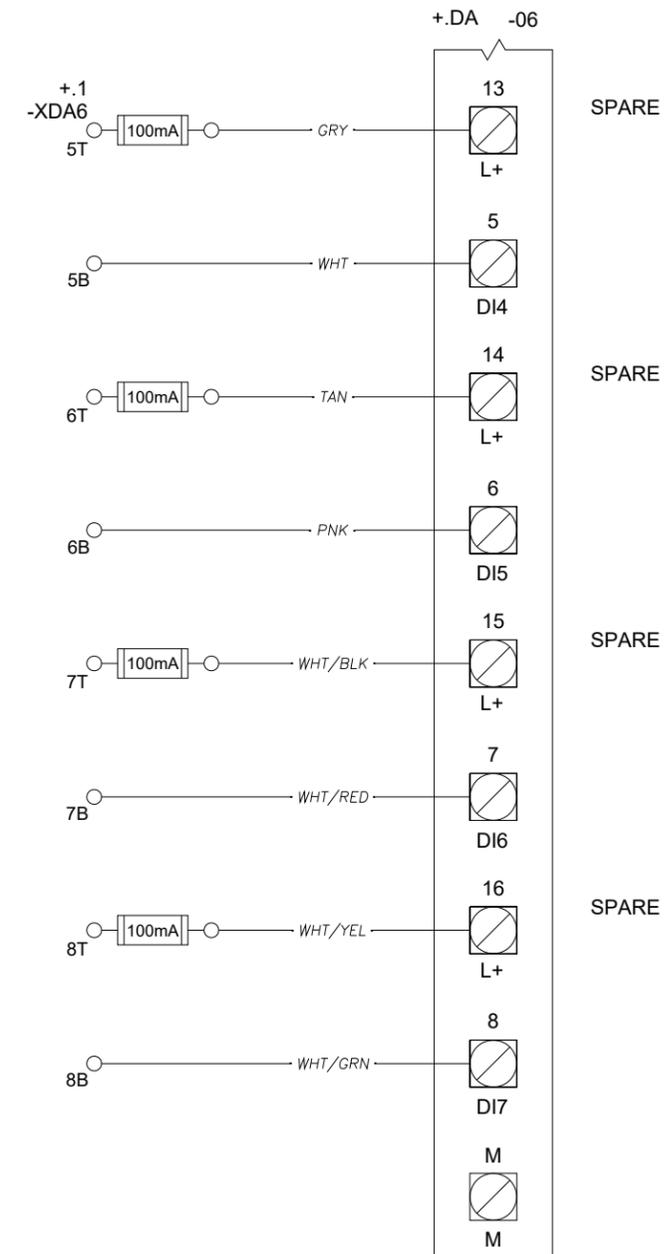
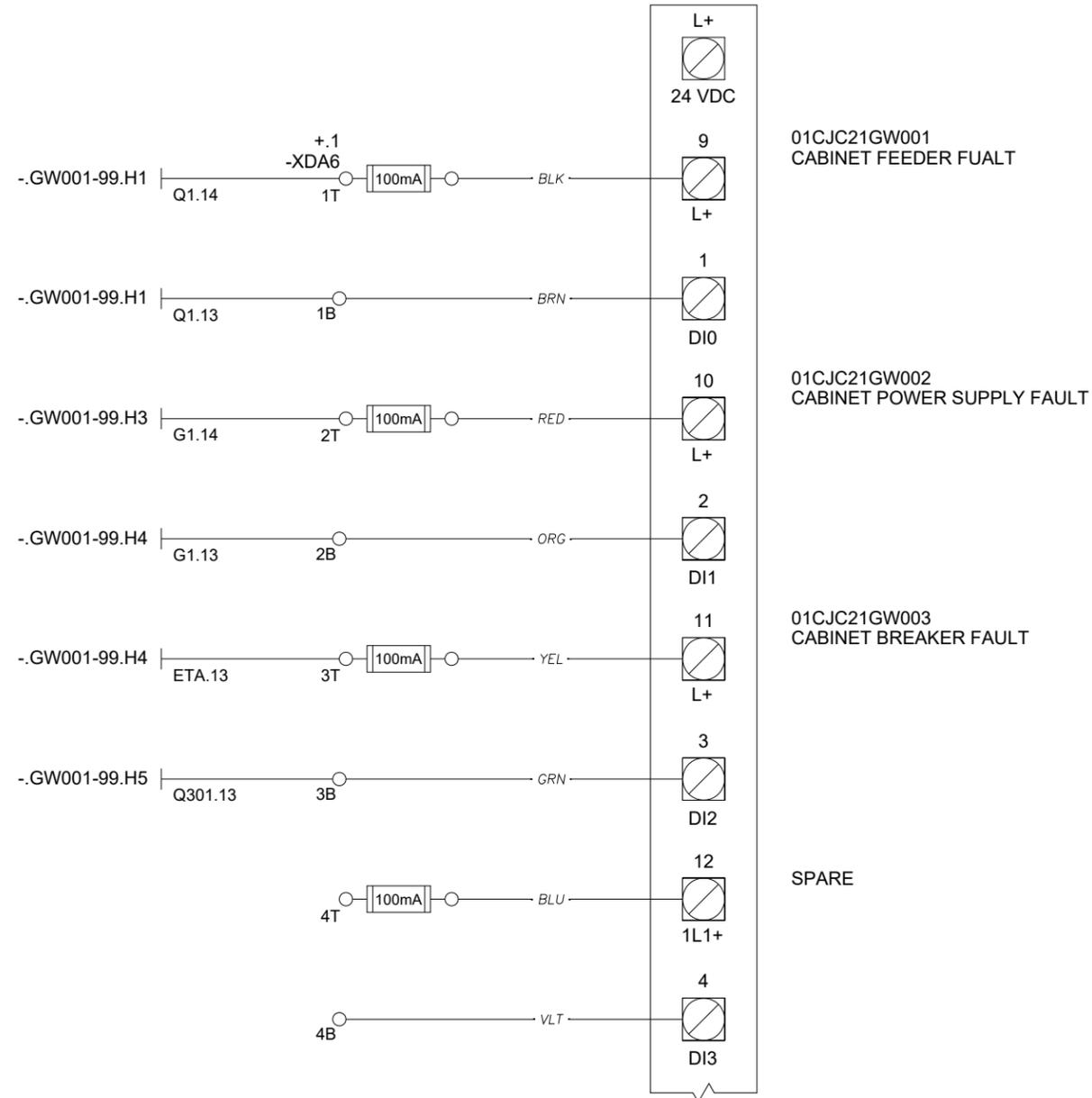


NOTES:  
1. REFER TO GW001 POWER DISTRIBUTION DRAWING.

REVISIONS			P G I E R U S This document contains information confidential to Siemens Energy, Inc. It is submitted in confidence and is to be used solely for the purpose for which it is furnished and returned on request. This document and such information is not to be reproduced, transmitted, disclosed or used otherwise, in whole or in part, without the written authorization from Siemens Energy, Inc.	CUSTOMER: VIONIX		TITLE: SPPA-T3000 BATTERY STORAGE CONTROL SM131 DI 8 x 24VDC		TYPE	IDENTIFICATION CODE	SHT	REV.
REV.	DESCRIPTION	APVD/DATE		PROJECT NO.:	PROJECT MANAGER:	SCALE	CLASS	SIZE	DRAWN:	DATE:	PSEUDO:
0	FOR REVIEW	01/25/18	20618	J. TROKE	NONE	B	B	JSK	01/25/18		
Plot Date_Time 1/29/2018 2:05 PM			SHIRLEY				DRAWING NO. 20618YS=01CJC21DA005-01				

DI24D-6BF00BG

6ES71316BF000BA0  
8CH DIGITAL IN  
+.DA -06



NOTES:  
1. REFER TO GW001 POWER DISTRIBUTION DRAWING.

REVISIONS		
REV.	DESCRIPTION	APVD/DATE
0	FOR REVIEW	01/25/18

**P G I E R U S**

This document contains information confidential to Siemens Energy, Inc. It is submitted in confidence and is to be used solely for the purpose for which it is furnished and returned on request. This document and such information is not to be reproduced, transmitted, disclosed or used otherwise, in whole or in part, without the written authorization from Siemens Energy, Inc.



CUSTOMER:  
**VIONIX**

PROJECT NO.:  
**20618**

ENGINEER:  
**SYED ANWAR**

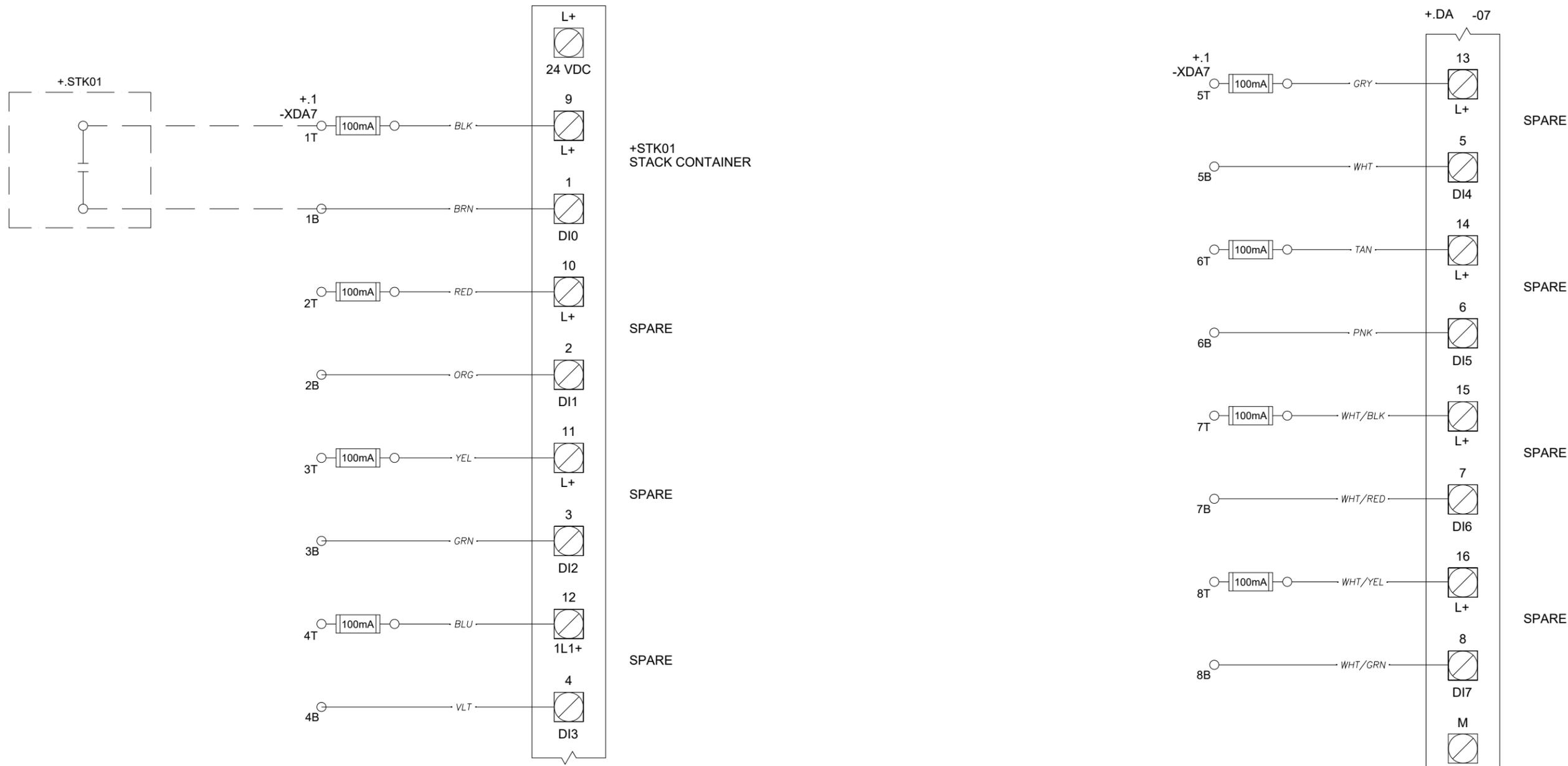
PLANT:  
**SHIRLEY**

TITLE:  
**SPPA-T3000  
BATTERY STORAGE CONTROL  
SM131 DI 8 x 24VDC**

PROJECT MANAGER:  
**J. TROKE**

TYPE YS	IDENTIFICATION CODE =.01CJC21 .DA006	SHT 01	REV. 0
DRAWN: JSK		PSEUDO:	
DATE: 01/25/18		WBS:	
DRAWING NO. 20618YS=01CJC21DA006-01			

DI24D-6BF00BG  
 6ES71316BF000BA0  
 8CH DIGITAL IN  
 +.DA -07



NOTES:  
 1. REFER TO GW001 POWER DISTRIBUTION DRAWING.

REVISIONS		
REV.	DESCRIPTION	APVD/DATE
0	FOR REVIEW	01/25/18

**P G I E R U S**

This document contains information confidential to Siemens Energy, Inc. It is submitted in confidence and is to be used solely for the purpose for which it is furnished and returned on request. This document and such information is not to be reproduced, transmitted, disclosed or used otherwise, in whole or in part, without the written authorization from Siemens Energy, Inc.

SIEMENS

CUSTOMER:  
**VIONIX**

PROJECT NO.:  
**20618**

ENGINEER:  
**SYED ANWAR**

PLANT:  
**SHIRLEY**

TITLE:  
**SPPA-T3000  
 BATTERY STORAGE CONTROL  
 SM131 DI 8 x 24VDC**

PROJECT MANAGER:  
**J. TROKE**

SCALE: **NONE**

CLASS:

SIZE: **B**

TYPE <b>YS</b>	IDENTIFICATION CODE <b>=.01CJC21 .DA007</b>	SHT <b>01</b>	REV. <b>0</b>
DRAWN: <b>JSK</b>		PSEUDO:	
DATE: <b>01/25/18</b>		WBS:	
DRAWING NO. <b>20618YS=01CJC21DA007-01</b>			

DOXXE-06BF00K5G

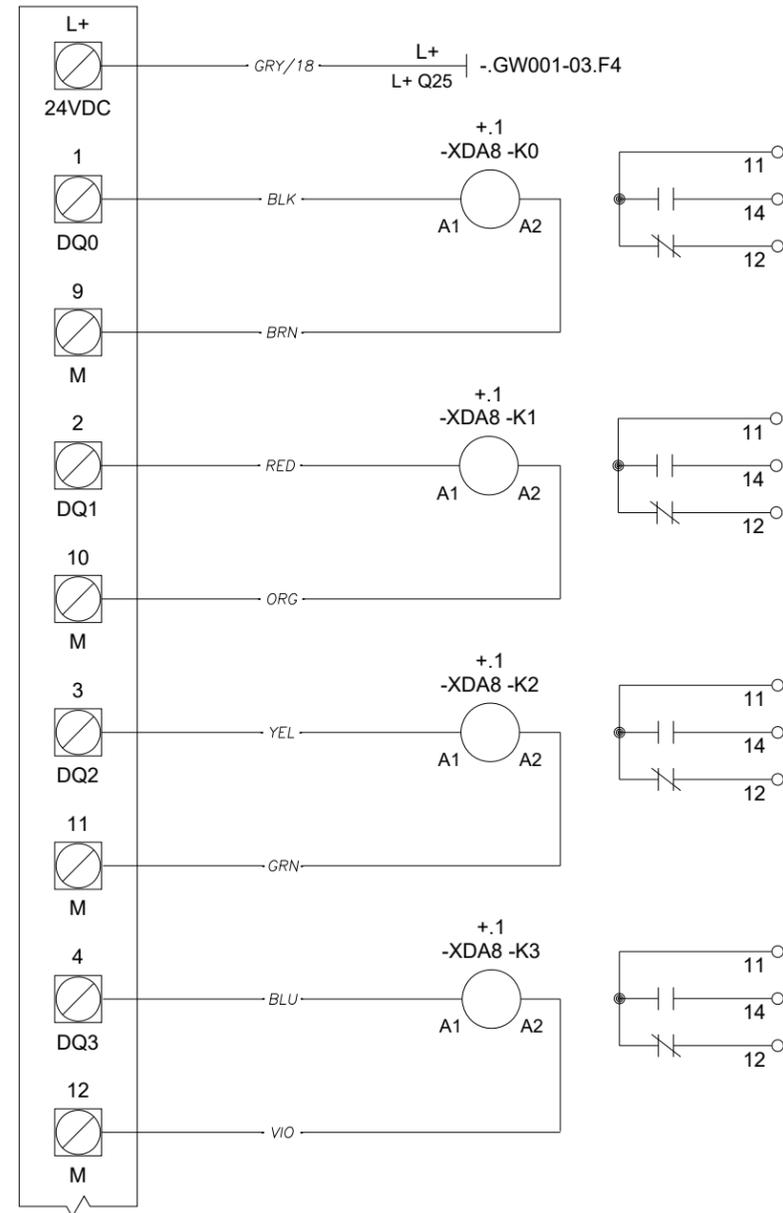
6ES71326BF000BA0  
8-CH DIGITAL OUT  
+.DA -08

+STK01  
STACK CONTAINER

SPARE

SPARE

SPARE

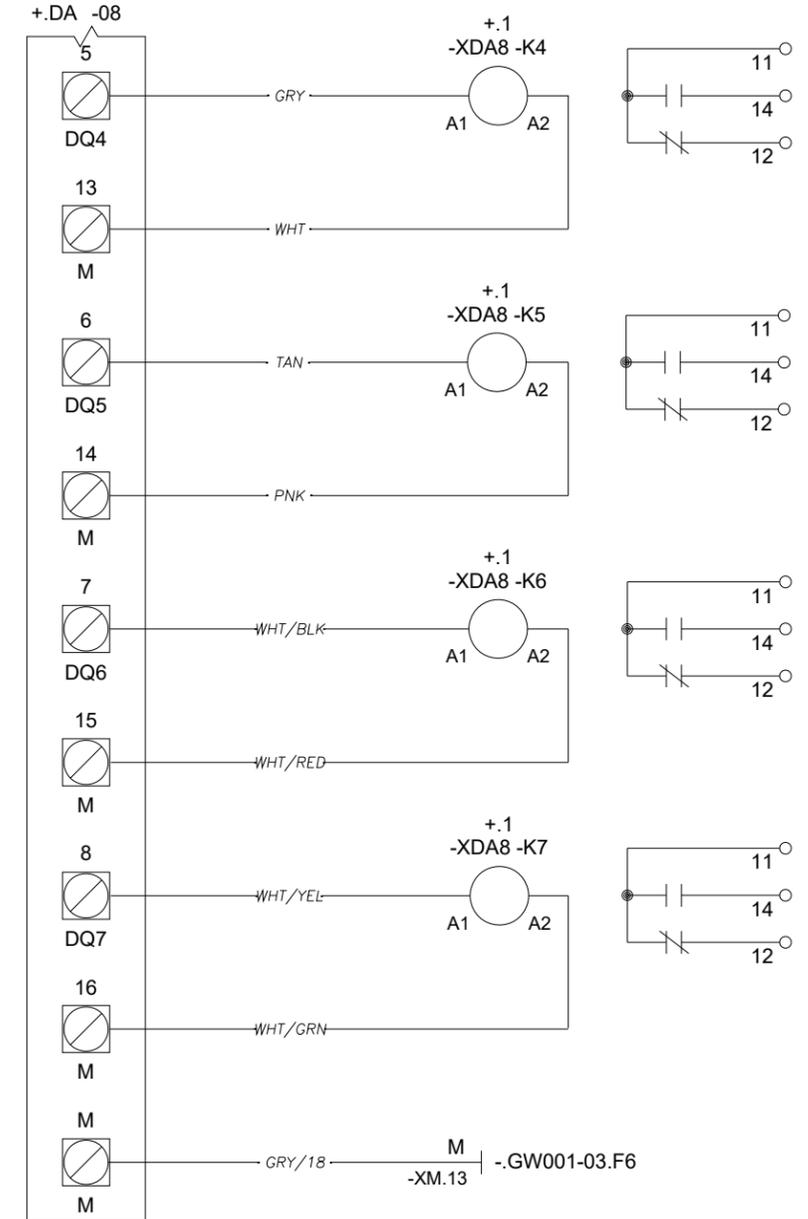


SPARE

SPARE

SPARE

SPARE



NOTES:  
1. REFER TO GW001 POWER DISTRIBUTION DRAWING.

REVISIONS		
REV.	DESCRIPTION	APVD/DATE
0	FOR REVIEW	01/25/18

**P G I E R U S**

This document contains information confidential to Siemens Energy, Inc. It is submitted in confidence and is to be used solely for the purpose for which it is furnished and returned on request. This document and such information is not to be reproduced, transmitted, disclosed or used otherwise, in whole or in part, without the written authorization from Siemens Energy, Inc.

SIEMENS

CUSTOMER: VIONIX  
PROJECT NO.: 20618  
ENGINEER: SYED ANWAR  
PLANT: SHIRLEY

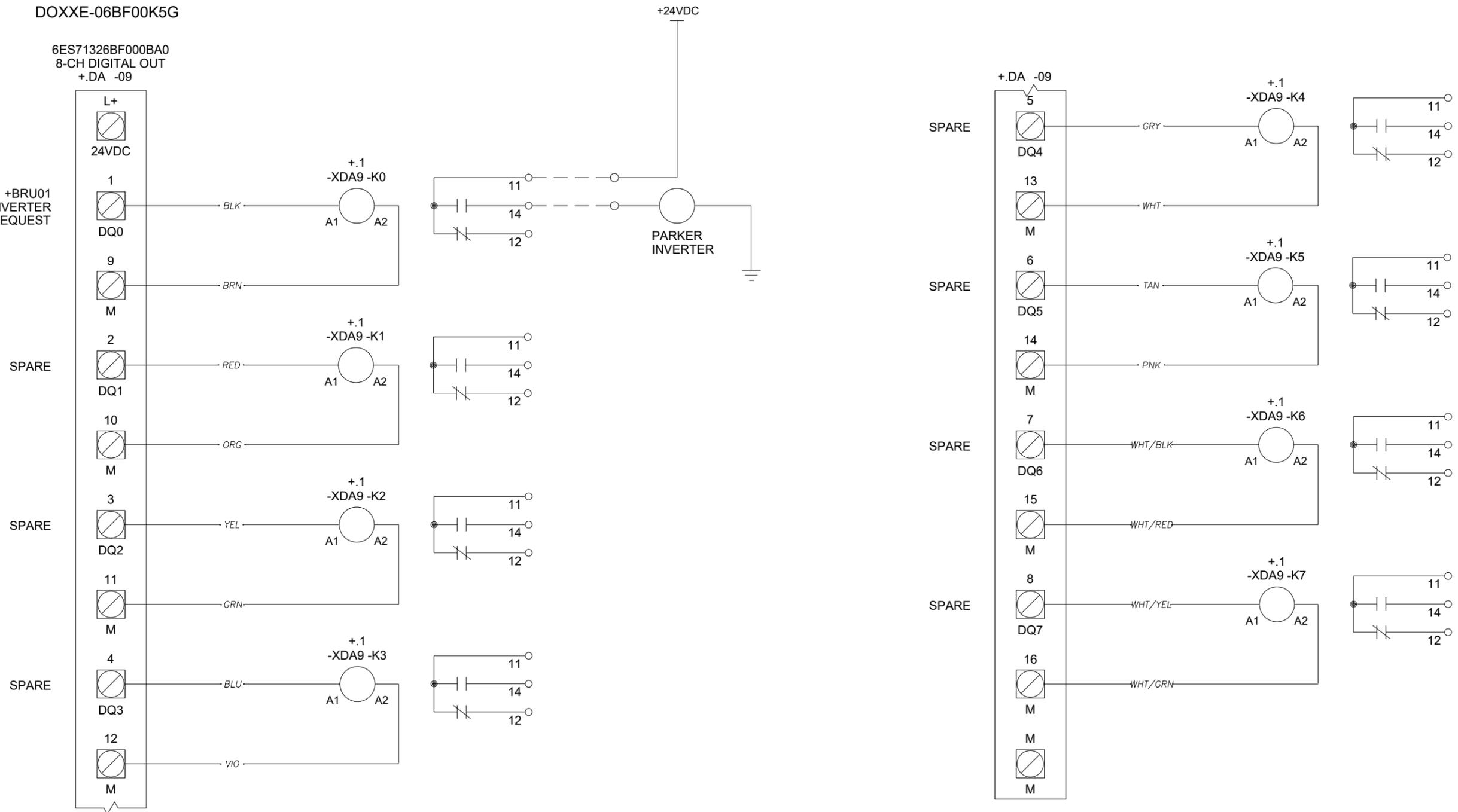
TITLE: SPPA-T3000  
BATTERY STORAGE CONTROL  
SM132 DOx8 (RELAY) 120VAC, 10A  
PROJECT MANAGER: J. TROKE  
SCALE: NONE  
CLASS:

TYPE: YS  
IDENTIFICATION CODE: =.01CJC21 .DA008  
SHT: 01  
REV: 0  
DRAWN: JSK  
DATE: 01/25/18  
PSEUDO:  
WBS:  
DRAWING NO.: 20618YS=01CJC21DA008-01

DOXXE-06BF00K5G

6ES71326BF000BA0  
8-CH DIGITAL OUT  
+.DA -09

+BRU01  
INVERTER  
INV CONVERTER TRIP REQUEST



NOTES:  
1. REFER TO GW001 POWER DISTRIBUTION DRAWING.

REVISIONS		
REV.	DESCRIPTION	APVD/DATE
0	FOR REVIEW	01/25/18

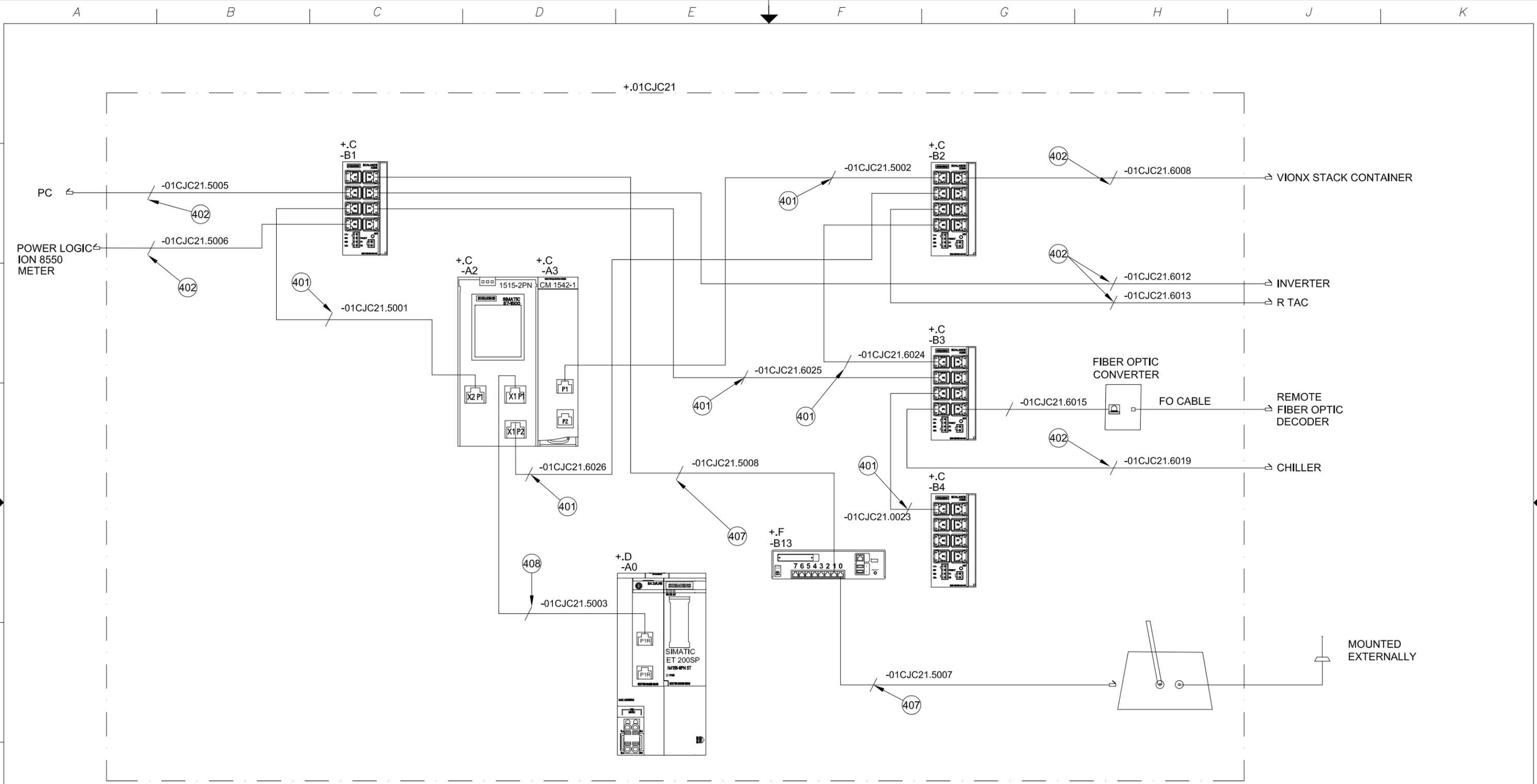
**P G I E R U S**  
This document contains information confidential to Siemens Energy, Inc. It is submitted in confidence and is to be used solely for the purpose for which it is furnished and returned on request. This document and such information is not to be reproduced, transmitted, disclosed or used otherwise, in whole or in part, without the written authorization from Siemens Energy, Inc.



CUSTOMER:  
**VIONIX**  
PROJECT NO.:  
**20618**  
ENGINEER:  
**SYED ANWAR**  
PLANT:  
**SHIRLEY**

TITLE:  
**SPPA-T3000  
BATTERY STORAGE CONTROL  
SM132 DOx8 (RELAY) 120VAC, 10A**  
PROJECT MANAGER:  
**J. TROKE**

TYPE YS	IDENTIFICATION CODE =.01CJC21 .DA009	SHT 01	REV. 0
DRAWN: JSK		PSEUDO:	
DATE: 01/25/18		WBS:	
DRAWING NO. 20618YS=01CJC21DA009-01			



REVISIONS		
REV.	DESCRIPTION	APVD/DATE
0	FOR REVIEW	01/25/18

**P G I E R U S**

This document contains information confidential to Siemens Energy, Inc. It is submitted in confidence and is to be used solely for the purpose for which it is furnished and returned on request. This document and such information is not to be reproduced, transmitted, disclosed or used otherwise, in whole or in part, without the written authorization from Siemens Energy, Inc.

**SIEMENS**

CUSTOMER:  
**VIONIX**

PROJECT NO.:  
**20618**

ENGINEER:  
**SYED ANWAR**

PLANT:  
**SHIRLEY**

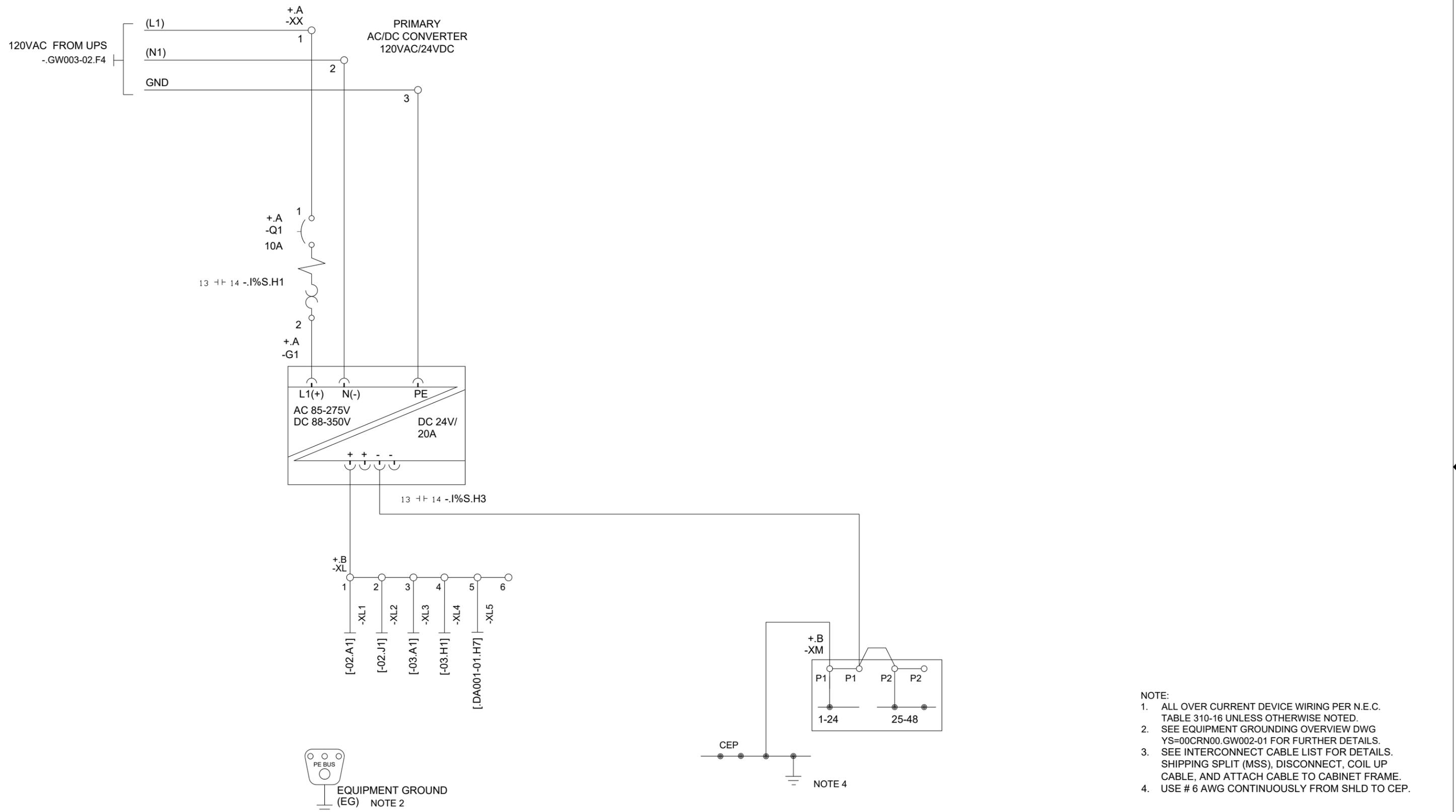
TITLE:  
**SPPA-T3000  
BATTERY STORAGE CONTROL  
NETWORK DETAILS**

PROJECT MANAGER:  
**J. TROKE**

TYPE YS	IDENTIFICATION CODE =01CJC21.GN000	SHT 01	REV. 0
DRAWN: JSK		PSEUDO:	
DATE: 01/25/18		WBS:	
DRAWING NO. 20618YS=01CJC21GN000-01			

Plot Date\_Time 1/31/2018 2:42 PM

A B C D E F G H J K



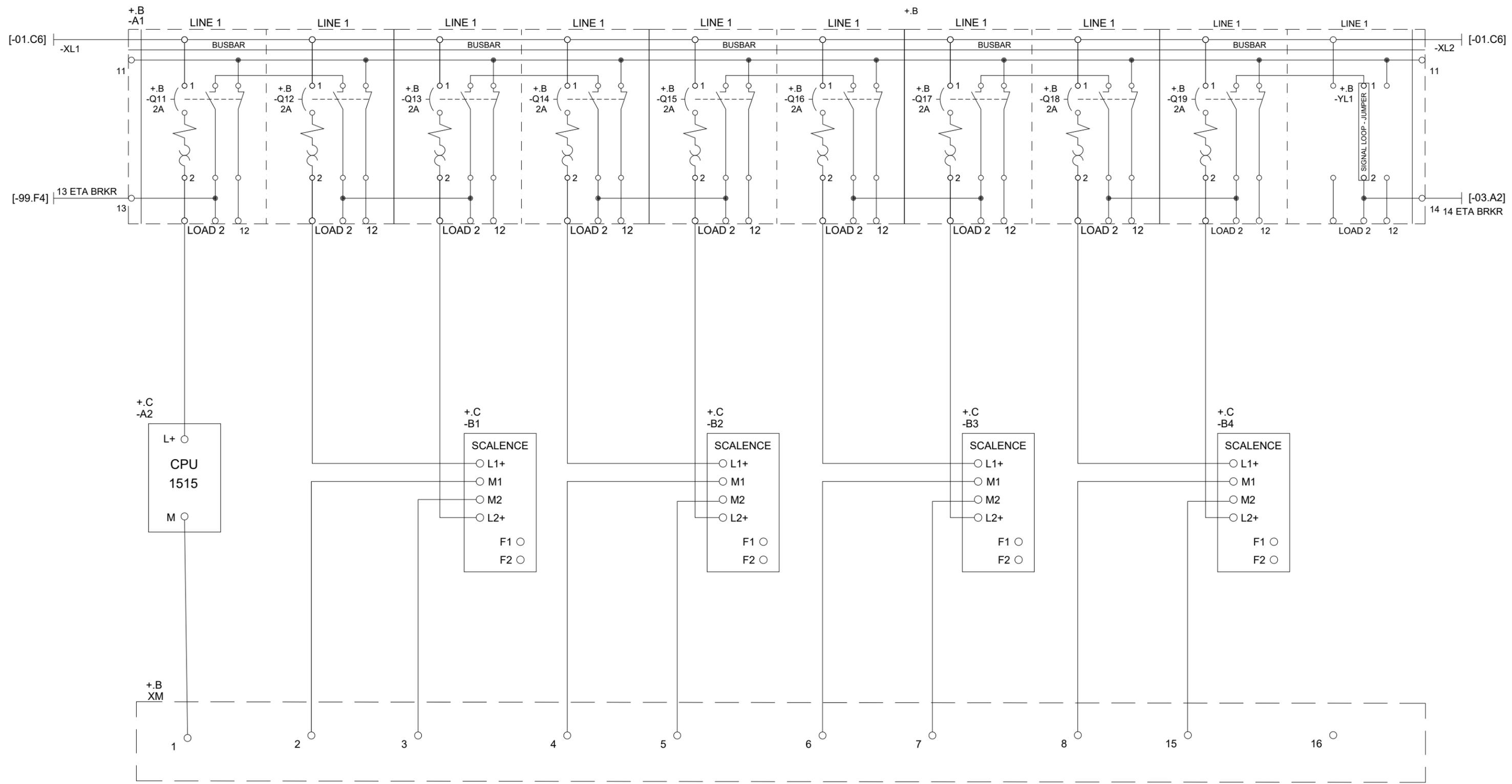
- NOTE:
1. ALL OVER CURRENT DEVICE WIRING PER N.E.C. TABLE 310-16 UNLESS OTHERWISE NOTED.
  2. SEE EQUIPMENT GROUNDING OVERVIEW DWG YS=00CRN00.GW002-01 FOR FURTHER DETAILS.
  3. SEE INTERCONNECT CABLE LIST FOR DETAILS. SHIPPING SPLIT (MSS), DISCONNECT, COIL UP CABLE, AND ATTACH CABLE TO CABINET FRAME.
  4. USE # 6 AWG CONTINUOUSLY FROM SHLD TO CEP.

Plot Date\_Time 1/29/2018 2:05 PM

REVISIONS			P G I E R U S This document contains information confidential to Siemens Energy, Inc. It is submitted in confidence and is to be used solely for the purpose for which it is furnished and returned on request. This document and such information is not to be reproduced, transmitted, disclosed or used otherwise, in whole or in part, without the written authorization from Siemens Energy, Inc.	CUSTOMER: VIONIX		TITLE: SPPA-T3000 BATTERY STORAGE CONTROL INTERNAL POWER SUPPLY 24VDC		TYPE	IDENTIFICATION CODE	SHT	REV.
REV.	DESCRIPTION	APVD/DATE		PROJECT NO.:	PROJECT MANAGER:	DRAWN:	PSEUDO:				
0	FOR REVIEW	01/25/18	20618	J. TROKE	JSK						
			ENGINEER: SYED ANWAR	DATE: 01/25/18		WBS:					
			PLANT: SHIRLEY	SCALE NONE	CLASS B	DRAWING NO. 20618YS=01CJC21GW001-01					

**SIEMENS**

A B C D E F G H J K



REVISIONS		
REV.	DESCRIPTION	APVD/DATE
0	FOR REVIEW	01/25/18

**P G I E R U S**

This document contains information confidential to Siemens Energy, Inc. It is submitted in confidence and is to be used solely for the purpose for which it is furnished and returned on request. This document and such information is not to be reproduced, transmitted, disclosed or used otherwise, in whole or in part, without the written authorization from Siemens Energy, Inc.

SIEMENS

CUSTOMER:  
**VIONIX**

PROJECT NO.:  
**20618**

ENGINEER:  
**SYED ANWAR**

PLANT:  
**SHIRLEY**

TITLE:  
**SPPA-T3000  
BATTERY STORAGE CONTROL  
INTERNAL 24VDC POWER DISTRIBUTION**

PROJECT MANAGER:  
**J. TROKE**

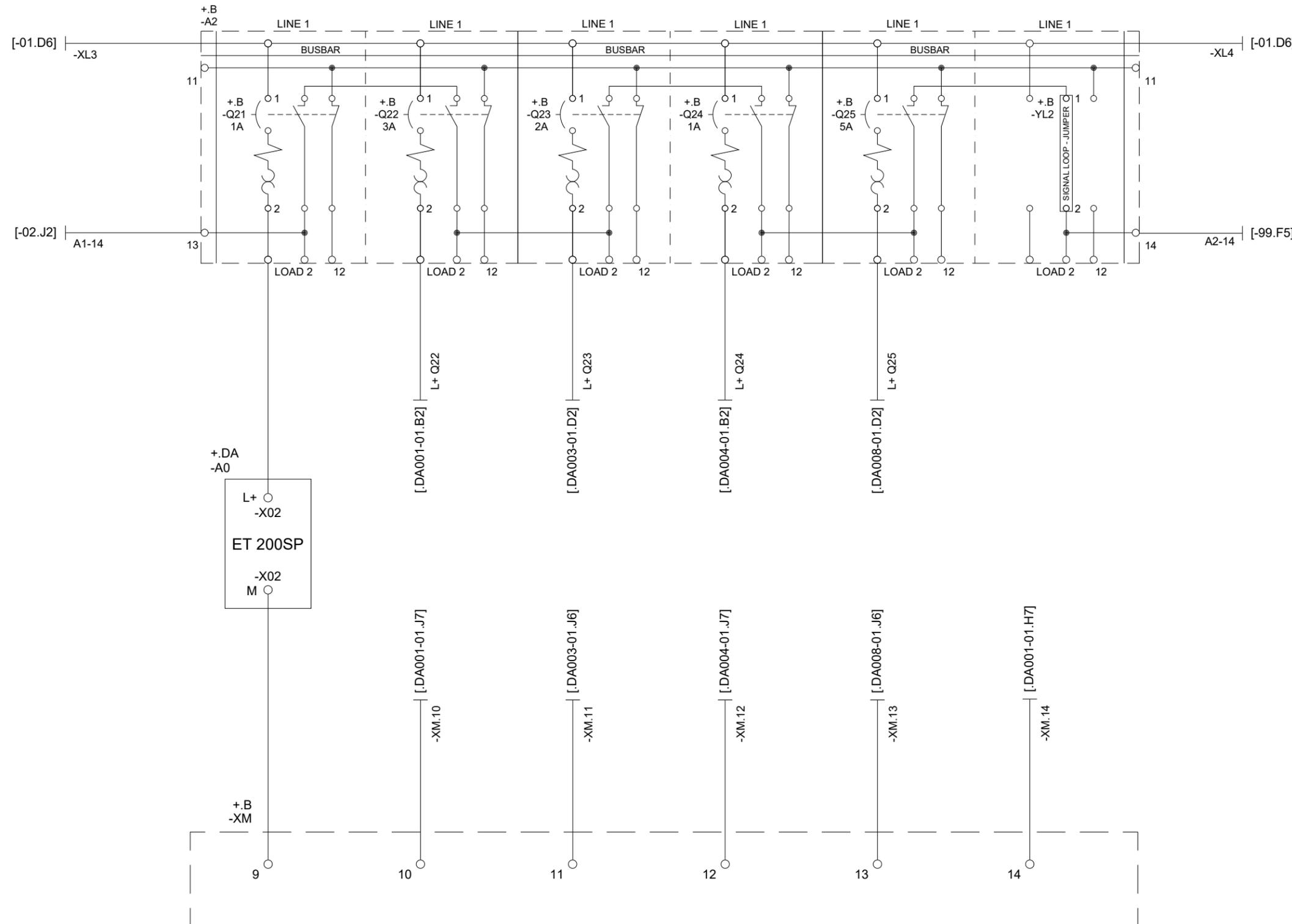
SCALE  
**NONE**

CLASS

SIZE  
**B**

TYPE <b>YS</b>	IDENTIFICATION CODE <b>=.01CJC21 .GW001</b>	SHT <b>02</b>	REV. <b>0</b>
DRAWN: <b>JSK</b>		PSEUDO:	
DATE: <b>01/25/18</b>		WBS:	
DRAWING NO. <b>20618YS=01CJC21GW001-02</b>			

Plot Date\_Time 1/29/2018 2:05 PM



REVISIONS		
REV.	DESCRIPTION	APVD/DATE
0	FOR REVIEW	01/25/18

**P G I E R U S**

This document contains information confidential to Siemens Energy, Inc. It is submitted in confidence and is to be used solely for the purpose for which it is furnished and returned on request. This document and such information is not to be reproduced, transmitted, disclosed or used otherwise, in whole or in part, without the written authorization from Siemens Energy, Inc.

SIEMENS

CUSTOMER: VIONIX  
 PROJECT NO.: 20618  
 ENGINEER: SYED ANWAR  
 PLANT: SHIRLEY

TITLE: SPPA-T3000  
 BATTERY STORAGE CONTROL  
 INTERNAL 24VDC POWER DISTRIBUTION

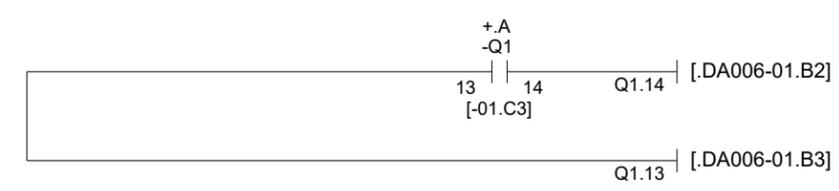
PROJECT MANAGER: J. TROKE

TYPE: YS	IDENTIFICATION CODE: =.01CJC21.GW001	SHT: 03	REV: 0
DRAWN: JSK		PSEUDO:	
DATE: 01/25/18		WBS:	
DRAWING NO. 20618YS=01CJC21GW001-03			

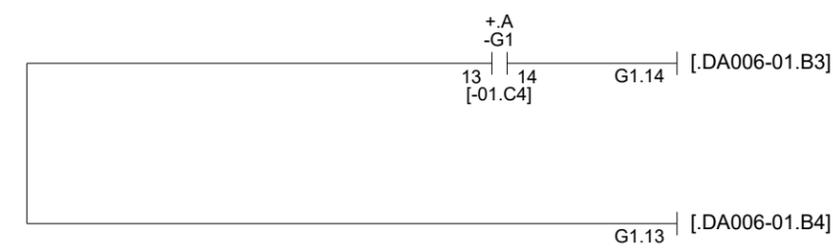
Plot Date\_Time 1/29/2018 2:05 PM

SCALE: NONE  
 CLASS:

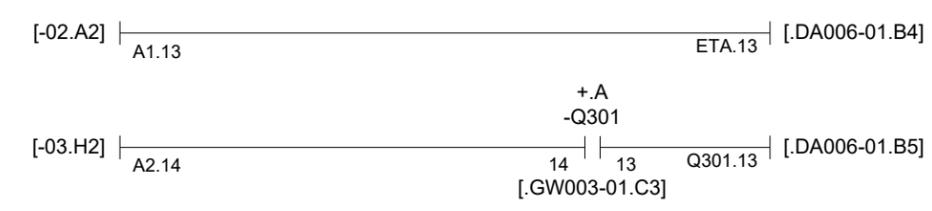
SIZE: B



01CJC21GW001  
24V DC MAIN FEED #1  
(NOT FAULT)



01CJC21GW002  
CABINET POWER SUPPLY  
(NOT FAULT)



01CJC21GW003  
CABINET BREAKER FAULT

- NOTES:
1. ALL CONTACTS ARE SHOWN IN SHELF STATE.
  2. JUMPERS REQUIRED ACROSS AUX. CONTACT IF OVERCURRENT PROTECTION DEVICE IS NOT USED.
  3. ALL WIRE 18 AWG UNLESS OTHERWISE STATED.
  4. INSTALLED BY OTHERS.

REVISIONS		
REV.	DESCRIPTION	APVD/DATE
0	FOR REVIEW	01/25/18

**P G I E R U S**

This document contains information confidential to Siemens Energy, Inc. It is submitted in confidence and is to be used solely for the purpose for which it is furnished and returned on request. This document and such information is not to be reproduced, transmitted, disclosed or used otherwise, in whole or in part, without the written authorization from Siemens Energy, Inc.

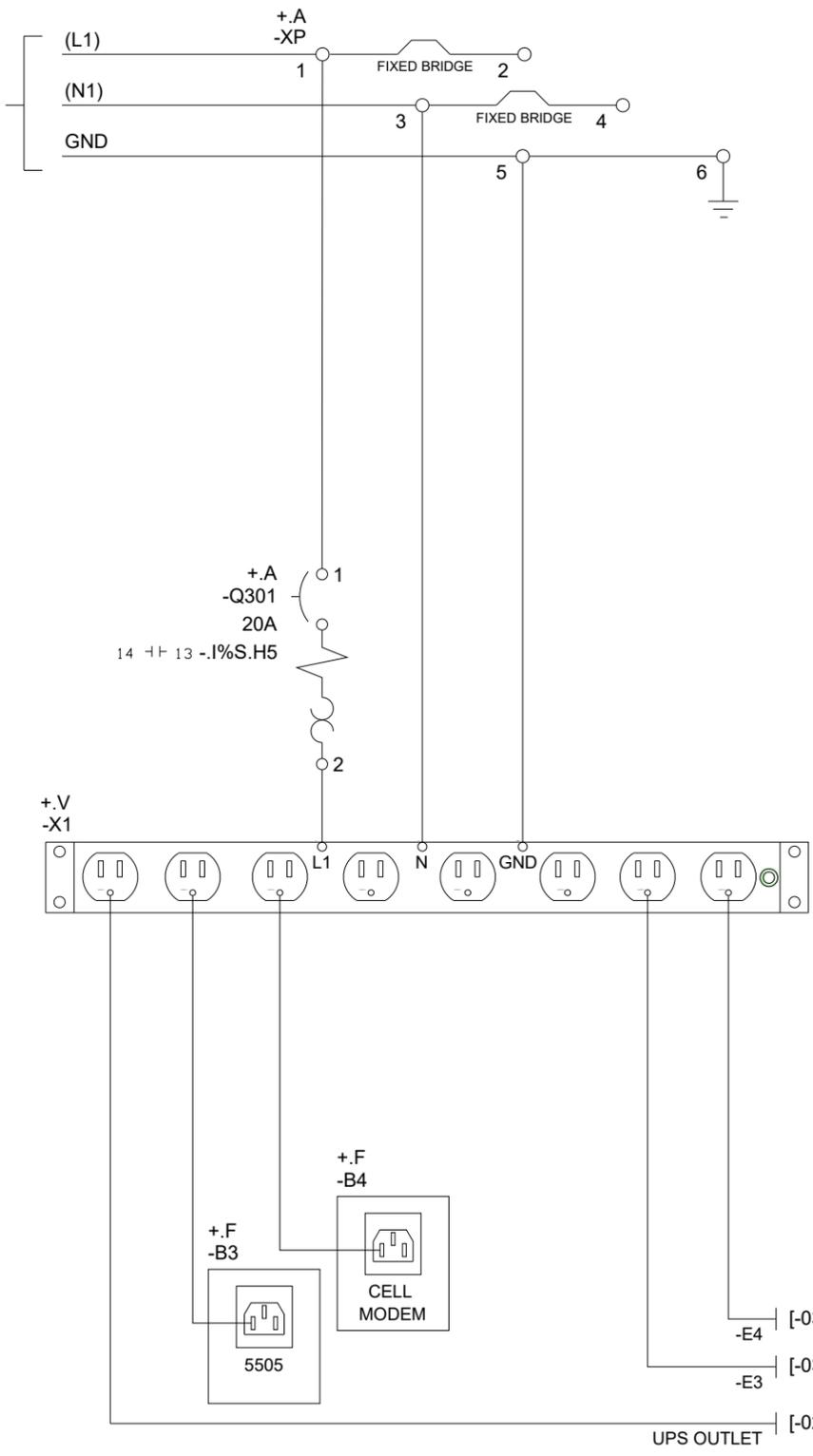
**SIEMENS**

CUSTOMER: VIONIX  
PROJECT NO.: 20618  
ENGINEER: SYED ANWAR  
PLANT: SHIRLEY

TITLE: SPPA-T3000  
BATTERY STORAGE CONTROL  
CABINET FAULT ALARMS  
PROJECT MANAGER: J. TROKE  
SCALE: NONE  
CLASS:   
SIZE: B

TYPE: YS	IDENTIFICATION CODE: =.01CJC21.GW001	SHT: 99	REV.: 0
DRAWN: JSK DATE: 01/25/18		PSEUDO: WBS:	
DRAWING NO. 20618YS=01CJC21GW001-99			

PRIMARY 120VAC  
UPS SUPPLY  
BY CUSTOMER



REVISIONS		
REV.	DESCRIPTION	APVD/DATE
0	FOR REVIEW	01/25/18

**P G I E R U S**

This document contains information confidential to Siemens Energy, Inc. It is submitted in confidence and is to be used solely for the purpose for which it is furnished and returned on request. This document and such information is not to be reproduced, transmitted, disclosed or used otherwise, in whole or in part, without the written authorization from Siemens Energy, Inc.

**SIEMENS**

CUSTOMER:  
**VIONIX**

PROJECT NO.:  
**20618**

ENGINEER:  
**SYED ANWAR**

PLANT:  
**SHIRLEY**

TITLE:  
**SPPA-T3000  
BATTERY STORAGE CONTROL  
INCOMING 120VAC POWER DISTRIBUTION**

PROJECT MANAGER:  
**J. TROKE**

SCALE  
**NONE**

CLASS

SIZE  
**B**

TYPE <b>YS</b>	IDENTIFICATION CODE <b>=.01CJC21 .GW003</b>	SHT <b>01</b>	REV. <b>0</b>
DRAWN: <b>JSK</b>		PSEUDO:	
DATE: <b>01/25/18</b>		WBS:	
DRAWING NO. <b>20618YS=01CJC21GW003-01</b>			

Plot Date\_Time 1/29/2018 2:05 PM

A B C D E F G H J K

1

2

3

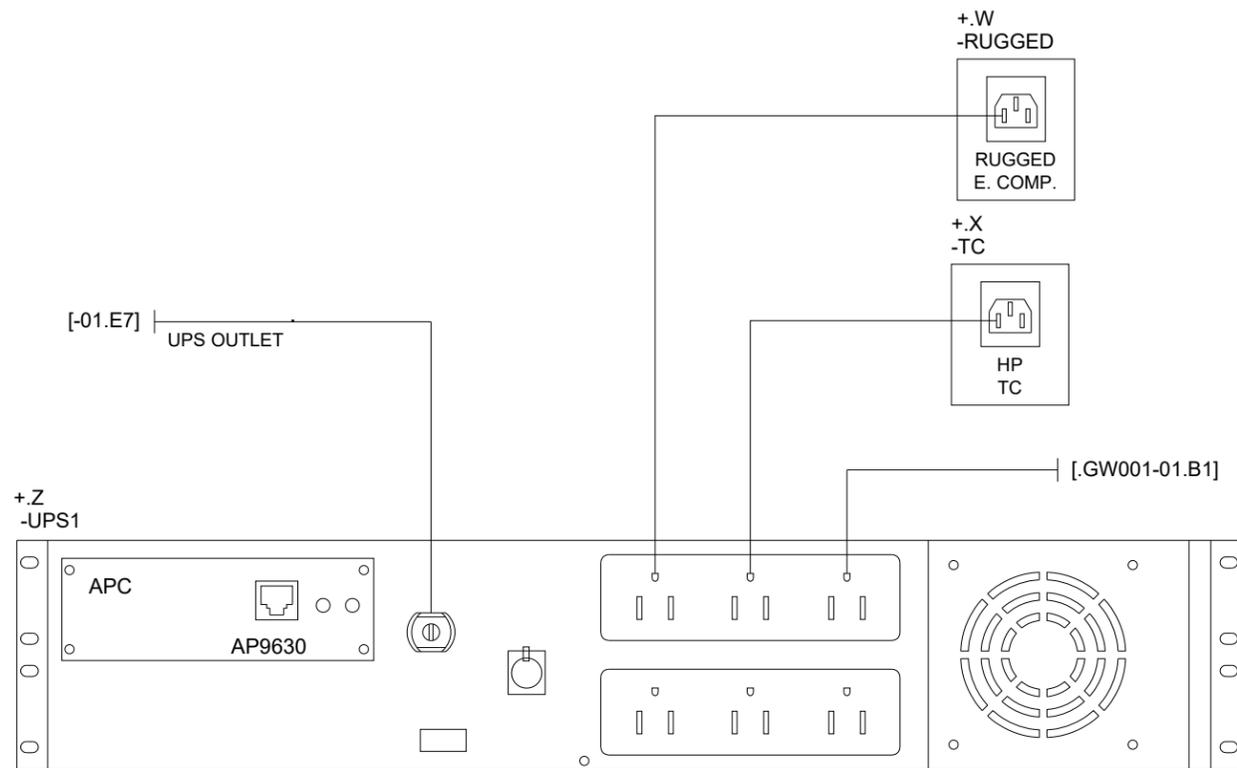
4

5

6

7

8

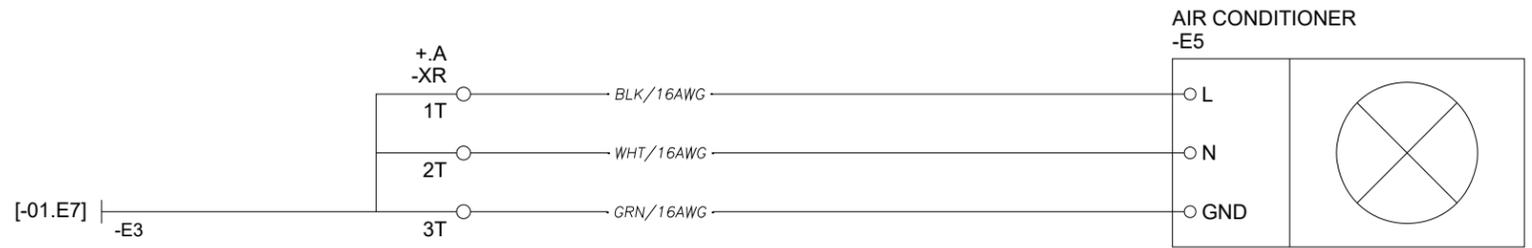


NOTE:  
1. ALL WIRE IS 12 AWG UNLESS OTHERWISE NOTED.

REVISIONS			P G I E R U S This document contains information confidential to Siemens Energy, Inc. It is submitted in confidence and is to be used solely for the purpose for which it is furnished and returned on request. This document and such information is not to be reproduced, transmitted, disclosed or used otherwise, in whole or in part, without the written authorization from Siemens Energy, Inc. <b>SIEMENS</b>	CUSTOMER: VIONIX		TITLE: SPPA-T3000 BATTERY STORAGE CONTROL CABINET UPS		TYPE	IDENTIFICATION CODE	SHT	REV.
REV.	DESCRIPTION	APVD/DATE		PROJECT NO.:	PROJECT MANAGER:	Y S	=.01CJC21 .GW003	02	0		
0	FOR REVIEW	01/25/18	ENGINEER: SYED ANWAR	J. TROKE	DRAWN: JSK		PSEUDO:				
			PLANT: SHIRLEY	SCALE NONE	CLASS ➡	SIZE B	DRAWING NO. 20618YS=01CJC21GW003-02				

Plot Date\_Time 1/29/2018 2:05 PM

A B C D E F G H J K



REVISIONS		
REV.	DESCRIPTION	APVD/DATE
0	FOR REVIEW	01/25/18

**P G I E R U S**

This document contains information confidential to Siemens Energy, Inc. It is submitted in confidence and is to be used solely for the purpose for which it is furnished and returned on request. This document and such information is not to be reproduced, transmitted, disclosed or used otherwise, in whole or in part, without the written authorization from Siemens Energy, Inc.

**SIEMENS**

**CUSTOMER:**  
VIONIX

**PROJECT NO.:**  
20618

**ENGINEER:**  
SYED ANWAR

**PLANT:**  
SHIRLEY

**TITLE:**  
SPPA-T3000  
BATTERY STORAGE CONTROL  
DOOR MOUNTED FAN

**PROJECT MANAGER:**  
J. TROKE

**SCALE:**  
NONE

**CLASS:**  
[Symbol]

**SIZE:**  
B

<b>TYPE</b> YS	<b>IDENTIFICATION CODE</b> =.01CJC21 .GW003	<b>SHT</b> 03	<b>REV.</b> 0
<b>DRAWN:</b> JSK		<b>PSEUDO:</b>	
<b>DATE:</b> 01/25/18		<b>WBS:</b>	
<b>DRAWING NO.</b> 20618YS=01CJC21GW003-03			