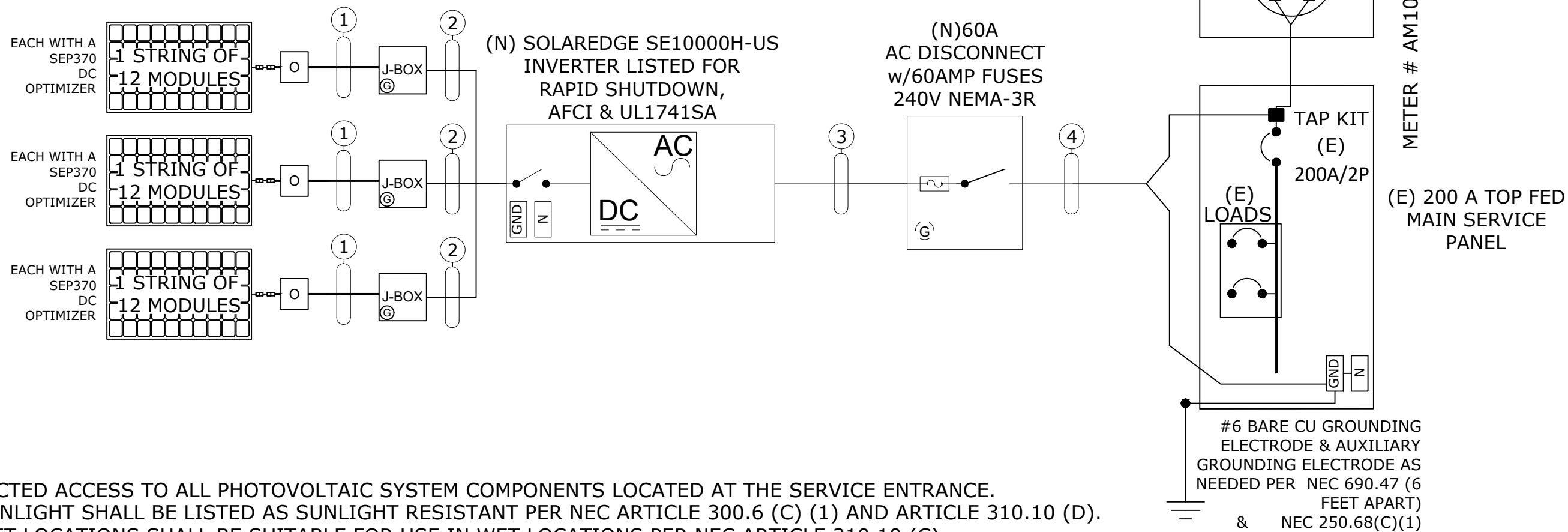




WIRE TAG #	CONDUIT	WIRE QTY	WIRE GAUGE	WIRE TYPE	TEMP RATING	WIRE AMP	TEMP DE-RATE	CONDUIT FILL	WIRE OCP	TERMINAL 75°C RATING	STRING WATTAGE	OPERATING VOLTAGE	STRING AMPS	NEC = MAX AMPS	MAX. SYSTEM VOLTAGE	GRND SIZE	GRND WIRE TYPE
1	Open Air	2	#10	PV WIRE	90°	40	x 0.96	x 1	= 38.40A	35 A	4320	/ 400	= 10.80	x 1.25 = 13.50 A	480	#6	SBC
2	3/4" EMT	2	#10	THWN-2	90°	40	x 0.96	x 1	= 38.40A	35 A	4320	/ 400	= 10.80	x 1.25 = 13.50 A	480	#10	THWN-2
3	3/4" EMT	3	#6	THWN-2	90°	75	x 0.96	x 1	= 72.00A	65 A	/		= 42	x 1.25 = 52.50 A	240	#8	THWN-2
4	3/4" EMT	3	#6	THWN-2	90°	75	x 0.96	x 1	= 72.00A	65 A	/		= 42	x 1.25 = 52.50 A	240	#8	THWN-2

INVERTER SPECS	OPTIMIZER SPECS	DISCONNECTS	MODULE SPECS	ASHRAE AMBIENT TEMPERATURE SPECS		
INVERTER: SE10000H-US QTY: 1	OPTIMIZER: P370 QTY: 36	MAKE: EATON DG222NRB QTY: 1	MODULE TYPE: PowerXT 360R-PD36 QTY: 36	WATTAGE: 360	FRAME COLOR: BLACK	High Temp
VOLTAGE: 240	CELL: 60	RATED CURRENT: 60A	Voc: 47.7V	Imp: 9.13A	Vpmax: 39.5V	2% Avg.
WATTAGE: 10000	ISC: 11	MAX RATED VOLTAGE: 240V				34.2° C
NEC EFF: 99%	MAX STRING WATTAGE: 6000					DISTANCE ABOVE ROOF
						1"
						EXTREME
						MIN
						-1.4° C
						NO TEMP ADDER PER 310.15(B)(3)(C)



	JOB NUMBER: P-004358	OWNER:	DESCRIPTION:	STAMP:	PV-5 PAGE NAME: SINGLE-LINE DIAGRAM
	UTILITY: ENERGY	ROSEMARY C PALMER, 8232 S CLAIBORNE AVE, NEW ORLEANS, LA 70118	ROSEMARY C PALMER, RESIDENCE		
POSIGEN DEVELOPER, LLC 819 CENTRAL AVE STE 210 JEFFERSON, LA 70121 LA ELECTRICAL LICENSE :74446	RACKING: GAF DECOTECH SOLAR		12.96 kWDC ROOF SOLAR SYSTEM PRODUCTION: 14,580kWH		SCALE: NTS
	MODULES: (36)SOLARIA POWERXT-360R-PD				DATE: 10/10/2022
	OPTIMIZER: (36) SOLAREEDGE P370 OPTIMIZER	ACCOUNT NO. : 154022727		DESIGNED BY: ENERQUAL TECHNOLOGY PVT. LTD.	REV:
	INVERTER: (1)SOLAREEDGE SE10000H-US				

GROUNDING NOTES		7	EQUIPMENT GROUNDING CONDUCTORS SHALL BE SIZED ACCORDING TO NEC ARTICLE 690.45, AND BE A MINIMUM OF #10AWG WHEN NOT EXPOSED TO DAMAGE, AND #6AWG SHALL BE USED WHEN EXPOSED TO DAMAGE	NOTES : 1. MATING CONNECTORS SHALL COMPLY WITH NEC 690.33. 2. SOLAR EDGE SYSTEM MEETS REQUIREMENTS FOR PHOTOVOLTAIC RAPID SHUTDOWN SYSTEM (PVRSS), AS PER NEC 690.12(B). 3. THE SPECIFIED OPTIMIZER CAN BE SUBSTITUTED WITH A P400, P405, P505, P401, OR P485. THESE OPTIMIZERS HAVE AN INPUT VOLTAGE WINDOW WIDE ENOUGH TO ACCOMMODATE THE OUTPUT VOLTAGE RANGE OF THE MODULE AT THE DESIGN TEMPERATURES, HAVE A MAX INPUT CURRENT RATING THAT IS ABOVE THE MAX OUTPUT CURRENT OF THE MODULE, AND A MAX POWER INPUT THAT IS ABOVE THE RATED POWER OUTPUT OF THE MODULE. 4. DC PV CONDUCTORS ARE NOT SOLIDLY-GROUNDED. NO DC PV CONDUCTOR SHALL BE WHITE- OR GRAY-COLORED 5. ALL METAL ENCLOSURES, RACEWAYS, CABLES AND EXPOSED NONCURRENT-CARRYING METAL PARTS OF EQUIPMENT SHALL BE GROUNDED TO EARTH AS REQUIRED BY NEC 250.4(A) AND PART III OF ARTICLE 250 AND EQUIPMENT GROUNDING CONDUCTORS SHALL BE SIZED ACCORDING TO NEC 690.45. THE GROUNDING ELECTRODE SYSTEM SHALL ADHERE TO NEC 690.47(A) AND NEC 250.169. THE DC GROUNDING ELECTRODE SHALL BE SIZED ACCORDING TO NEC 250.166 AND INSTALLED IN COMPLIANCE WITH NEC 250.64. 6. MAX DC VOLTAGE OF ARRAY FIXED BY THE INVERTER AT 380V REGARDLESS OF TEMPERATURE. THE MAX DC VOLTAGE OF THE MODULE AT -15°C IS 53.2V (-15°C - 25°C) X -0.138V/C + 47.7V = 53.2V). 7. POINT-OF-CONNECTION IS ON THE SUPPLY SIDE OF SERVICE DISCONNECT, INSIDE PANELBOARD ENCLOSURE USING UNUSED TERMINALS, TERMINALS THAT ARE SUITABLE FOR DOUBLE LUGGING, OR USING OTHER LOCALLY-APPROVED METHODS AND HARDWARE, IN COMPLIANCE WITH NEC 705.12(A). THE PANELBOARD SHALL HAVE SUFFICIENT SPACE TO ALLOW FOR ANY TAP HARDWARE AS REQUIRED BY NEC 110.3 AND NEC 312.8(A) 8. PV SYSTEM DISCONNECT SHALL BE A VISIBLE KNIFE-BLADE TYPE DISCONNECT THAT IS ACCESSIBLE AND LOCKABLE BY THE UTILITY. THE DISCONNECT SHALL BE LOCATED WITHIN 10 FT OF UTILITY METER. DISCONNECT SHALL BE GROUPED IN ACCORDANCE WITH NEC 230.72.
1	ALL EQUIPMENT SHALL BE PROPERLY GROUNDED PER THE REQUIREMENTS OF NEC ARTICLES 250 & 690			
2	INSTALLER SHALL CONFIRM THAT MOUNTING SYSTEM HAS BEEN EVALUATED FOR COMPLIANCE WITH UL 2703 "GROUNDING AND BONDING" WHEN USED WITH PROPOSED PV MODULE.			
3	PV MODULES SHALL BE GROUNDED TO MOUNTING RAILS USING MODULE LUGS OR RACKING INTEGRATED GROUNDING CLAMPS AS ALLOWED BY LOCAL JURISDICTION. ALL OTHER EXPOSED METAL PARTS SHALL BE GROUNDED USING UL-LISTED LAY-IN LUGS.			
4	GROUNDING AND BONDING CONDUCTORS, IF INSULATED, SHALL BE COLOR CODED GREEN, OR MARKED GREEN IF #4AWG OR LARGER			
5	AC SYSTEM GROUNDING ELECTRODE CONDUCTOR (GEC) SHALL BE A MINIMUM SIZE #8AWG WHEN INSULATED, #6AWG IF BARE WIRE.			
6	IF THE EXISTING MAIN SERVICE PANEL DOES NOT HAVE A VERIFIABLE GROUNDING ELECTRODE, IT IS THE CONTRACTOR'S RESPONSIBILITY TO INSTALL A SUPPLEMENTAL GROUNDING ELECTRODE.			

 PosiGen Solar Energy and Energy Efficiency	JOB NUMBER: P-004358	OWNER:	DESCRIPTION:	STAMP:	PV-5.1 PAGE NAME: ELECTRICAL NOTES
	UTILITY: ENERGY	ROSEMARY C PALMER, 8232 S CLAIBORNE AVE, NEW ORLEANS, LA 70118	ROSEMARY C PALMER, RESIDENCE		
POSIGEN DEVELOPER, LLC 819 CENTRAL AVE STE 210 JEFFERSON, LA 70121 LA ELECTRICAL LICENSE :74446	RACKING: GAF DECOTECH SOLAR	12.96 kWDC ROOF SOLAR SYSTEM PRODUCTION: 14,580kWH			SCALE: NTS
	MODULES: (36)SOLARIA POWERXT-360R-PD	ACCOUNT NO. : 154022727			DATE: 10/10/2022
	OPTIMIZER: (36) SOLAREEDGE P370 OPTIMIZER		 ENERQUAL TECHNOLOGY PVT. LTD.	DESIGNED BY:	REV:
INVERTER: (1)SOLAREEDGE SE10000H-US					