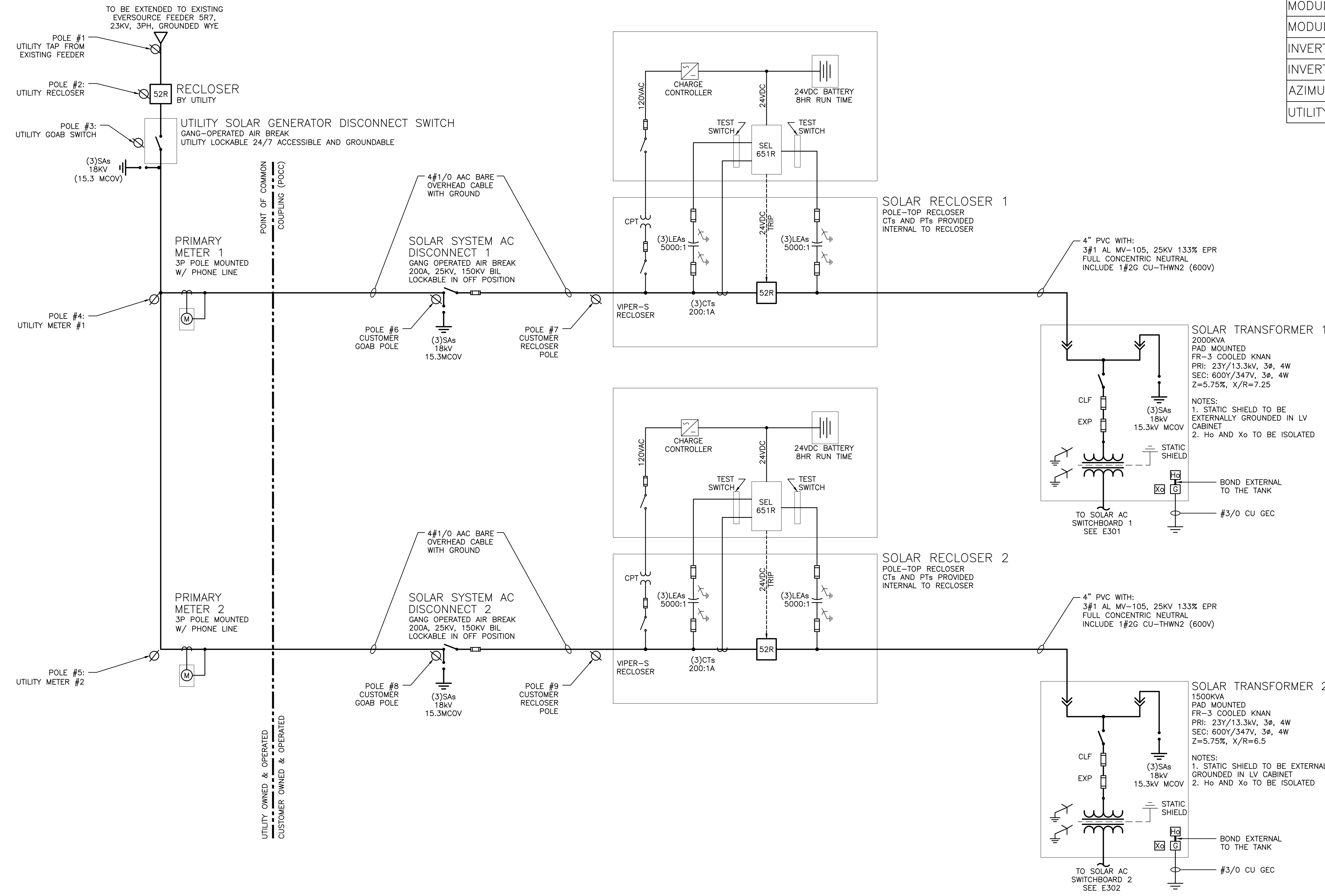


RULER IN INCHES: 0 1/2 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18

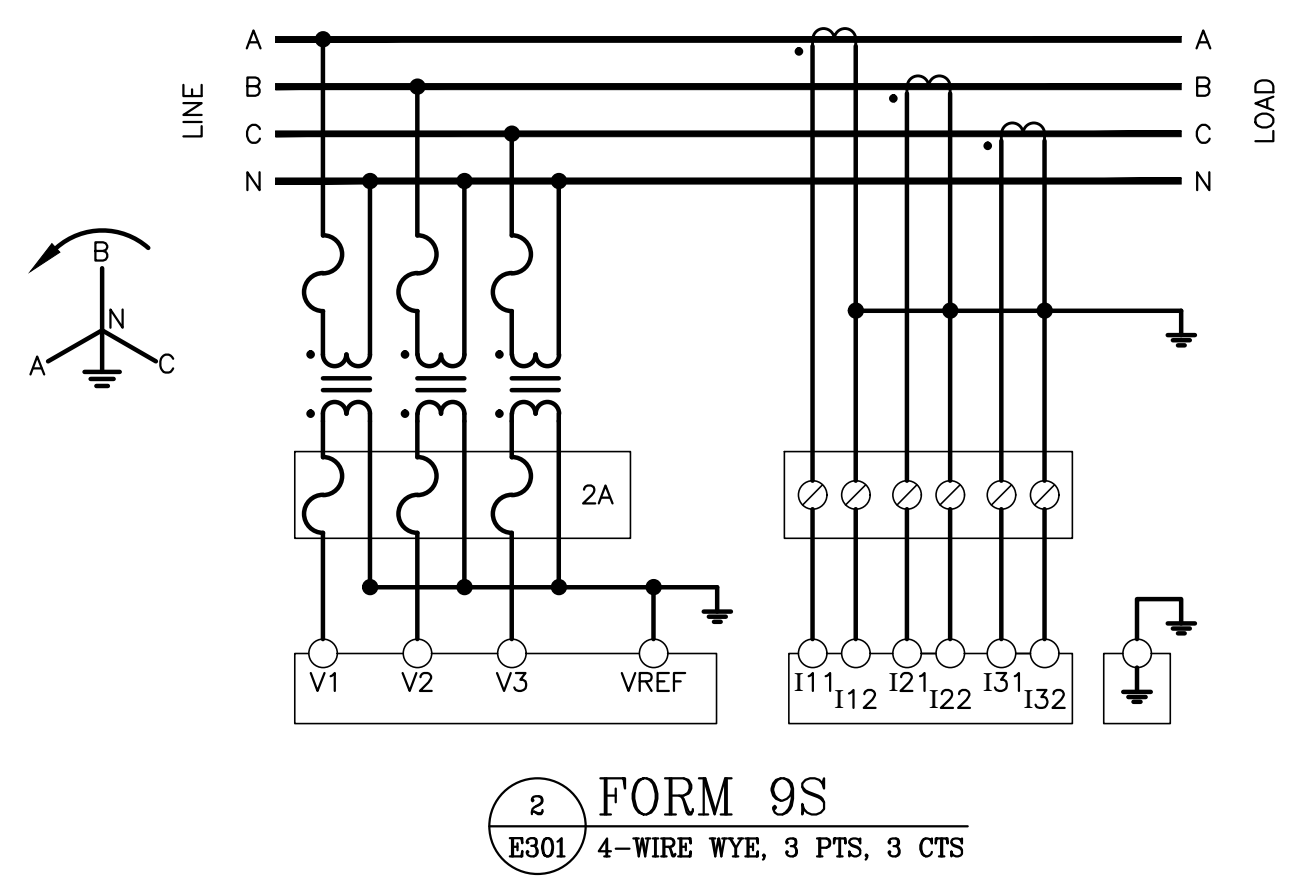


TOTAL SYSTEM SUMMARY	
DC TOTAL SYSTEM SIZE	5,011.76 KW
AC TOTAL SYSTEM SIZE	3,500.00 KW
MODULE 1	TRINA 400W
MODULE 1 QTY	10,010
MODULE 2	RISEN 380W
MODULE 2 QTY	2,652
INVERTER	SOLECTRIA 125kW
INVERTER QTY	28
AZIMUTH / TILT	180° / 25° FIXED TILT
UTILITY	EVERSOURCE

1 ONE LINE DIAGRAM - MEDIUM VOLTAGE
E300 SCALE: NONE

PROJECT: SOLAR GROUND MOUNT SYSTEM AT BURLINGTON SOLAR ONE
 85 PROSPECT STREET
 BURLINGTON, CONNECTICUT 06013
 DC SYSTEM POWER: 5,011.76 KW
 AC SYSTEM POWER: 3,500.00 KW
 MODULE TYPE: TRINA 400/RISEN 380
 MODULE QUANTITY: 10,010/2,652
 STRING QUANTITY: 385/102
 ORIENTATION: 23° TILT, 180° AZIMUTH
 DEVELOPER: VEROGY
 150 TOWN CENTER STREET
 4TH FLOOR
 HARTFORD, CT 06103
 WWW.VEROGY.COM
 VEROGY
 PUREPOWER
 5 MARINE VIEW PLAZA, HARTFORD, CT 06103
 WWW.PUREPOWER.COM
 RICHARD A. WILSON
 LICENSE NO. 00329262
 CT LICENSE NO. 00329262
 ENGINEER
 DATE: 09/28/2020
 90% DESIGN DEVELOPMENT
 08/18/2020
 30% DESIGN - REV. 2
 07/10/2020
 30% DESIGN - REV. 1
 05/20/2020
 30% CONCEPTUAL DESIGN
 REVISION DESCRIPTION
 PM LENG CHK
 RK GP RI
 RK GP RI
 RK GP RI
 RK GP RI
 RK GP RI

RULER IN INCHES: 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18



- ZREC METER NOTES**
- (3) CTs 2500:5A, 0.3% ACCURACY, RATING FACTOR = 2, SOLID CORE, SINGLE RATIO
 - (3) Pts., 2.89:1
 - CT CABINET: 2500A BUS, NEMA 3R
 - METER SOCKET: FORM 9S, 120V, NEMA 3R, 13-TERMINAL SOCKET WITH TEST SWITCH.
 - ALL EQUIPMENT TO BE SUBMITTED TO EVERSOURCE FOR APPROVAL PRIOR TO INSTALLATION

2 FORM 9S
E301 4-WIRE WYE, 3 PTS, 3 CTS

EXTERNAL RELAY SETTINGS - SYSTEM 1

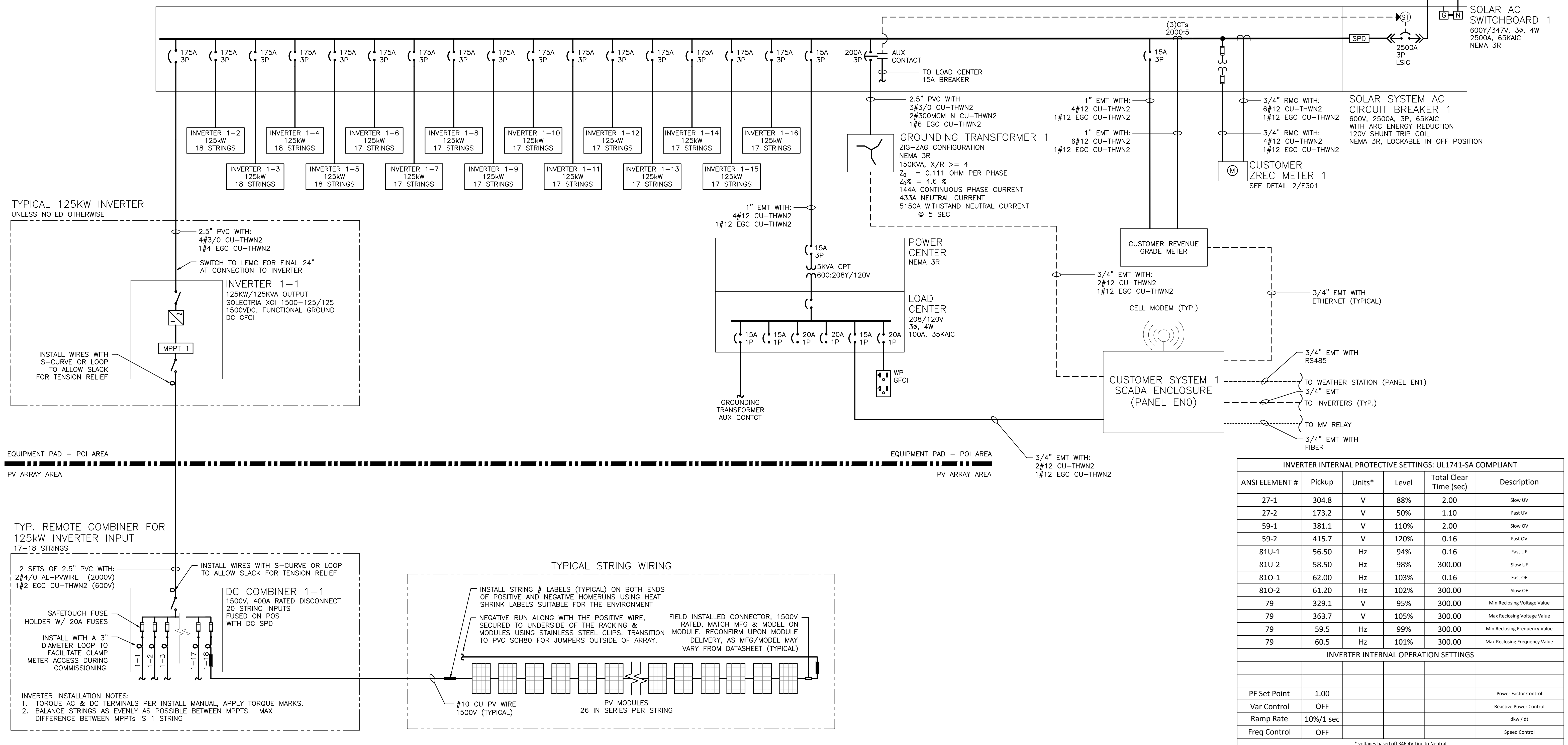
ANSI ELEMENT #	Pickup	Real	Units	Level	Delay (sec)	Total Clear Time (sec)*	Curve	Description
27-1	58.42	11684	V	88%	1.95	2.00		Slow UV
27-2	33.19	6638	V	50%	1.05	1.10		Fast UV
59-1	73.03	14606	V	110%	1.95	2.00		Slow OV
59-2	79.67	15934	V	120%	0.11	0.16		Fast OV
81U-1	56.50	56.50	Hz	94%	0.11	0.16		Fast UF
81U-2	58.50	58.50	Hz	98%	299.95	300.00		Slow UF
81O-1	62.00	62.00	Hz	103%	0.11	0.16		Fast OF
81O-2	61.20	61.20	Hz	102%	299.95	300.00		Slow OF
79	63.07	12614	V	95%	299.95	300.00		Min Reclosing Voltage Value
79	69.71	13942	V	105%	299.95	300.00		Max Reclosing Voltage Value
79	59.50	59.50	Hz	99%	299.95	300.00		Min Reclosing Frequency Value
79	60.50	60.50	Hz	101%	299.95	300.00		Max Reclosing Frequency Value

50.2A USED FOR 50/51 ELEMENTS 13279V USED FOR 27/59 ELEMENTS
 CT RATIO FACTOR = 100 PT RATIO FACTOR = 200
 * total clear time includes 0.05 sec breaker opening time

SYSTEM ONE SUMMARY

DC SYSTEM ONE SIZE	2,880.80 KW
AC SYSTEM ONE SIZE	2,000.00 KW
MODULE 1	TRINA 400W
MODULE 1 QTY	7,202
MODULE 2	RISEN 380W
MODULE 2 QTY	0
INVERTER	SOLECTRIA 125kW
INVERTER QTY	16

4 MV RELAY SETTINGS
E301



INVERTER INTERNAL PROTECTIVE SETTINGS: UL1741-SA COMPLIANT

ANSI ELEMENT #	Pickup	Units*	Level	Total Clear Time (sec)	Description
27-1	304.8	V	88%	2.00	Slow UV
27-2	173.2	V	50%	1.10	Fast UV
59-1	381.1	V	110%	2.00	Slow OV
59-2	415.7	V	120%	0.16	Fast OV
81U-1	56.50	Hz	94%	0.16	Fast UF
81U-2	58.50	Hz	98%	300.00	Slow UF
81O-1	62.00	Hz	103%	0.16	Fast OF
81O-2	61.20	Hz	102%	300.00	Slow OF
79	329.1	V	92%	300.00	Min Reclosing Voltage Value
79	363.7	V	105%	300.00	Max Reclosing Voltage Value
79	59.5	Hz	99%	300.00	Min Reclosing Frequency Value
79	60.5	Hz	101%	300.00	Max Reclosing Frequency Value

INVERTER INTERNAL OPERATION SETTINGS

PF Set Point	1.00	Power Factor Control
Var Control	OFF	Reactive Power Control
Ramp Rate	10%/1 sec	dkw / dt
Freq Control	OFF	Speed Control

* voltages based off 346.4V line to Neutral

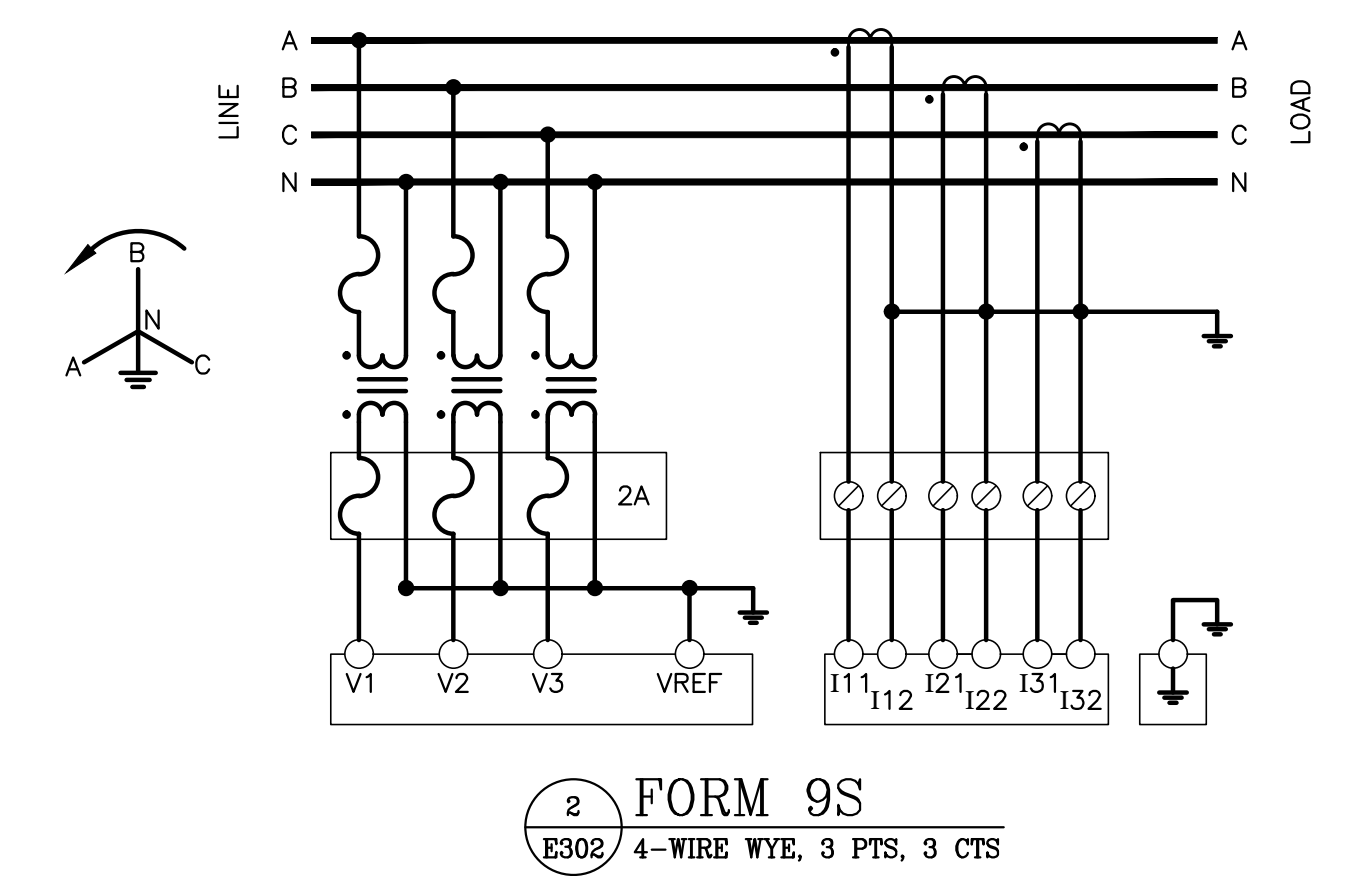
3 INVERTER SETTINGS
E301

1 ONE LINE DIAGRAM - SYSTEM ONE
E301 SCALE: NONE

DRAWING TITLE
ONE LINE DIAGRAM SYSTEM ONE

PROJECT: SOLAR GROUND MOUNT SYSTEM AT BURLINGTON SOLAR ONE
 85 PROSPECT STREET
 BURLINGTON, CONNECTICUT 06013
 DRAWING #: E301
 DEVELOPER: VEROGY
 150 WILLOW STREET
 HARTFORD, CT 06103
 WWW.VEROGY.COM
 ENGINEER: PUREPOWER
 5 MARINE VIEW PLAZA, HARTFORD, CT 06103
 WWW.PUREPOWER.COM
 CT LICENSE NO. 03029262
 DATE: 09/28/2020
 90% DESIGN DEVELOPMENT
 08/18/2020
 30% DESIGN - REV 2
 07/10/2020
 30% DESIGN - REV 1
 05/20/2020
 30% CONCEPTUAL DESIGN
 PM LENG CHK
 RK JT RI
 RK CP RI
 RK CP RI
 RK CP RI
 RK CP RI

RULER IN INCHES: 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18



- ZREC METER NOTES**
- (3) CTs 2000:5A, 0.3% ACCURACY, RATING FACTOR = 2, SOLID CORE, SINGLE RATIO
 - (3) PTS, 2.89:1
 - CT CABINET: 2000A BUS, NEMA 3R
 - METER SOCKET: FORM 9S, 120V, NEMA 3R, 13-TERMINAL SOCKET WITH TEST SWITCH.
 - ALL EQUIPMENT TO BE SUBMITTED TO EVERSOURCE FOR APPROVAL PRIOR TO INSTALLATION

2 FORM 9S
E302 4-WIRE WYE, 3 PTS, 3 CTS

EXTERNAL RELAY SETTINGS - SYSTEM 2

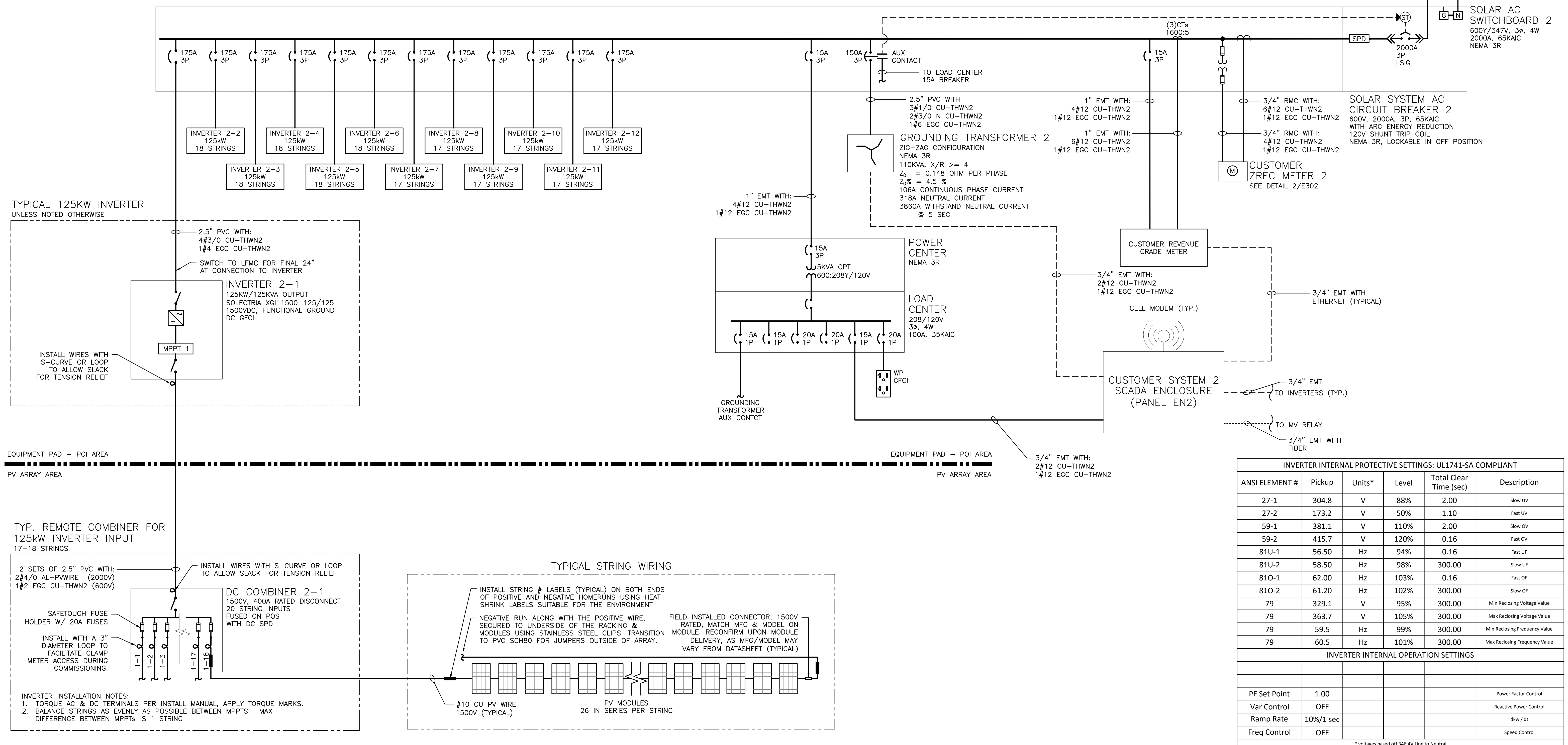
ANSI ELEMENT #	Pickup	Real	Units	Level	Delay (sec)	Total Clear Time (sec)*	Curve	Description
27-1	58.42	11684	V	88%	1.95	2.00		Slow UV
27-2	33.19	6638	V	50%	1.05	1.10		Fast UV
59-1	73.03	14606	V	110%	1.95	2.00		Slow OV
59-2	79.67	15934	V	120%	0.11	0.16		Fast OV
81U-1	56.50	56.50	Hz	94%	0.11	0.16		Fast UF
81U-2	58.50	58.50	Hz	98%	299.95	300.00		Slow UF
81O-1	62.00	62.00	Hz	103%	0.11	0.16		Fast OF
81O-2	61.20	61.20	Hz	102%	299.95	300.00		Slow OF
79	63.07	12614	V	95%	299.95	300.00		Min Reclosing Voltage Value
79	69.71	13942	V	105%	299.95	300.00		Max Reclosing Voltage Value
79	59.50	59.50	Hz	99%	299.95	300.00		Min Reclosing Frequency Value
79	60.50	60.50	Hz	101%	299.95	300.00		Max Reclosing Frequency Value
37.65A USED FOR 50/51 ELEMENTS				13279V USED FOR 27/59 ELEMENTS				
CT RATIO FACTOR = 100				PT RATIO FACTOR = 200				
* total clear time includes 0.05 sec breaker opening time								

4 MV RELAY SETTINGS
E302

SYSTEM TWO SUMMARY

DC SYSTEM TWO SIZE	2,130.96 KW
AC SYSTEM TWO SIZE	1,500.00 KW
MODULE 1	TRINA 400W
MODULE 1 QTY	2,808
MODULE 2	RISEN 380W
MODULE 2 QTY	2,652
INVERTER	SOLECTRIA 125kW
INVERTER QTY	12

NOTE:
INVERTERS 2-1 THRU 2-6 USE TRINA 400W MODULES
INVERTERS 2-7 THRU 2-12 USE RISEN 380W MODULES



INVERTER INTERNAL PROTECTIVE SETTINGS: UL1741-SA COMPLIANT

ANSI ELEMENT #	Pickup	Units*	Level	Total Clear Time (sec)	Description
27-1	304.8	V	88%	2.00	Slow UV
27-2	173.2	V	50%	1.10	Fast UV
59-1	381.1	V	110%	2.00	Slow OV
59-2	415.7	V	120%	0.16	Fast OV
81U-1	56.50	Hz	94%	0.16	Fast UF
81U-2	58.50	Hz	98%	300.00	Slow UF
81O-1	62.00	Hz	103%	0.16	Fast OF
81O-2	61.20	Hz	102%	300.00	Slow OF
79	329.1	V	92%	300.00	Min Reclosing Voltage Value
79	363.7	V	105%	300.00	Max Reclosing Voltage Value
79	59.5	Hz	99%	300.00	Min Reclosing Frequency Value
79	60.5	Hz	101%	300.00	Max Reclosing Frequency Value

INVERTER INTERNAL OPERATION SETTINGS

PF Set Point	1.00	Power Factor Control
Var Control	OFF	Reactive Power Control
Ramp Rate	10%/1 sec	dkw / dt
Freq Control	OFF	Speed Control

*voltages based off 346.4V line to Neutral

3 INVERTER SETTINGS
E302

1 ONE LINE DIAGRAM - SYSTEM TWO
E302 SCALE: NONE

DRAWING TITLE
ONE LINE DIAGRAM SYSTEM TWO

VEROGY
 DEVELOPER
 150 WILLOW FLOOR
 HARTFORD, CT 06103
 WWW.VEROGY.COM
 PROJECT # 00167
 PAGE SIZE 36" x 24"
 PROJECT # 00167
 DC SYSTEM POWER: 5,011.76 KW
 AC SYSTEM POWER: 3,500.00 KW
 MODULE TYPE: TRINA 400/RISEN 380
 STRING QUANTITY: 10,070/2,652
 STRING QUANTITY: 385/102
 ORIENTATION: 23° TILT, 180° AZIMUTH
 PROJECT
SOLAR GROUND MOUNT SYSTEM AT BURLINGTON SOLAR ONE
 85 PROSPECT STREET
 BURLINGTON, CONNECTICUT 06013
 ENGINEER
PUREPOWER
 5 MARINE VIEW PLAZA, HARTFORD, CT 06103
 WWW.PUREPOWER.COM
 CT LICENSE NO. 05329282
 DATE
 09/28/2020 90% DESIGN DEVELOPMENT
 08/18/2020 30% DESIGN - REV 2
 07/30/2020 30% DESIGN - REV 1
 05/20/2020 30% CONCEPTUAL DESIGN
 REVISION DESCRIPTION
 R1 JT RI
 R2 CP RI
 R3 CP RI
 R4 CP RI
 R5 CP RI