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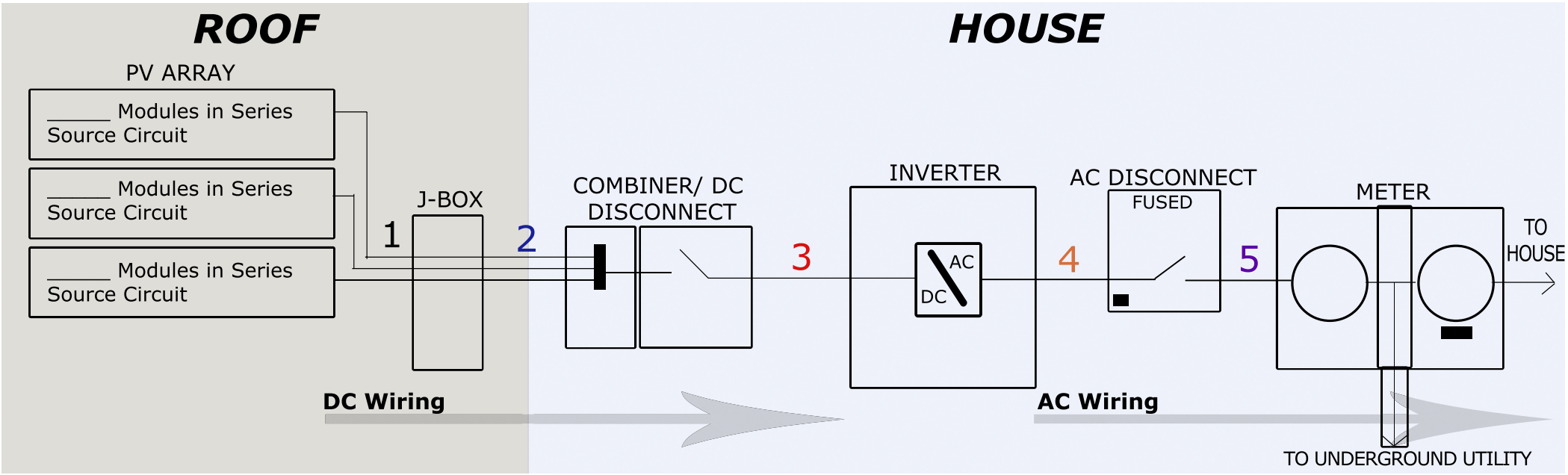
Residential Roof-Mounted 7 kW System

PV Array Location: _____
Modules in Series:_____
Parallel Circuits:_____
Lowest Ambient Temp: _____
Highest Continuous Temp: _____



PV Module Ratings at STC 690.51

Module Make:_____
Module Model#:_____
Max Power Current (Imp): _____A
Max Power Voltage (Vmp): _____V
Open-Circuit Voltage (Voc): _____V
Short-Circuit Current (Isc): _____A
Max Series Fuse (OCPD): _____ A
Maximum Power (Pmax): _____W

Source Circuit Combiner Ratings

Max OCPD Rating Per String: _____ A
OCPD Amp Rating: _____ A
OCPD Volt Rating: _____ V

DC Disconnect Ratings

Nameplate Amp Rating:_____ A
Actual Current Limit: _____ A
Volt Rating: _____ V

Inverter Ratings

Model Make: _____
Model #: _____
Max DC Volt: _____ V
Max Power at 40C: _____ W
Nominal AC Voltage: _____ V
Max AC Current: _____ A
Max OCPD Rating: _____ A

AC Disc. Ratings

Nameplate
Amp Rating:_____ A
Volt Rating: _____ V
Inverter OCPD: _____ A

Service Panel Ratings

Bus Amp: _____ A
Service Volt: _____ V
Main OCPD: _____ A

Tag	Description	Conductor Size	# Conductors	Conduit	Calculations
1	USE-2 or PV WIRE				Isc = 8.18 A 8.18 A x 1.25 (irradiance) x 1.25 (continuous) = 12.76 A
2.	THWN-2, XHHW-2, or RHW-2				Isc = 8.18 A 8.18 A x 1.25 (irradiance) x 1.25 (continuous) = 12.76 A
3.	THWN-2, XHHW-2, or RHW-2				Isc = 8.18 A 8.18 A x 3 x 1.25 (irradiance) x 1.25 (continuous) = 38.34 A
4.	THWN-2, XHHW-2 or RHW-2 (690.8(B)(1))				Max Operating Current = 7000 watts/240 volts = 29.2 A 29.2 A x 1.25 (continuous duty) = 36.5 A
5.	THWN-2, XHHW-2 or RHW-2(690.8(B)(1))				Max Operating Current = 7000 watts/240 volts = 29.2 A 29.2 A x 1.25 (continuous duty) = 36.5 A
* Grounding Not Shown in This Diagram					