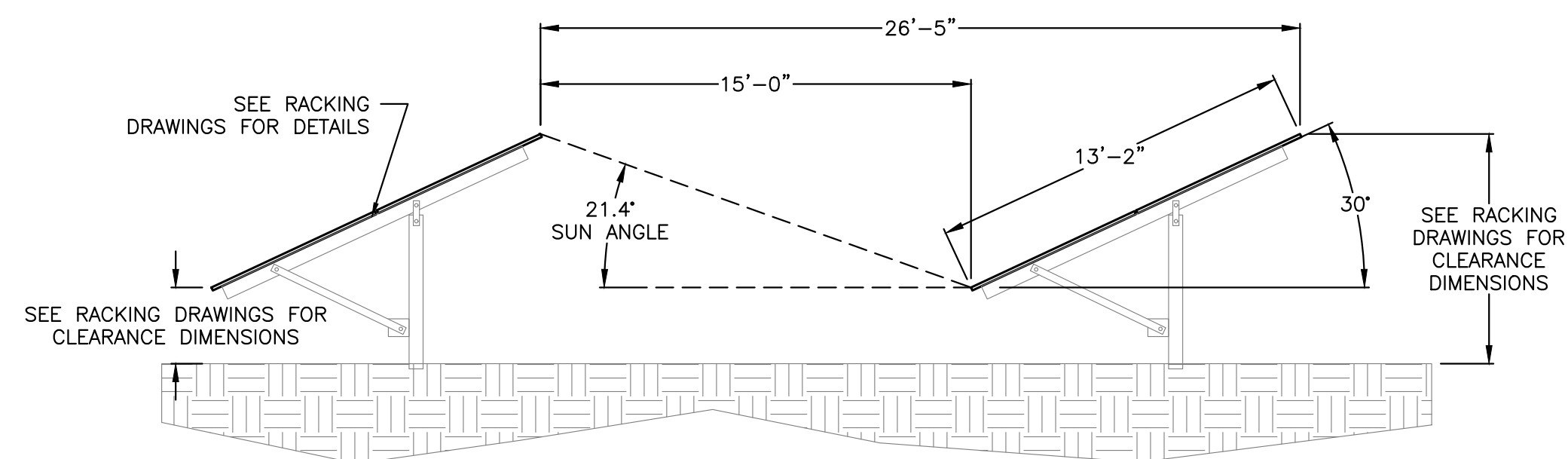


RULER IN INCHES: 0 1/2 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18

PLOT DATE: 5/5/2020 4:27 PM



**2 RACKING DETAIL**  
E100 SCALE: NONE

EQUIPMENT PAD WITH SOLAR TRANSFORMER, SOLAR AC SWITCHBOARD, INVERTERS, MONITORING CONTROL PANEL.

COMBINER BOXES RACK-MOUNTED BEHIND SOLAR ARRAY (TYPICAL).

**SYSTEM 4**  
DC SYSTEM SIZE: 1294.020kWDC  
AC SYSTEM SIZE: 1000.000kWAC

**SYSTEM 5**  
DC SYSTEM SIZE: 1294.020kWDC  
AC SYSTEM SIZE: 1000.000kWAC

**SYSTEM 3**  
DC SYSTEM SIZE: 1294.020kWDC  
AC SYSTEM SIZE: 1000.000kWAC

**SYSTEM 2**  
DC SYSTEM SIZE: 1304.290kWDC  
AC SYSTEM SIZE: 1000.000kWAC

**SYSTEM 1**  
DC SYSTEM SIZE: 1304.290kWDC  
AC SYSTEM SIZE: 1000.000kWAC

**MV EQUIPMENT AREA**

- UTILITY TAKE OFF POLE
- VEHICLE ACCESS GATE
- UTILITY PRIMARY METERS 1-5 AND RISER POLE (TYPICAL)
- EQUIPMENT PADS WITH SUB-SYSTEM MEDIUM VOLTAGE SWITCHGEAR
- 7FT HIGH CHAINLINK FENCE (TYPICAL)
- PROPERTY LINE
- ACCESS ROAD
- MV FEEDERS IN DUCTBANK, RUN PARALLEL TO ROAD

**1 AC ELECTRICAL PLAN**  
E100 SCALE: 1" = 150'-0"

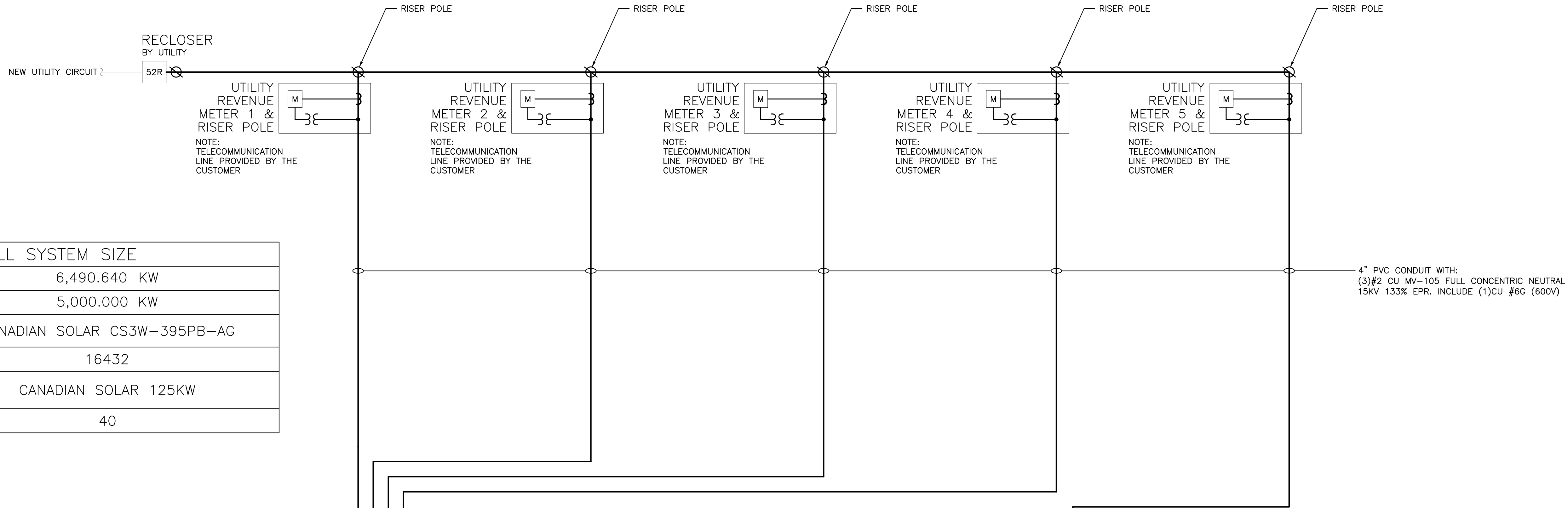


DRAWING TITLE  
**AC ELECTRICAL PLAN**

E100

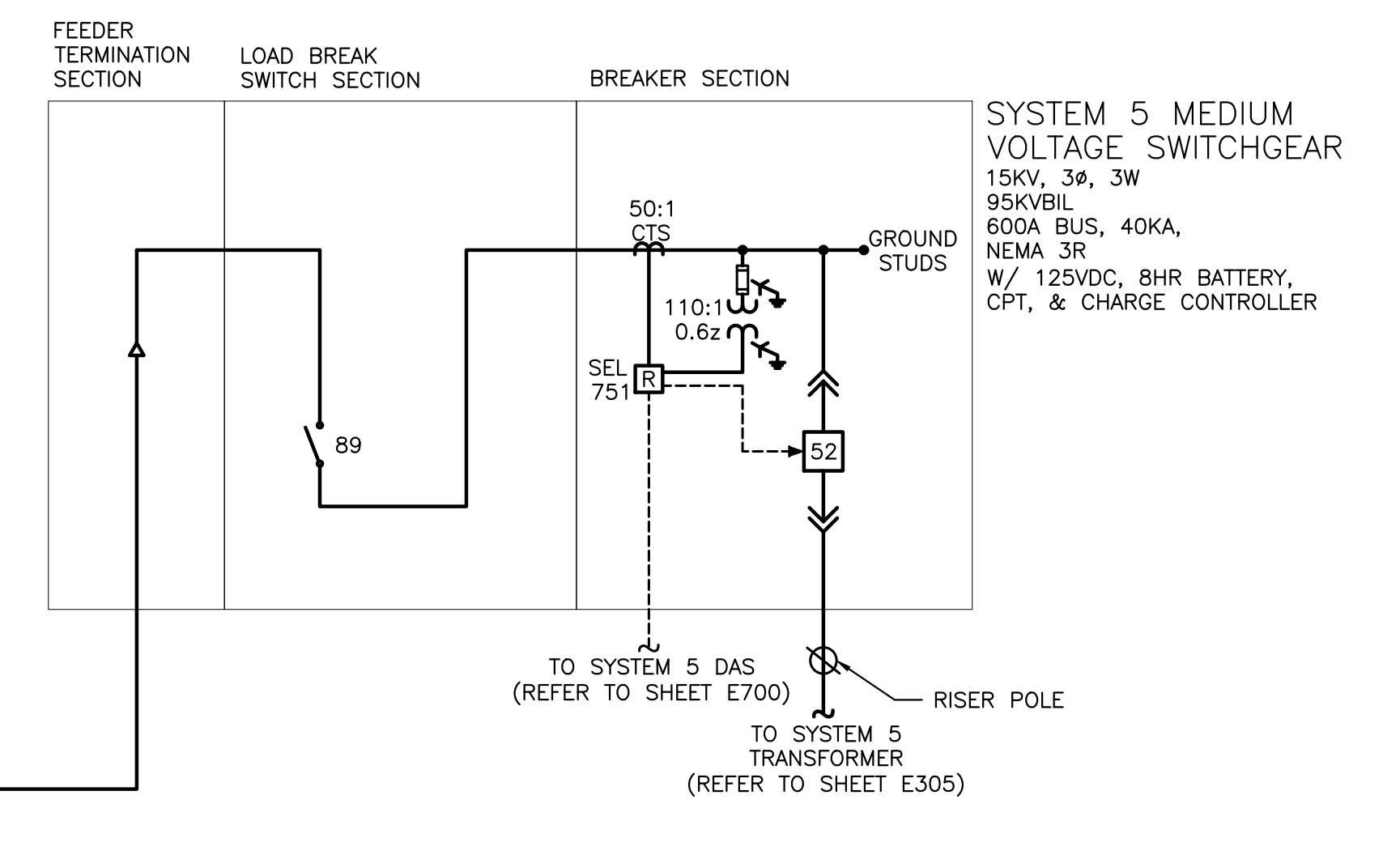
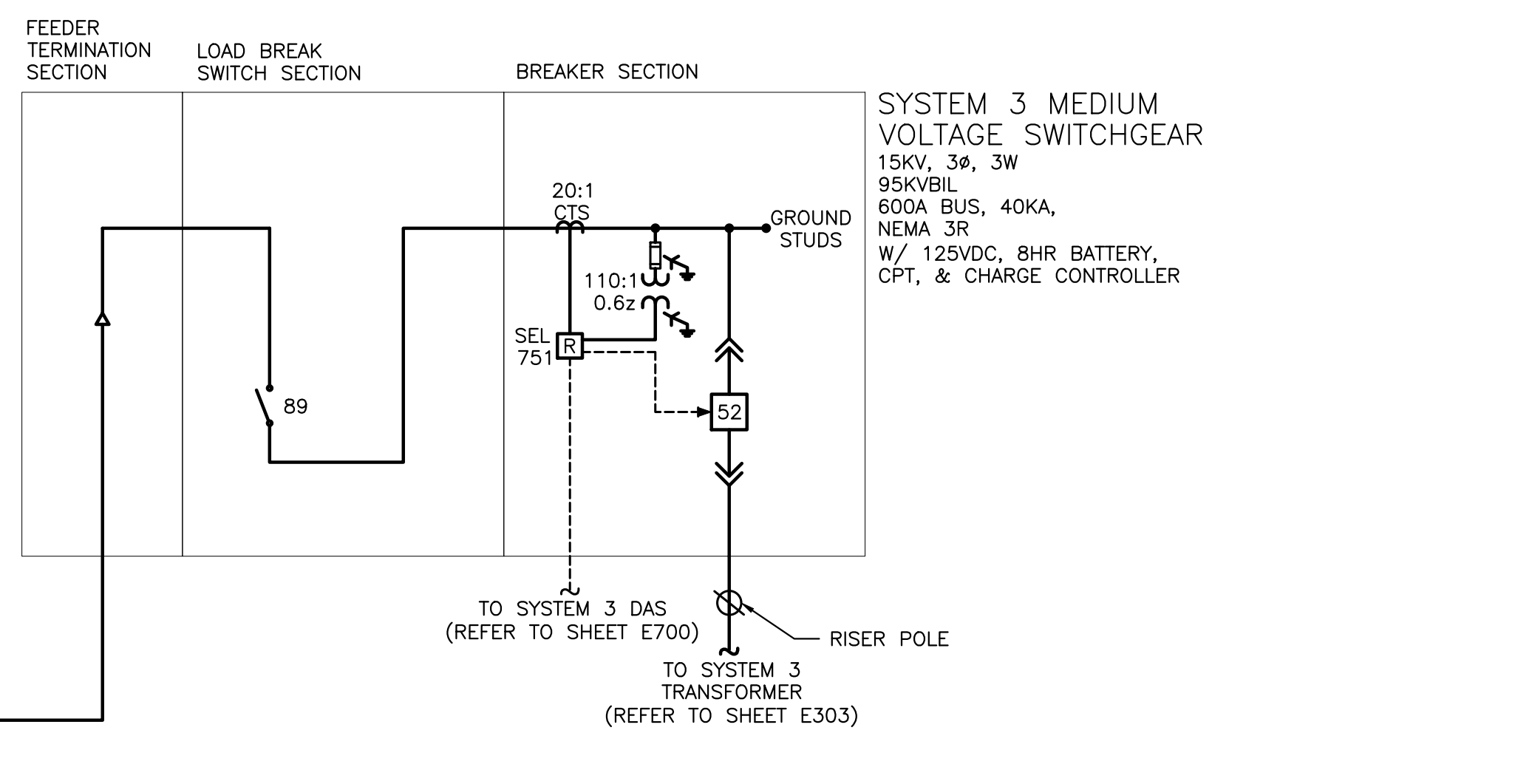
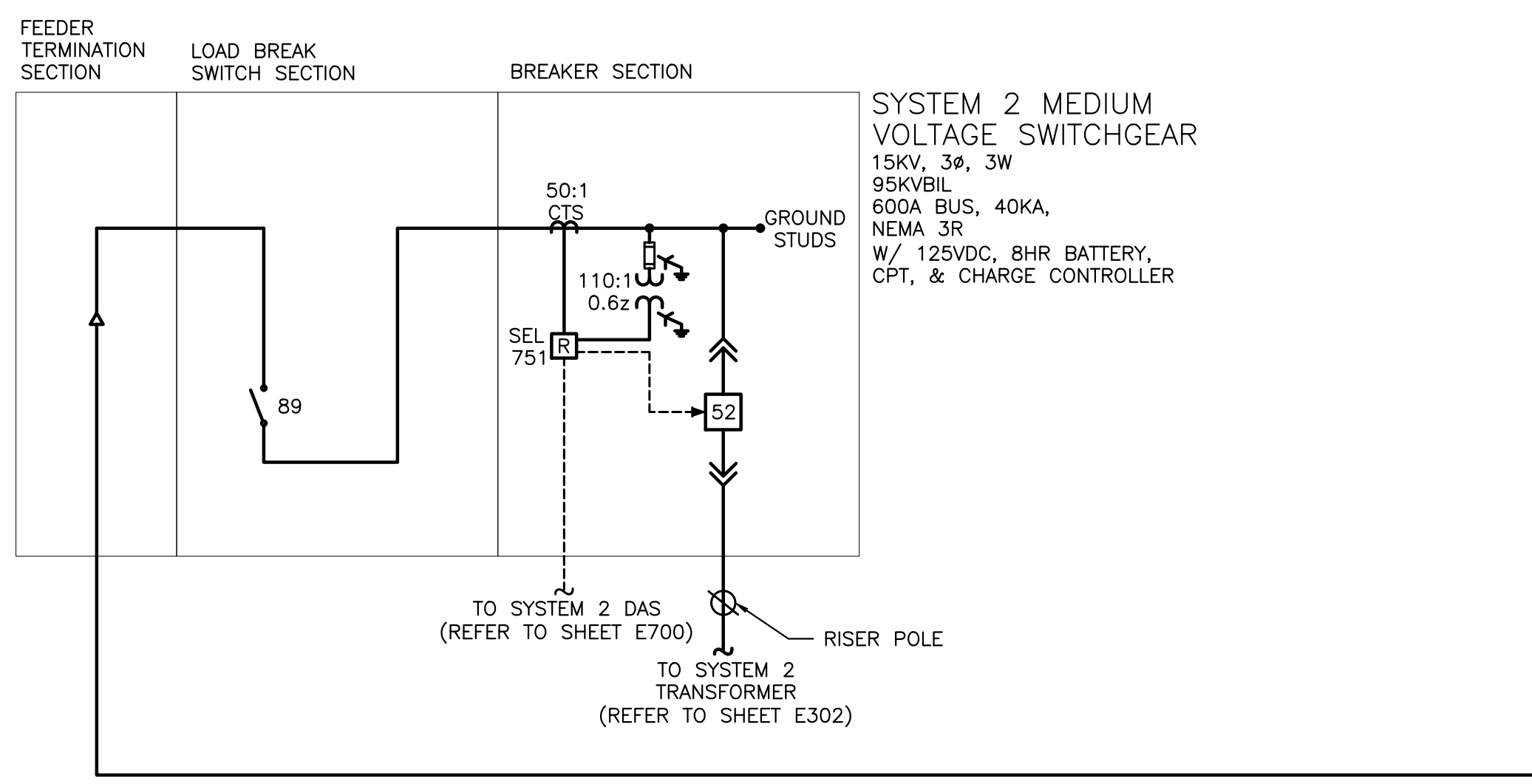
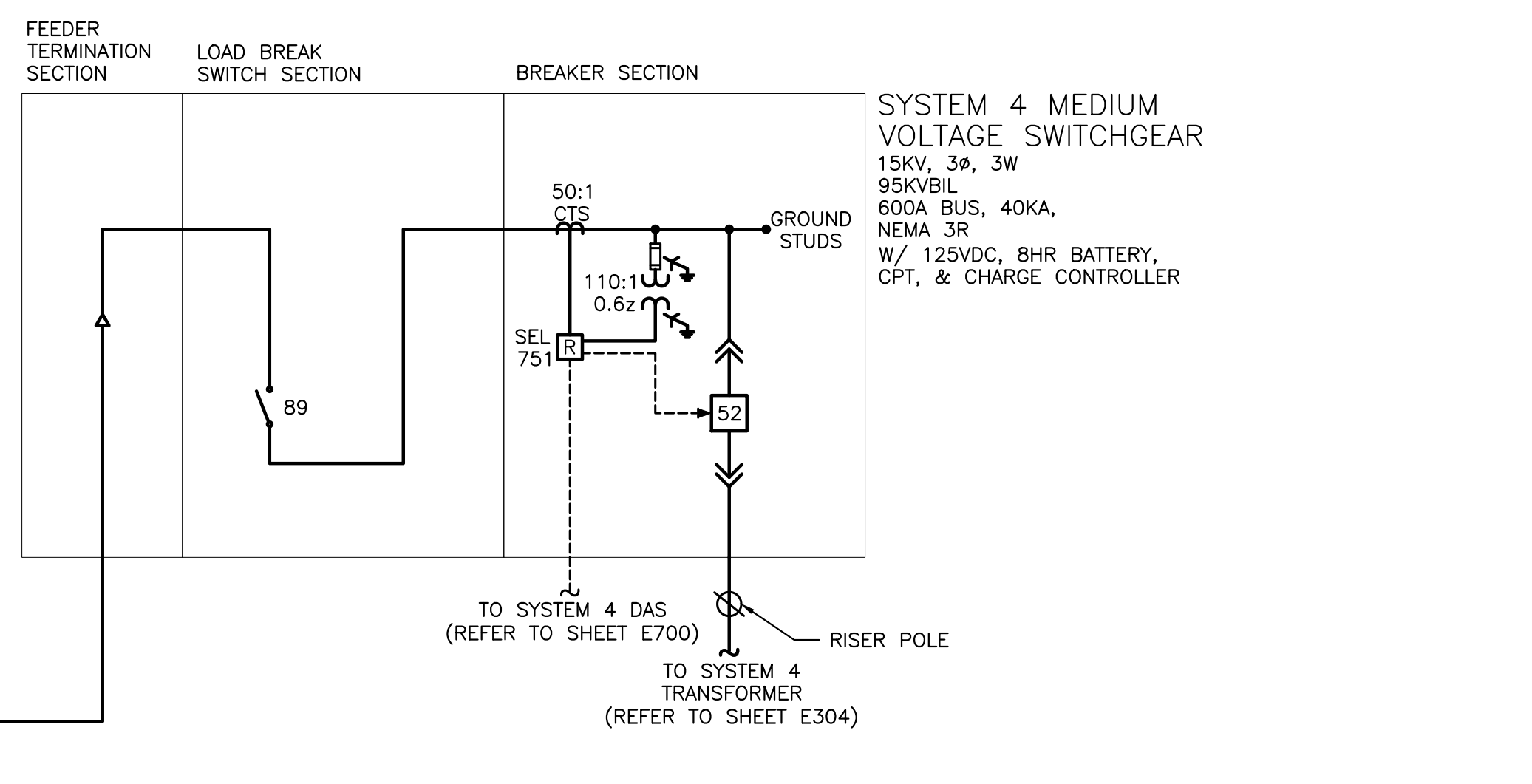
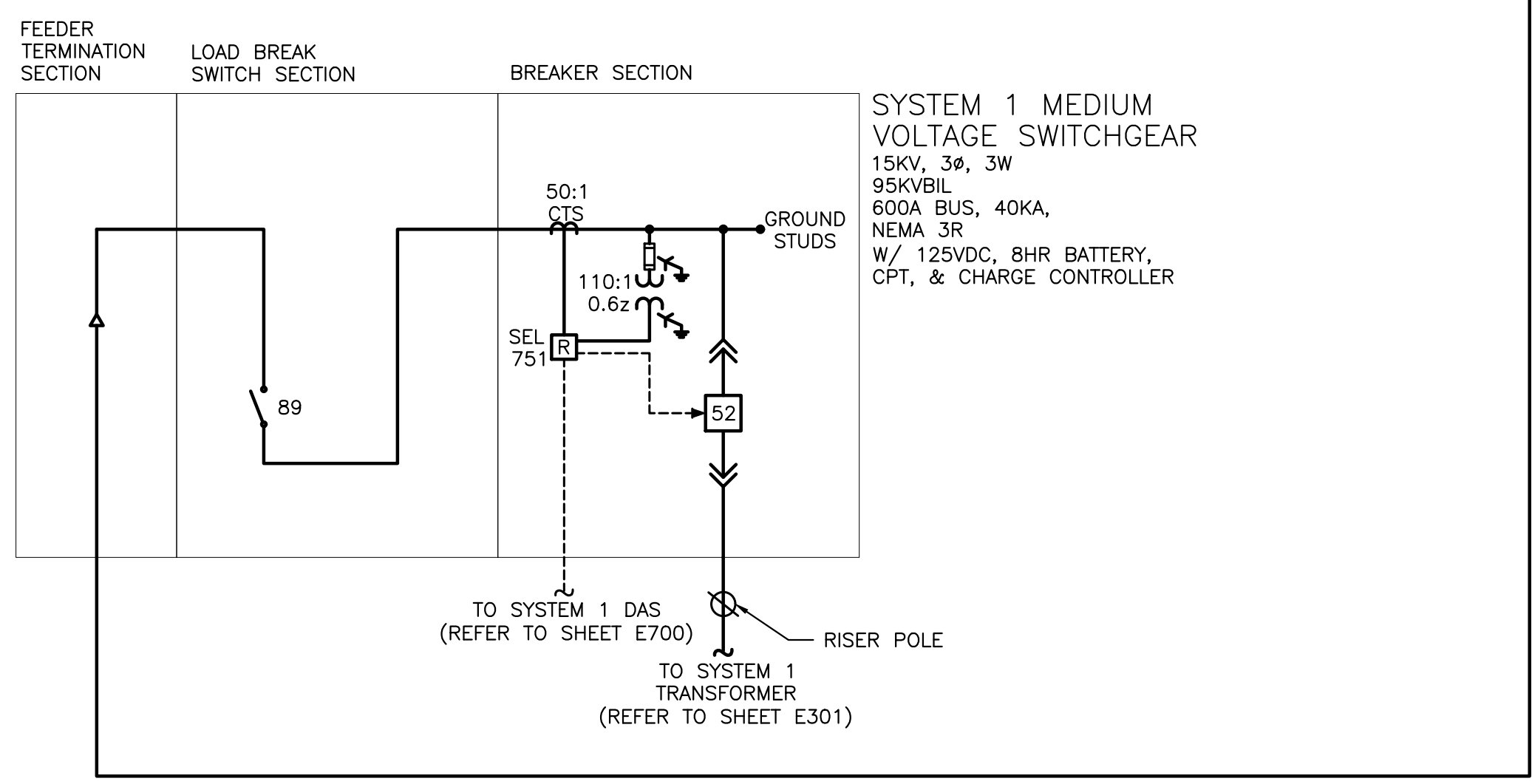
<b>PURE POWER</b> 5 MARINE VIEW PLAZA - HOBOKEN, NJ WWW.PUREPOWER.COM RICHARD A. WINKLER CT LICENSE NO. 03629262	DATE: 05/05/2020 INTERCONNECTION DOCUMENTS BX SK RI	REVISION DESCRIPTION PM TENG CHK
	DATE: 03/27/2020 INTERCONNECTION DOCUMENTS BX 1 SK RI	REVISION DESCRIPTION INTERCONNECTION DOCUMENTS BX 1 AD RI
DEVELOPER <b>Greenskies</b> a Clean Focus company 180 JOHNSON STREET, MIDDLETOWN, CT 06457 WWW.GREENSKIES.COM	PROJECT # PPE 19.1312	PROJECT <b>6490.640KW SOLAR GROUND MOUNT AT CSCU BOOMBRIDGE</b> 227 BOOMBRIDGE ROAD STONINGTON, CT 06359
DC SYSTEM SIZE: 6490.640 KW AC SYSTEM SIZE: 5000.000 KW MODULE: CS3W-395PB-AG 385W MODULE QUANTITY: 16432 STRING QUANTITY: 52 ORIENTATION: 35 TILT & 180 AZIMUTH	PAGE SIZE 36" x 24"	PROJECT # PPE 19.1312

RULER IN INCHES: 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18  
 PLOT DATE: 5/25/2020 4:27 PM



OVERALL SYSTEM SIZE	
DC SYSTEM SIZE	6,490.640 KW
AC SYSTEM SIZE	5,000.000 KW
MODULE	CANADIAN SOLAR CS3W-395PB-AG
MODULE QTY	16432
INVERTER	CANADIAN SOLAR 125KW
INVERTER QTY	40

4" PVC CONDUIT WITH:  
 (3)#2 CU MV-105 FULL CONCENTRIC NEUTRAL  
 15KV 133% EPR. INCLUDE (1)CU #6G (600V)



1 ONE LINE DIAGRAM  
 E300 SCALE: NONE

DRAWING TITLE  
 ONE LINE DIAGRAM  
 - MEDIUM VOLTAGE

DATE	REVISION DESCRIPTION	PM LENG CHK
03/27/2020	INTERCONNECTION DOCUMENTS	BK AD RI
5 MARINE VIEW PLAZA, HOBOKEN, NJ WWW.PUREPOWER.COM RICHARD A. YOUNG CT LICENSE NO. 00829862		
180 JOHNSON STREET, MIDDLETOWN, CT 06457 WWW.GREENSKIES.COM		
DEVELOPER	PAGE SIZE	PROJECT #
GREENSKIES	36" x 24"	PPE 19.1312
PROJECT	DC SYSTEM SIZE:	6490.640 KW
227 BOOMBRIDGE ROAD	AC SYSTEM SIZE:	5000.000 KW
STONINGTON, CT 06359	MODULE:	CS3W-395PB-AG 395W
	MODULE QUANTITY:	16432
	INVERTER QUANTITY:	40
	GENERATION:	35-TILT & 180-24-MUTH

RULER IN INCHES: 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18  
 PLOT DATE: 5/5/2020 4:27 PM

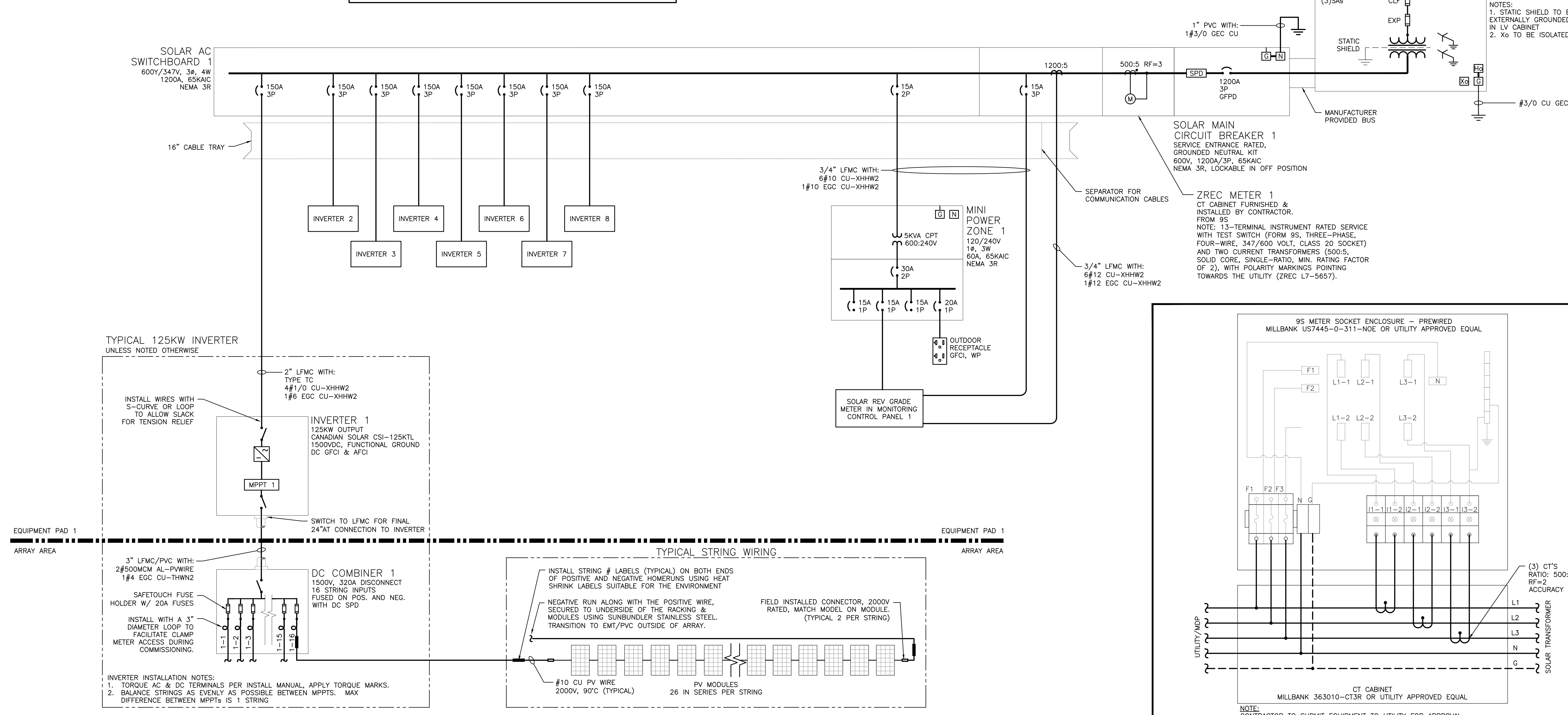
SYSTEM 1 SUMMARY	
DC SYSTEM SIZE	1,304.290 KW
AC SYSTEM SIZE	1,000.000 KW
MODULE	CANADIAN SOLAR CS3W-395PB-AG
MODULE QTY	3302
INVERTER	CANADIAN SOLAR 125KW
INVERTER QTY	8

INVERTER INTERNAL PROTECTIVE SETTINGS: UL1741-SA COMPLIANT					
ANSI ELEMENT #	Pickup	Units*	Level	Total Clear Time (sec)	Description
27	304.8	V	88%	2.00	Slow UV
27	173.2	V	50%	1.10	Fast UV
59	381.1	V	110%	2.00	Slow OV
59	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	95%	300.00	Min Reclosing Voltage Value
79	363.7	V	105%	300.00	Max Reclosing Voltage Value
79	59.6	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



2 ZREC METER WIRING DIAGRAM (TYPICAL)  
E301 SCALE: NONE

1 ONE LINE DIAGRAM  
E301 SCALE: NONE

DRAWING TITLE  
ONE LINE DIAGRAM - SYSTEM 1

DATE	REVISION DESCRIPTION	FW LENG CHK
03/24/2020	INTERCONNECTION DOCUMENTS	BK AD BR

**PURE POWER**  
 5 MARINE VIEW PLAZA - HOBOKEN, NJ  
 WWW.PUREPOWER.COM  
 RICHARD A. VONN  
 CT LICENSE NO. 00592862

**GREENSKIES**  
 180 JOHNSON STREET,  
 MIDDLETOWN, CT 06457  
 WWW.GREENSKIES.COM  
 a Clean Focus company

DEVELOPER  
 PROJECT #  
 PPE 19.1312

DC SYSTEM SIZE: 6490.640 KW  
 AC SYSTEM SIZE: 5000.000 KW  
 MODULE SIZE: CS3W-395PB-AG 385W  
 MODULE QUANTITY: 16432  
 STRING QUANTITY: 532  
 ORIENTATION: 35° TILT & 180° AZIMUTH

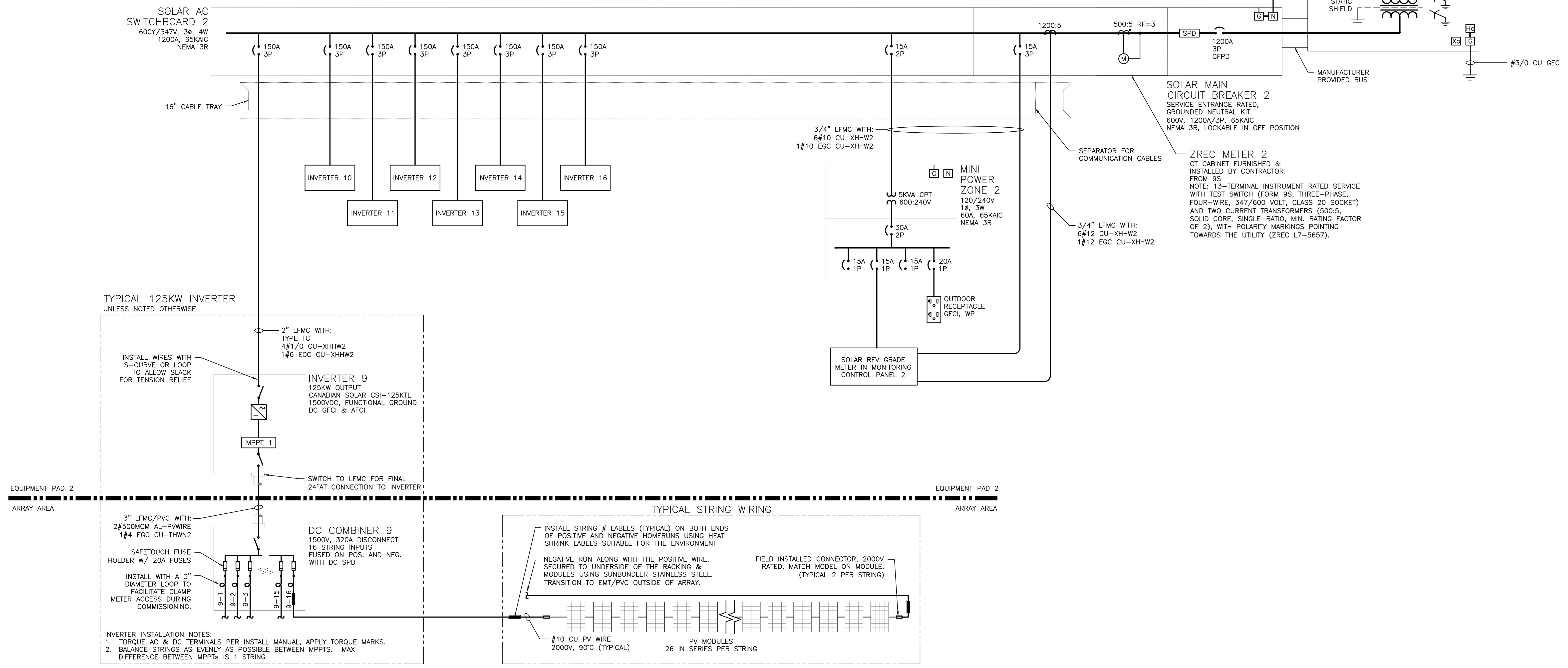
PROJECT  
 6490.640KW SOLAR GROUND MOUNT AT  
 CSCU BOOMBRIDGE  
 227 BOOMBRIDGE ROAD  
 STONINGTON, CT 06359

RULER IN INCHES: 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18  
 PLOT DATE: 5/5/2020 4:27 PM

SYSTEM 2 SUMMARY	
DC SYSTEM SIZE	1,304.290 KW
AC SYSTEM SIZE	1,000.000 KW
MODULE	CANADIAN SOLAR CS3W-395PB-AG
MODULE QTY	3302
INVERTER	CANADIAN SOLAR 125KW
INVERTER QTY	8

INVERTER INTERNAL PROTECTIVE SETTINGS: UL1741-SA COMPLIANT					
ANSI ELEMENT #	Pickup	Units*	Level	Total Clear Time (sec)	Description
27	304.8	V	88%	2.00	Slow UV
27	173.2	V	50%	1.10	Fast UV
59	381.1	V	110%	2.00	Slow OV
59	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	95%	300.00	Min Reclosing Voltage Value
79	363.7	V	105%	300.00	Max Reclosing Voltage Value
79	59.6	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



1 ONE LINE DIAGRAM  
E302 SCALE: NONE

DRAWING TITLE  
ONE LINE DIAGRAM - SYSTEM 2

PROJECT	6490.640KW SOLAR GROUND MOUNT AT CSCU BOOMBRIDGE 227 BOOMBRIDGE ROAD STONINGTON, CT 06359
DC SYSTEM SIZE	6490.640 KW
AC SYSTEM SIZE	5000.000 KW
MODULE	CS3W-395PB-AG 395W
MODULE QUANTITY	16432
STRING QUANTITY	932
ORIENTATION	35° TILT & 180° AZIMUTH
PAGE SIZE	36" x 24"
PROJECT #	1312
PPE	19,1312
DEVELOPER	Greenskies a Clean Focus company
180 JOHNSON STREET, MIDDLETOWN, CT 06457 WWW.GREENSKIES.COM	
REVISION DESCRIPTION	DATE
INTERCONNECTION DOCUMENTS	03/27/2020
PM LENG CHK	
AD	
AD	
AD	



RULER IN INCHES: 0 1/2 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18  
 PLOT DATE: 5/25/2020 4:27 PM

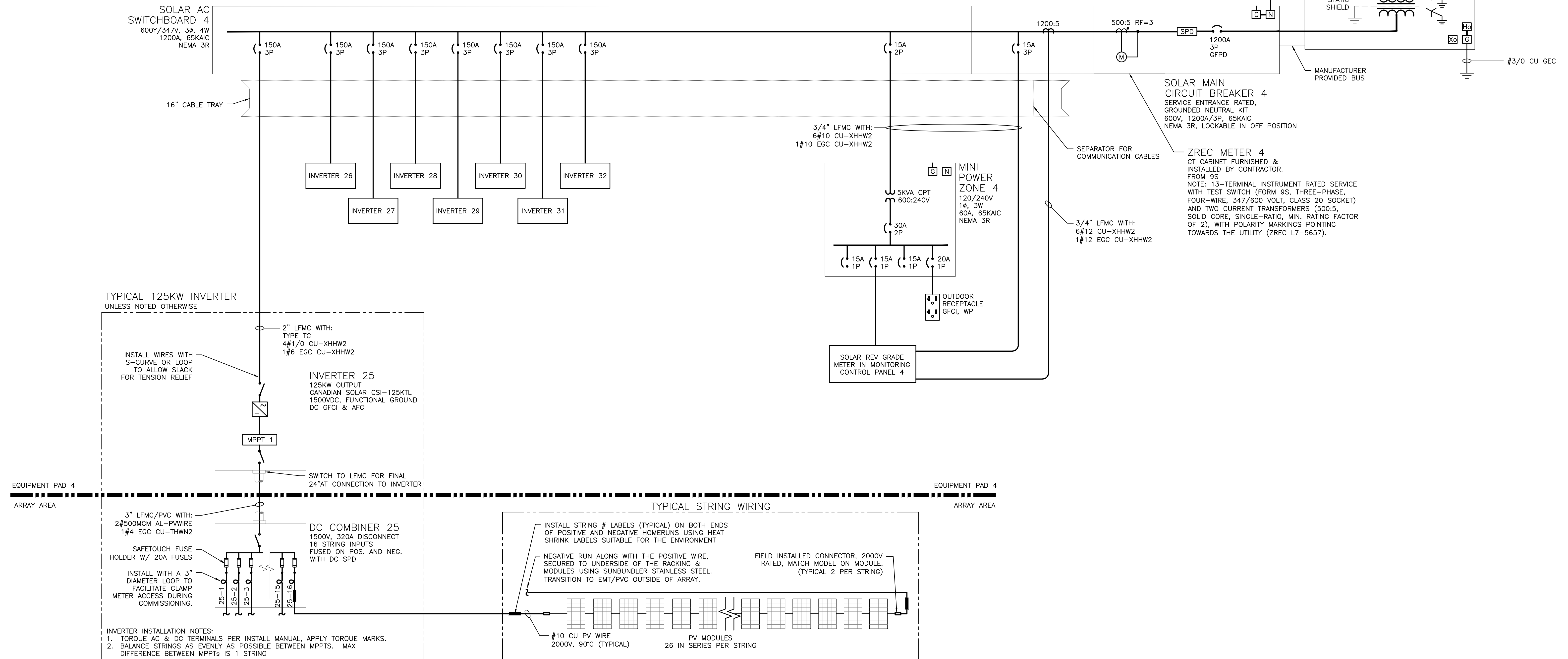
SYSTEM 4 SUMMARY	
DC SYSTEM SIZE	1,294.020 KW
AC SYSTEM SIZE	1,000.000 KW
MODULE	CANADIAN SOLAR CS3W-395PB-AG
MODULE QTY	3276
INVERTER	CANADIAN SOLAR 125KW
INVERTER QTY	8

INVERTER INTERNAL PROTECTIVE SETTINGS: UL1741-SA COMPLIANT					
ANSI ELEMENT #	Pickup	Units*	Level	Total Clear Time (sec)	Description
27	304.8	V	88%	2.00	Slow UV
27	173.2	V	50%	1.10	Fast UV
59	381.1	V	110%	2.00	Slow OV
59	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	95%	300.00	Min Reclosing Voltage Value
79	363.7	V	105%	300.00	Max Reclosing Voltage Value
79	59.6	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



1 ONE LINE DIAGRAM  
E304 SCALE: NONE

DRAWING TITLE  
ONE LINE DIAGRAM  
- SYSTEM 4

PROJECT	6490.640KW SOLAR GROUND MOUNT AT CSCU BOOMBRIDGE 227 BOOMBRIDGE ROAD STONINGTON, CT 06359
DC SYSTEM SIZE:	6490.640 KW
AC SYSTEM SIZE:	5000.000 KW
MODULE:	CS3W-395PB-AG 395W
MODULE QUANTITY:	16432
STRING QUANTITY:	532
ORIENTATION:	35°TILT & 180°AZIMUTH
PAGE SIZE	3.6" x 24"
PROJECT #	
PPE	19.1312
DEVELOPER	Greenskies a Clean Focus company
GREENSKIES	180 JOHNSON STREET, MIDDLETOWN, CT 06457 WWW.GREENSKIES.COM
PURE POWER	5 MARINE VIEW PLAZA, HOBOKEN, NJ WWW.PUREPOWER.COM RICHARD A. VON CT LICENSE NO. 03629262
DATE	03/24/2020
REVISION DESCRIPTION	INTERCONNECTION DOCUMENTS
DATE	
REVISION DESCRIPTION	
DATE	
REVISION DESCRIPTION	
DATE	
REVISION DESCRIPTION	

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

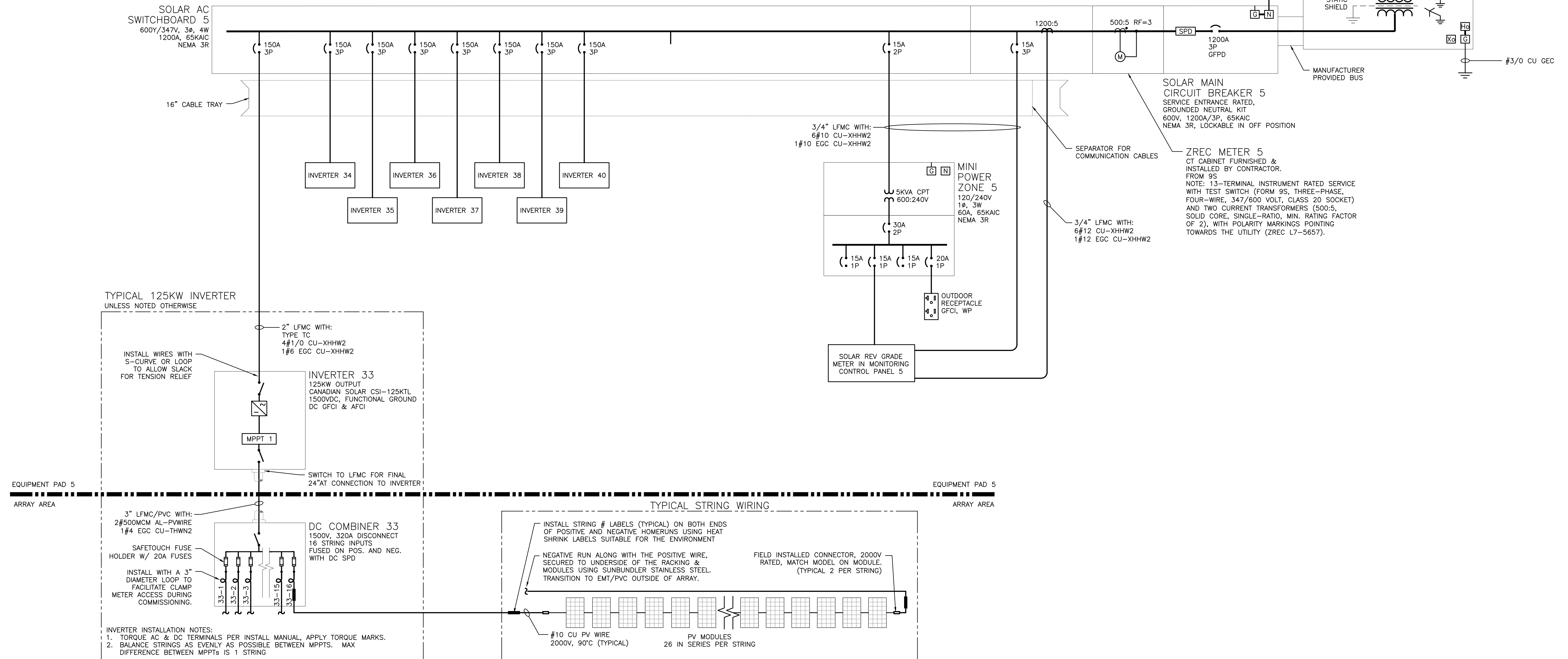
SYSTEM 5 SUMMARY	
DC SYSTEM SIZE	1,294.020 KW
AC SYSTEM SIZE	1,000.000 KW
MODULE	CANADIAN SOLAR CS3W-395PB-AG
MODULE QTY	3276
INVERTER	CANADIAN SOLAR 125KW
INVERTER QTY	8

INVERTER INTERNAL PROTECTIVE SETTINGS: UL1741-SA COMPLIANT					
ANSI ELEMENT #	Pickup	Units*	Level	Total Clear Time (sec)	Description
27	304.8	V	88%	2.00	Slow UV
27	173.2	V	50%	1.10	Fast LV
59	381.1	V	110%	2.00	Slow OV
59	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	95%	300.00	Min Reclosing Voltage Value
79	363.7	V	105%	300.00	Max Reclosing Voltage Value
79	59.6	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



1 ONE LINE DIAGRAM  
E305 SCALE: NONE

PROJECT: 6490.640KW SOLAR GROUND MOUNT AT CSCU BOOMBRIDGE 227 BOOMBRIDGE ROAD STONINGTON, CT 06359  
 DC SYSTEM SIZE: 6490.640 KW AC SYSTEM SIZE: 5000.000 KW MODULE: CS3W-395PB-AG 395W MODULE QUANTITY: 16432 STRING QUANTITY: 532 ORIENTATION: 35° TILT & 180° AZIMUTH  
 DEVELOPER: Greenskies a Clean Focus company  
 180 JOHNSON STREET, MIDDLETOWN, CT 06457 WWW.GREENSKIES.COM  
 DATE: 03/24/2020 INTERCONNECTION DOCUMENTS: E305  
 REVISION DESCRIPTION: DATE: 03/24/2020 INTERCONNECTION DOCUMENTS: E305  
 PM: TENG CHK  
 DATE: 03/24/2020 INTERCONNECTION DOCUMENTS: E305  
 PM: TENG CHK



# THREE-PHASE STRING INVERTER 125 KW CSI-125KTL-GS-E

Canadian Solar's grid-tied, transformer-less string inverters help accelerate the use of three-phase string architecture for commercial rooftop and small ground-mount applications. An NRTL approved, cost-effective alternative to central inverters, these inverters are modular design building blocks that provide high yield and enable significant BoS cost savings. They provide up to 99.1% conversion efficiency, and a wide operating range for maximum energy harvest.



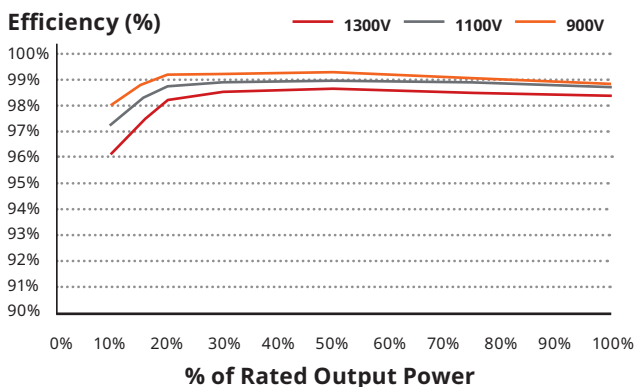
**Standard warranty, extension up to 20 years**

## KEY FEATURES

- Maximum efficiency of 99.1%, CEC efficiency of 98.6%
- Single MPPT for higher conversion efficiency
- Transformerless design
- PID mitigation capability

## EFFICIENCY CURVE

CSI-125KTL-GS-E @ 900 V



\*For detailed information, please refer to the Installation Manual.

## HIGH RELIABILITY

- Advanced thermal design with variable speed fans
- Ground-fault detection and interruption circuit

## BROAD ADAPTIBILITY

- NEMA 4X (IP65), outdoor application
- Utility interactive controls: active power derating, reactive power control and over frequency derating
- Integrated wiring box design
- Integrated DC and AC load rated disconnects
- Wide MPPT range for flexible string sizing
- AC terminals compatible with copper and aluminum conductors
- Supports up to 20 DC string inputs

**CANADIAN SOLAR (USA), INC.** is committed to providing high quality solar products, solar system solutions and services to customers around the world. As a leading PV project developer and manufacturer of solar modules with over 36 GW deployed around the world since 2001, Canadian Solar Inc. (NASDAQ: CSIQ) is one of the most bankable solar companies worldwide.

**CANADIAN SOLAR (USA), INC.**

3000 Oak Road, Suite 400, Walnut Creek, CA 94597, USA | [www.canadiansolar.com/na](http://www.canadiansolar.com/na) | [sales.us@canadiansolar.com](mailto:sales.us@canadiansolar.com)



<b>SYSTEM/TECHNICAL DATA</b>	
<b>MODEL NAME</b>	<b>CSI-125KTL-GS-E</b>
<b>DC INPUT</b>	
Max. PV Power	187.5 kW
Max. DC Input Voltage	1500 V <sub>DC</sub>
Operating DC Input Voltage Range	860-1450 V <sub>DC</sub>
Start-up DC Input Voltage/Power	900 V <sub>DC</sub>
Number of MPP Trackers	1
Full Power MPPT Voltage Range	860-1300 V <sub>DC</sub>
Operating Current (Imp)	150 A
Max. Input Current (Isc)	300 A
Number of DC Inputs	20
DC Disconnection Type	Load rated DC switch
<b>AC OUTPUT</b>	
Rated AC Output Power	125 kW
Max. AC Output Power	125 kW
Rated Output Voltage	600 V <sub>AC</sub>
Operating Voltage Range*	528 - 660 V <sub>AC</sub>
Grid Connection Type	3 $\Phi$ /PE
Nominal AC Output Current @600 Vac	120 A
Rated Output Frequency	60 Hz
Output Frequency Range*	55 - 65 Hz
Power Factor	1 default ( $\pm$ 0.8 adjustable)
Current THD	< 3 %
AC Disconnection Type	Load rated AC switch
<b>SYSTEM</b>	
Topology	Transformerless
Max. Efficiency	99.1 %
CEC Efficiency	98.6 %
Night Consumption	< 2 W
<b>ENVIRONMENT</b>	
Protection Degree	NEMA 4X (IP65)
Cooling	Intelligent Redundant Cooling
Operating Temperature Range	-13 ° F to + 140 ° F / -25 ° C to +60 ° C
Storage Temperature Range	-40 ° F to + 158 ° F / -40 ° C to +70 ° C
Operating Humidity	0 - 100 %
Operating Altitude	13,123.4 ft / 4000 m
Audible Noise	<55 dBA @ 1 m
<b>DISPLAY AND COMMUNICATION</b>	
Display	LED
Communication	Standard: RS485 (Modbus RTU), AND either MODBUS over ETHERNET
<b>MECHANICAL DATA</b>	
Dimensions (W / H / D)	46.3 x 28.1 x 12.4in / 1176 x 713.5 x 315mm
Weight	185lbs (84kg)
Installation Angle	Back tilt up to 15 degrees
DC Fuse Rating	20 A standard
<b>SAFETY</b>	
Safety and EMC Standard	UL1741 SA, UL1998, CSA-C22.2 No. 107.1-01, IEEE1547, FCC PART 15
Grid Standard	IEEE1547, Rule 21, ISO-NE
Smart-Grid Features	Voltage-Ride Thru, Frequency-Ride Thru, Soft-Start, Volt-Var, Frequency-Watt, Volt-Watt

\*The "Output Voltage Range" and "Output Frequency Range" may differ according to specific grid standard.

The specification and key features described in this datasheet may deviate slightly and are not guaranteed. Due to on-going innovation, research and product enhancement, Canadian Solar Inc. reserves the right to make any adjustment to the information described herein at any time without notice. Please always obtain the most recent version of the datasheet which shall be duly incorporated into the binding contract made by the parties governing all transactions related to the purchase and sale of the products described herein.

Caution: For professional use only. The installation and handling of PV equipment requires professional skills and should only be performed by qualified professionals. Please read the safety and installation instructions before using the product.



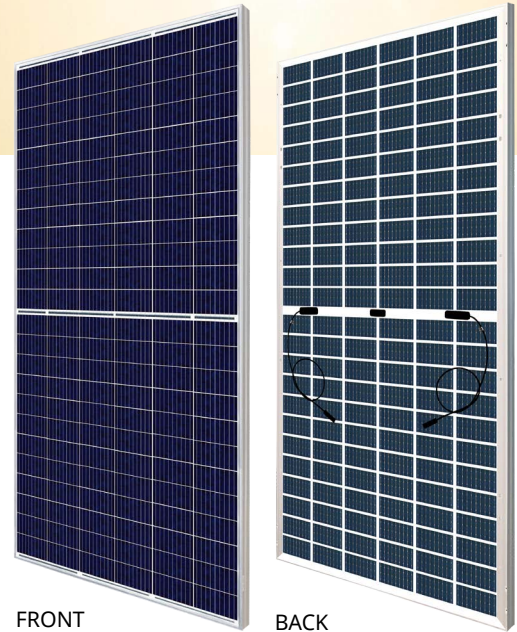
# BiHiKu

**SUPER HIGH POWER BIFACIAL POLY PERC MODULE**

**390 W ~ 410 W**

**UP TO 30% MORE POWER FROM THE BACK SIDE**

**CS3W-390 | 395 | 400 | 405 | 410PB-AG**



## MORE POWER



Up to 30% more power from the back side



24 % more front side power than conventional modules



Low NMOT:  $41 \pm 3 \text{ }^\circ\text{C}$   
Low temperature coefficient (Pmax):  $-0.37 \text{ \% / }^\circ\text{C}$



Better shading tolerance

## MORE RELIABLE



Lower internal current, lower hot spot temperature



Minimizes micro-cracks and snail trails



Heavy snow load up to 5400 Pa, wind load up to 2400 Pa \*



Fire Class A and Type 3 / Type 13



**linear power output warranty\***



**enhanced product warranty on materials and workmanship\***

\*According to the applicable Canadian Solar Limited Warranty Statement.

## MANAGEMENT SYSTEM CERTIFICATES\*

ISO 9001:2015 / Quality management system  
ISO 14001:2015 / Standards for environmental management system  
OHSAS 18001:2007 / International standards for occupational health & safety

## PRODUCT CERTIFICATES\*

IEC 61215 / IEC 61730: VDE / CE / MCS / INMETRO  
UL 1703 / IEC 61215 performance: CEC listed (US)  
UL 1703: CSA / IEC 61701 ED2: VDE / IEC 62716: VDE / IEC 60068-2-68: SGS Take-e-way

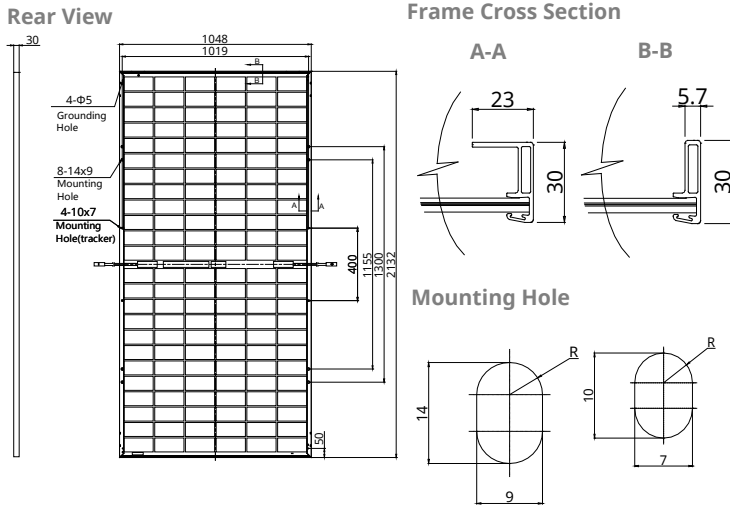


\* As there are different certification requirements in different markets, please contact your local Canadian Solar sales representative for the specific certificates applicable to the products in the region in which the products are to be used.

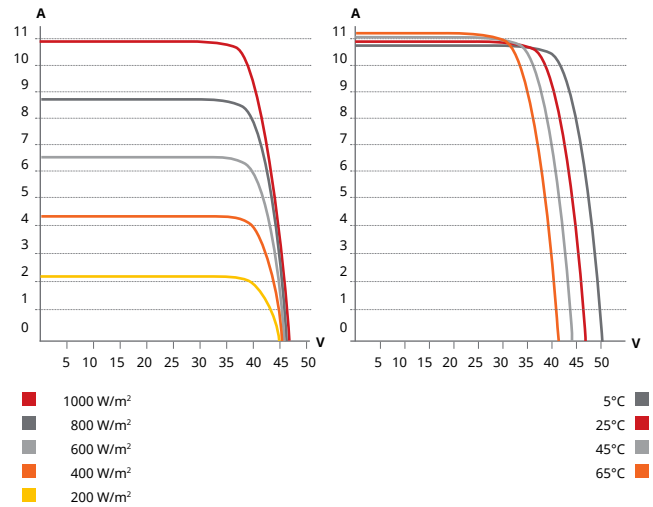
**CANADIAN SOLAR INC.** is committed to providing high quality solar products, solar system solutions and services to customers around the world. No. 1 module supplier for quality and performance/price ratio in IHS Module Customer Insight Survey. As a leading PV project developer and manufacturer of solar modules with over 36 GW deployed around the world since 2001.

\* For detail information, please refer to Installation Manual.

## ENGINEERING DRAWING (mm)



## CS3W-400PB-AG / I-V CURVES



## ELECTRICAL DATA | STC\*

	Nominal Max. Power (P <sub>max</sub> )	Opt. Operating Voltage (V <sub>mp</sub> )	Opt. Operating Current (I <sub>mp</sub> )	Open Circuit Voltage (V <sub>oc</sub> )	Short Circuit Current (I <sub>sc</sub> )	Module Efficiency
<b>CS3W-390PB-AG</b>	390 W	38.3 V	10.19 A	46.8 V	10.74 A	17.45%
<b>Bifacial Gain**</b>	5%	410 W	38.3 V	10.71 A	46.8 V	18.35%
	10%	429 W	38.3 V	11.21 A	46.8 V	19.20%
	20%	468 W	38.3 V	12.23 A	46.8 V	20.95%
	30%	507 W	38.3 V	13.25 A	46.8 V	22.69%
<b>CS3W-395PB-AG</b>	395 W	38.5 V	10.26 A	47 V	10.82 A	17.68%
<b>Bifacial Gain**</b>	5%	415 W	38.5 V	10.78 A	47 V	18.57%
	10%	435 W	38.5 V	11.3 A	47 V	19.47%
	20%	474 W	38.5 V	12.31 A	47 V	21.21%
	30%	513 W	38.5 V	13.34 A	47 V	22.96%
<b>CS3W-400PB-AG</b>	400 W	38.7 V	10.34 A	47.2 V	10.9 A	17.90%
<b>Bifacial Gain**</b>	5%	420 W	38.7 V	10.86 A	47.2 V	18.80%
	10%	440 W	38.7 V	11.37 A	47.2 V	19.69%
	20%	480 W	38.7 V	12.41 A	47.2 V	21.48%
	30%	520 W	38.7 V	13.44 A	47.2 V	23.27%
<b>CS3W-405PB-AG</b>	405 W	38.9 V	10.42 A	47.4 V	10.98 A	18.13%
<b>Bifacial Gain**</b>	5%	425 W	38.9 V	10.94 A	47.4 V	19.02%
	10%	445 W	38.9 V	11.46 A	47.4 V	19.92%
	20%	486 W	38.9 V	12.5 A	47.4 V	21.75%
	30%	527 W	38.9 V	13.56 A	47.4 V	23.59%
<b>CS3W-410PB-AG</b>	410 W	39.1 V	10.49 A	47.6 V	11.06 A	18.35%
<b>Bifacial Gain**</b>	5%	431 W	39.1 V	11.03 A	47.6 V	19.29%
	10%	451 W	39.1 V	11.54 A	47.6 V	20.18%
	20%	492 W	39.1 V	12.59 A	47.6 V	22.02%
	30%	533 W	39.1 V	13.64 A	47.6 V	23.85%

\* Under Standard Test Conditions (STC) of irradiance of 1000 W/m<sup>2</sup>, spectrum AM 1.5 and cell temperature of 25°C.

\*\* Bifacial Gain: The additional gain from the back side compared to the power of the front side at the standard test condition. It depends on mounting (structure, height, tilt angle etc.) and albedo of the ground.

## ELECTRICAL DATA

Operating Temperature	-40°C ~ +85°C
Max. System Voltage	1500 V (IEC/UL) or 1000 V (IEC/UL)
Module Fire Performance	TYPE 3 / Type 13 (UL 1703) or CLASS A (IEC61730)
Max. Series Fuse Rating	25 A
Application Classification	Class A
Power Tolerance	0 ~ + 5 W
Power Bifaciality*	70 %

\* Power Bifaciality = P<sub>max, rear</sub> / P<sub>max, front</sub>, both P<sub>max, rear</sub> and P<sub>max, front</sub> are tested under STC, Bifaciality Tolerance: ± 5 %

\* The specifications and key features contained in this datasheet may deviate slightly from our actual products due to the on-going innovation and product enhancement. Canadian Solar Inc. reserves the right to make necessary adjustment to the information described herein at any time without further notice. Please be kindly advised that PV modules should be handled and installed by qualified people who have professional skills and please carefully read the safety and installation instructions before using our PV modules.

## CANADIAN SOLAR INC.

545 Speedvale Avenue West, Guelph, Ontario N1K 1E6, Canada, [www.canadiansolar.com](http://www.canadiansolar.com), [support@canadiansolar.com](mailto:support@canadiansolar.com)

## ELECTRICAL DATA | NMOT\*

	Nominal Max. Power (P <sub>max</sub> )	Opt. Operating Voltage (V <sub>mp</sub> )	Opt. Operating Current (I <sub>mp</sub> )	Open Circuit Voltage (V <sub>oc</sub> )	Short Circuit Current (I <sub>sc</sub> )
<b>CS3W-390PB-AG</b>	291 W	35.7 V	8.15 A	44.0 V	8.66 A
<b>CS3W-395PB-AG</b>	295 W	35.9 V	8.21 A	44.2 V	8.72 A
<b>CS3W-400PB-AG</b>	299 W	36.1 V	8.27 A	44.4 V	8.79 A
<b>CS3W-405PB-AG</b>	302 W	36.3 V	8.33 A	44.6 V	8.85 A
<b>CS3W-410PB-AG</b>	306 W	36.5 V	8.39 A	44.8 V	8.92 A

\* Under Nominal Module Operating Temperature (NMOT), irradiance of 800 W/m<sup>2</sup> spectrum AM 1.5, ambient temperature 20°C, wind speed 1 m/s.

## MECHANICAL DATA

Specification	Data
Cell Type	Poly-crystalline
Cell Arrangement	144 [2X (12 X6)]
Dimensions	2132 × 1048 × 30 mm (83.9 × 41.3 × 1.2 in)
Weight	28.2 kg (62.2 lbs)
Front / Back Glass	2.0 mm heat strengthened glass
Frame	Anodized aluminium alloy
J-Box	IP68, 3 diodes
Cable	4.0 mm <sup>2</sup> (IEC), 12 AWG (UL)
Cable Length (Including Connector)	Portrait: 400 mm (15.7 in) (+) / 280 mm (11.0 in) (-); landscape: 1400 mm (55.1 in); leap-frog connection: 1850 mm (72.8 in)*
Connector	T4 series or H4 UTX or MC4-EVO2
Per Pallet	35 pieces
Per Container (40' HQ)	700 pieces or 560 pieces (only for US and Canada)

\* For detailed information, please contact your local Canadian Solar sales and technical representatives.

## TEMPERATURE CHARACTERISTICS

Specification	Data
Temperature Coefficient (P <sub>max</sub> )	-0.37 % / °C
Temperature Coefficient (V <sub>oc</sub> )	-0.29 % / °C
Temperature Coefficient (I <sub>sc</sub> )	0.05 % / °C
Nominal Module Operating Temperature	41 ± 3°C

## PARTNER SECTION

