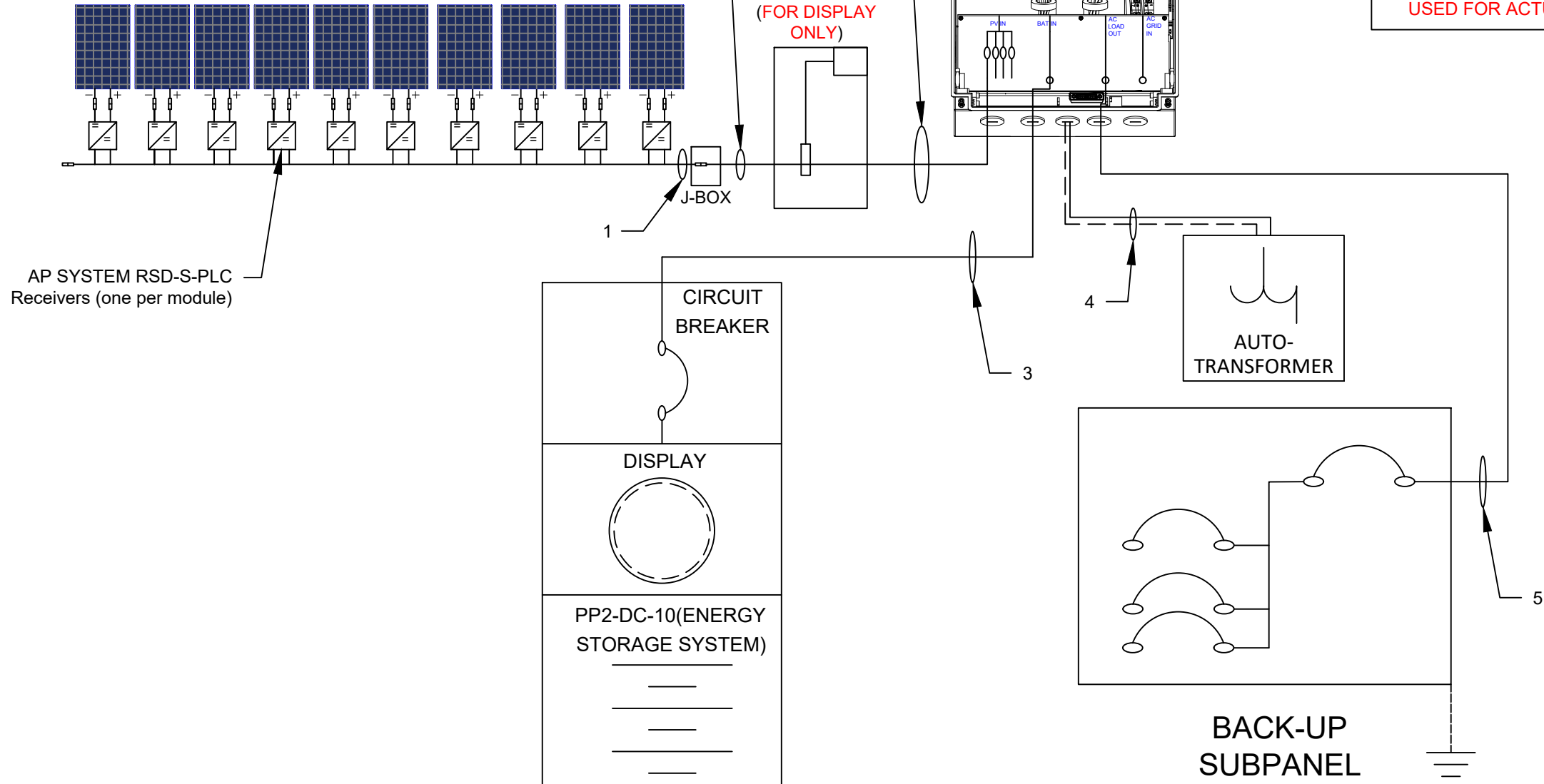


(10) JINKO JKM385M-72HBL-V (385W) MODULES.  
 (1) STRING OF 10 MODULES CONNECTED IN SERIES.

(10) JINKO JKM385M-72HBL-V 385W  
 (10) AP SYSTEM RSD-S-PLC  
 (1) STRING OF (10) MODULES  
 STRING A



**NOTE: FOR PRACTICE INSTALLATION PURPOSES ONLY, NOT TO BE USED FOR ACTUAL CONSTRUCTION**

CONDUIT SCHEDULE					
#	CONDUIT	CONDUCTOR (RED/BLACK)	NEUTRAL (WHITE)	GROUND	
				(GREEN)	(BARE COPPER)
1	NONE	(2) 10 AWG PV WIRE	NONE	NONE	(1) 6 AWG
2	NONE	(1) 12/2 MC CABLE W/ GND			NONE
3	1/2" EMT	(2) 8 AWG THHN/THWN-2	NONE	(1) 10 AWG THHN/THWN-2	NONE
4	3/4" EMT	(2) 8 AWG THHN/THWN-2 W/ INCLUDED TX-NTC CABLE	(1) 8 AWG THHN/THWN-2	(1) 10 AWG THHN/THWN-2	NONE
5	1/2" EMT	(2) 10 AWG THHN/THWN-2	(1) 10 AWG THHN/THWN-2	(1) 10 AWG THHN/THWN-2	NONE

CONDUCTOR SIZING CALCULATIONS

CIRCUIT DESCRIPTION	CURRENT	$I_{max}$ (690.8(A)(3))	$I_{cont}$ (690.8(B)(1) calc)	SPECIFIED CONDUCTOR	AMPACITY @ 90c	AMBIENT TEMP c	CURRENT CARRYING COND.	TERMINAL TEMP RATING	AMPACITY @ TERMINAL TEMP. RATING	COND. OF USE APPLIED (690.8(B)(2) calc)
PV SOURCE CIRCUIT	10.38A	$10.38A \times 1.25 = 12.98A$	$12.98A \times 1.25 = 16.22A$	#12 MC CABLE	30A	26-30	1-3	75C	25A	$30A \times 1.0$ (am b. temp.) $\times 1.0$ (raceway fill) = 30A
INVERTER ON-GRID CURRENT	20.8A	20.8A	$20.8A \times 1.25 = 26A$	#10 THWN-2	40A	41-45	1-3	75C	35A	$40A \times 1.0$ (am b. temp.) $\times 1.0$ (raceway fill) = 40A
BATTERY CHARGE/DISCHARGE CURRENT	50A	50A	50A	#8 THWN-2	55A	41-45	1-3	75C	50A	$75A \times 1.0$ (am b. temp.) $\times 1.0$ (raceway fill) = 65.25A
BACKUP LOAD OUT (PEAK OUTPUT)	24A	24A	$24A \times 1.25 = 30A$	#10 THWN-2	40A	41-45	1-3	75C	35A	$40A \times 1.0$ (am b. temp.) $\times 1.0$ (raceway fill) = 40A

GRID TIED - BATTERY BACKUP - ELECTRIQ POWER POD 2 DC COUPLED INVERTER WITH ESS

**INTERSOLAR**  
 123 ANYSTREET  
 CITY, STATE, 00000

Rev B  
 DATE:10 February 2023

Line Diagram

INSTALL ON THE UTILITY METER

**WARNING**

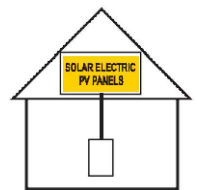
THIS SERVICE METER IS ALSO SERVED BY A PHOTOVOLTAIC SYSTEM

596-00738-03945

INSTALL ON THE MAIN BREAKER PANEL

**SOLAR PV SYSTEM EQUIPPED WITH RAPID SHUTDOWN**

TURN RAPID SHUTDOWN SWITCH TO THE "OFF" POSITION TO SHUT DOWN PV SYSTEM AND REDUCE SHOCK HAZARD IN THE ARRAY



596-00815-03945

**WARNING**

TURN OFF PHOTOVOLTAIC AC DISCONNECT PRIOR TO WORKING INSIDE PANEL

596-00499-03945

**WARNING**

POWER SOURCE OUTPUT CONNECTION. DO NOT RELOCATE THIS OVERCURRENT DEVICE.

596-00883-03945

**CAUTION**

MULTIPLE SOURCES OF POWER

596-00580-03945

**CAUTION: SOLAR ELECTRIC SYSTEM CONNECTED**

596-00613-03945

**DO NOT DISCONNECT UNDER LOAD**

596-04409-03945

INSTALL EVERY 10 FEET ON EXTERIOR CONDUIT, RACEWAYS

**PHOTOVOLTAIC POWER SOURCE**

596-01030-03945

**SOLAR PV DC CIRCUIT**

596-01030-03945

**DC PHOTOVOLTAIC SOURCE CIRCUIT**

596-00845-03945

INSTALL ON THE BACKUP LOADS PANEL

**CAUTION: DO NOT INSTALL ADDITIONAL LOADS IN THIS PANEL**

596-03945

INSTALL ON THE ESS DISCONNECT

**ENERGY STORAGE SYSTEM DISCONNECT**

9

INSTALL ON THE JUNCTION BOX

**DC JUNCTION BOX**

596-00738-03945

**WARNING**

**PV SOURCE CIRCUIT**

596-03945

INSTALL ON THE INVERTER

**WARNING**

THE DISCONNECTION OF THE GROUNDED CONDUCTOR(S) MAY RESULT IN OVERVOLTAGE ON THE EQUIPMENT

596-09323-03945

**PHOTOVOLTAIC DC DISCONNECT**

596-01001-03945

**MAXIMUM DC VOLTAGE OF PV SYSTEM**

596-01001-03945

**RAPID SHUTDOWN FOR SOLAR PV SYSTEM**

596-01001-03945

**DC DISCONNECT**

3

**WARNING**

**ELECTRICAL SHOCK HAZARD**

TERMINALS ON THE LINE AND LOAD SIDES MAY BE ENERGIZED IN THE OPEN POSITION

596-00878-03945

INSTALL ON THE AC DISCONNECT

**PHOTOVOLTAIC AC DISCONNECT**

RATED AC OUTPUT CURRENT: \_\_\_\_\_

NOMINAL OPERATING AC VOLTAGE: \_\_\_\_\_

596-00892-03945

**CAUTION**

**INVERTER OUTPUT CIRCUIT**

596-00750-03945

**WARNING**

**ELECTRICAL SHOCK HAZARD**

TERMINALS ON THE LINE AND LOAD SIDES MAY BE ENERGIZED IN THE OPEN POSITION

DC VOLTAGE IS ALWAYS PRESENT WHEN SOLAR MODULES ARE EXPOSED TO SUNLIGHT

596-00879-03945

**CIRCUIT 1**

GRID TIED - BATTERY BACKUP - ELECTRIQ POWER POWERPOD 2 DC COUPLED INVERTER WITH ESS

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DATE:10 February 2023