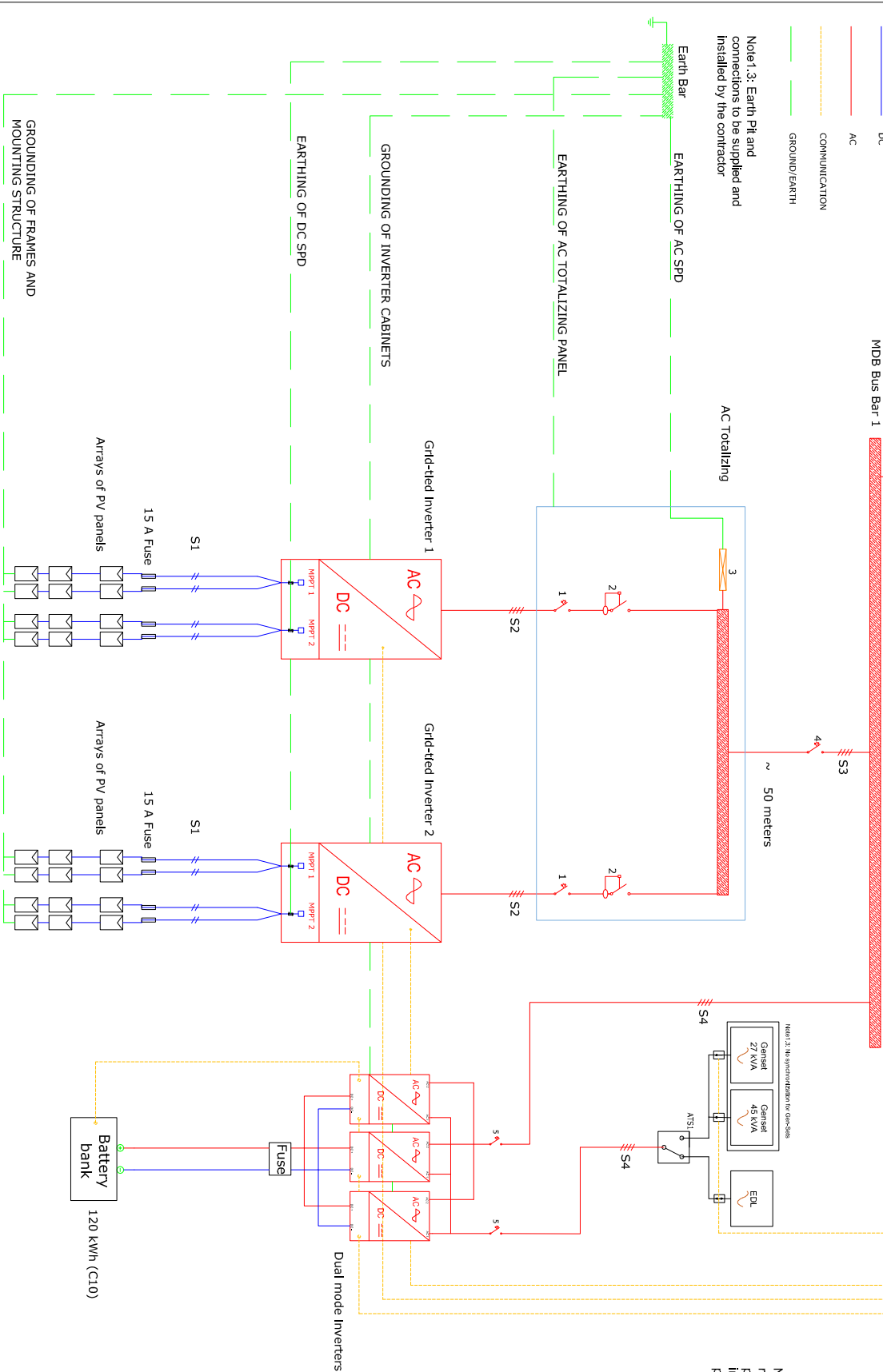
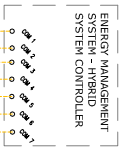


SYMBOLS	
	CIRCUIT BREAKER 4P CURVE B RATED AS PER GRID-TIED INVERTER CAPACITY
	DIFFERENTIAL SWITCH 4P TYPE A OR AC 300 mA RATED AS PER GRID-TIED INVERTER
	Surge Arrester SPCT2 460/4 RATED AS PER GRID-TIED INVERTER. Up ≤ 1.75 kV, I _{max} = 40 kA, I _n = 20kA
	CIRCUIT BREAKER 4P CURVE B RATED AS PER 2X GRID-TIED INVERTER CAPACITY
	CIRCUIT BREAKER 4P CURVE B RATED AS PER MAXIMUM LOAD
	THREE PHASE BI-DIRECTIONAL POWER ANALYZER
	Surge Arrester DC SIDE TYPE 2. Up ≤ 4.5 kV, I _{max} = 25 kA, I _n = 12.5 kA



Note1.2: Connection scheme serves as an example only



- ISOLATION SENSOR
- MODULE TEMPERATURE SENSOR
- AMBIENT TEMPERATURE SENSOR

Note1.1: Additional Type 2 SPDs for the DC strings are required if the distance between the inverters and the PV panels is greater than 10 meters. These SPDs should be installed at a distance less than 10 meters from the PV panels.

Maximum Allowable Voltage Drop	
Cable	%ΔU
S1	0.50%
S2 & S3	2.00%
All cables must be UV and water resistant, DC cables shall be of the type Cu Rxxk 0.6/1 kV.	

SYSTEM DESCRIPTION	
THE SYSTEM IS A HYBRID SOLAR SYSTEM DESIGNED TO DECREASE THE UTILIZATION OF DIESEL AND ENERGY FROM THE GRID.	
MAIN COMPONENTS:	
PV CAPACITY: 30 kWp	
GRID-TIED INVERTER CAPACITY: 2 X 6 kVA continuous per phase (36 kVA continuous in total)	
BATTERY CAPACITY: 120 KWH AT 10 HOUR RATE (C10)	
BATTERY VOLTAGE: 48V	
SYSTEM ARCHITECTURE: AC COUPLED SOLAR-STORAGE HYBRID SYSTEM	
INVERTERS IN DRAWINGS: SMA STP 15	
PV PANELS IN DRAWING: JINKO JA60 320 W	
NOTE: CONFIGURATION SERVERS TO BE AN EXAMPLE ONLY	

DRAWING: SINGLE LINE DIAGRAM
PROJECT: K'FAR ROUIMANE SCHOOL PV SYSTEM
BENEFICIARY: K'FAR ROUIMANE PUBLIC SCHOOL
PVLB 2.2.2