

PV MODULE

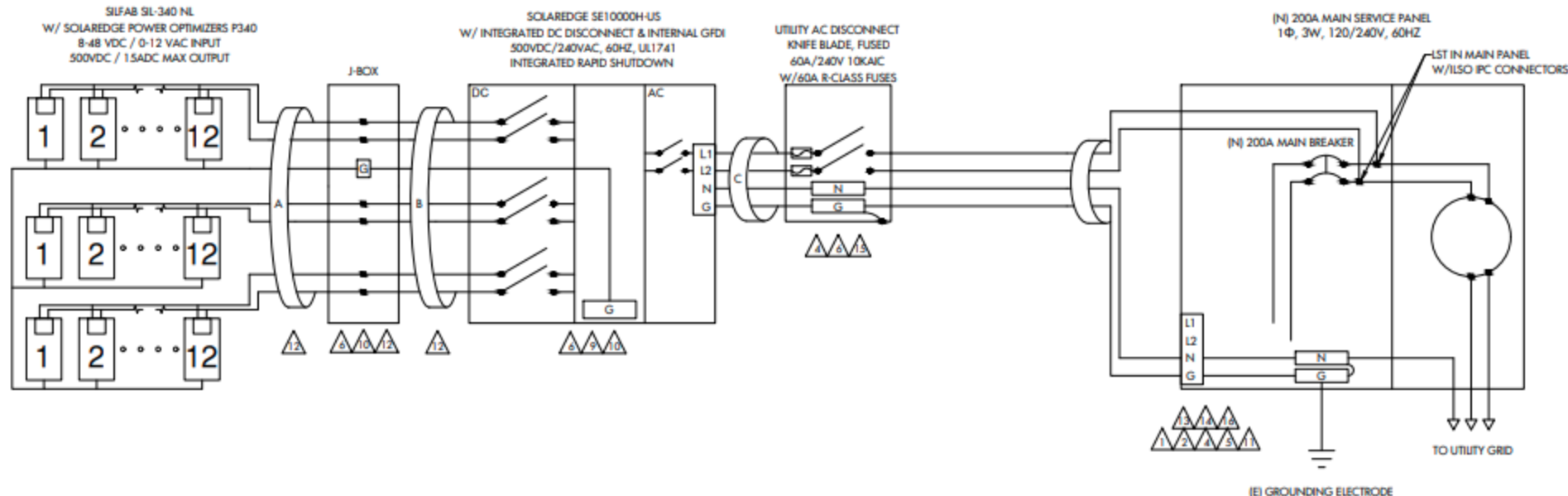
SILFAB SIL-340 NL
 ISC = 10.5 ADC
 VOC = 40.9 VDC
 IMP = 10.1 ADC
 VMP = 33.7 VDC
 TVOC = -0.31% / °C

WIRE SCHEDULE

- A - (6) #10 AWG-CU PV WIRE (HR)
 - (1) #10 AWG-CU BARE COPPER WIRE (GND)
 IN FREE AIR
- B - (6) #10 AWG-CU THWN-2 WIRE (HR)
 - (1) #10 AWG-CU THWN-2 WIRE (GND)
 3/4" EMT
- C - (3) #6 AWG-CU THWN-2 WIRE (HR)
 - (1) #8 AWG-CU THWN-2 WIRE (GND)
 3/4" EMT

MAIN SERVICE PANEL

| | | |
|---------------------|---|-------------------|
| BUS RATING | = | 200A |
| MAX. CURRENT RATING | = | 240A (200A X 1.2) |
| SOLAR BREAKER | = | 60A |
| MAIN BREAKER | = | 200A |
| TOTAL | = | 260A |

**WIRE SIZE CALCULATIONS**

TEMP CORRECTION FACTOR: 0.87 (109° AMBIENT)
 ROOF TOP TEMP CORRECTION FACTOR: 1 (109°)
 [2" ABOVE ROOFTOP / 0° TEMP ADDERS - AS OCCURS]
 (TEMP DATA TAKEN FROM ASHRAE 2% AVG HIGH TEMP)

DC WIRING

CONDUIT FILL FACTOR = 0.8
 OPTIMIZER MAX. CURRENT = 18.75ADC (1.5A X 1.25)
 #10 - AWG CU. AMPACITY = 45.10A (55A X 1.0 X 0.87) FREE AIR
 #10 - AWG CU. AMPACITY = 32A (40A X 1 X 0.8) ROOFTOP
 CONDUIT

AC WIRING

CONDUIT FILL FACTOR = 1 (3) CONDUCTORS
 MAX. INVERTER CURRENT = 42A (PER INVERTER SPECS)
 MIN. INVERTER OCP = 52.5A (42A X 1.25)
 INVERTER OCP = 60A
 #6 - AWG CU AMPACITY = 65.25A (75A X 1.0 X 0.87)



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 LAT:35.318159, LON:-79.003292
 TSP-60522

(36) SILFAB SIL-340 NL
 (1) SOLAREGE SE1000H-US
 12.240 kW DC SYSTEM SIZE
 10.000 kW AC SYSTEM SIZE

DATE: 12/28/2020
 REV:A
 DRAWN BY: DH

THREE LINE
 PV 6