



1 ONE LINE DIAGRAM - 277V CONNECTION
SCALE: 1" = 1'-0"

From Sheet E6

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PV & LINE VOLTAGE WIRE, CABLE, AND CONDUIT SCHEDULE

TAG	DESCRIPTION		NOTES
1	1 - PV WIRE 10AWG 2000VDC RED 1 - PV WIRE 10AWG 2000VDC BLACK	FREE AIR	CONDUCTORS FROM MODULE STRING TO PORDIS, FROM PORDIS TO INVERTER DISCONNECT, AND BETWEEN PORDIS UNITS - MUST BE UV RESISTANT
2	4 - 10AWG THHN (BRO, ORG, YEL, NEUTRAL) 1 - 10AWG THHN GREEN (GROUND)	CONDUIT	277VAC CONNECTION BETWEEN INVERTER AND 277V DISCONNECT, 277V DISCONNECT AND PANEL

PHOTOVOLTAIC EQUIPMENT SCHEDULE

TAG	QTY	DESCRIPTION	MAKE	MODEL	NOTES
PV CP#	48	Photovoltaic Modules	Canadian Solar	CS6K-270P	2 - (12) Module Strings - Series Connected - Polycrystalline
PV CM#	48	Photovoltaic Modules	Canadian Solar	CS6K-275M	2 - (12) Module Strings - Series Connected - Monocrystalline
PV HP#	48	Photovoltaic Modules	Hanwha	Q.PLUS BFR-G4.1	2 - (12) Module Strings - Series Connected - Polycrystalline
PV HM#	48	Photovoltaic Modules	Hanwha	Q.PEAK-G4.1	2 - (12) Module Strings - Series Connected - Monocrystalline
DISCO 1	4	DC Disconnect	SMA	1000-US	Disconnect for SMA Inverters.
DISCO 2	4	AC Disconnect	Eaton or Equiv.	-	AC Disconnect 600V, 30A, Non Fused, 3 Pole
PORDIS 1	1	Pordis String Curve Tracer	Pordis	140A2	IV Curve Tracer - 8 String Local Capacity
PORDIS 2	1	Pordis String Curve Tracer Expansion Unit	Pordis	140A2	IV Curve Tracer Expansion Unit - 8 String Capacity
DC 1	4	4-String Boilerplate DC Monitoring Enclosure	SNL	-	SNL Designed 4-String DC Monitoring Enclosure
INVTR 1	4	Solar Inverter	SMA	Sunny TriPower 15000TL-US	SMA 15kW Inverter (3 Phase, 480/277V connection)

480V/277Y 3φ
Wire Color Schedule

Phase	Wire Color
A	Brown
B	Orange
C	Yellow
Neutral	Gray or White
Ground	Green

PV String
Wire Color Schedule

Wire	Wire Color
Positive (+)	Red
Negative (-)	Black

This is a general guideline.