

Field Services & Meter Shop

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Disconnect Model/Catalog numbers

Important Reminders:

- The Model/Catalog Number of all APS required Disconnects must match the Model/Catalog numbers in the approved three lines.
- The approved list of APS disconnects can be found in the links section of the www.aps.com/dg under "common documents and resources. Please refer to this list to confirm whether the equipment is approved.

Equipment Approval Process:

To get a piece of equipment placed on the approved list, the physical equipment must be submitted to the APS Equipment Approval committee. This committee meets every first Wednesday of each month.

- Mail requested equipment to:
Attn: Meter shop - Equipment Approval Committee
2121 W Cheryl Dr
M.S. 3324
Phoenix AZ, 85021
- Please provide a return address to have the equipment returned.

Disconnect Model/Catalog numbers

⚠ DANGER/PELIGRO

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

- Always use a properly rated voltage sensing device at all line and load fuse disconnects.
- Reinstall all parts and latch door before turning power on and operating switch.
- Unless Class J, R or T fuses are used, this switch will become a fire and casualty hazard if installed on circuits capable of delivering more than 10,000 RMS symmetrical amperes.
- Do not use renewable link fuses in fused switches.

Failure to follow these instructions will result in death or serious injury.

PELIGRO DE DESCARGA ELÉCTRICA, EXPLOSIÓN O DESTELLO POR ARQUEO

- Siempre utilice un dispositivo detector de tensión nominal adecuado en los circuitos para confirmar la desconexión de interruptor según la puerta antes de energizar y ponga inmediatamente el desconector a tierra.
- Si no se utilizan fusibles clase J, R o T, este interruptor podrá causar incendios y lesiones personales serias en caso de ser instalado en circuitos capaces de suministrar más de 10,000 A simétricos rms.
- No utilice fusibles de cinta renovables en los interruptores de fusible.

Catalog No. / No. de catálogo:
DU324RB

Series / Serie: F01 Amps / A 200
Frequency / Frecuencia: 50/60 Hz
Type SR Enclosure / Gabinete tipo SR
Rating / A prueba de lluvia
Single Throw Non-Fusible / Un tiro, sin fusible

Line / Línea	Volts	Std. / Est.	Max. / Máx.
1	240 V~	1	15
3	240 V~	3	60

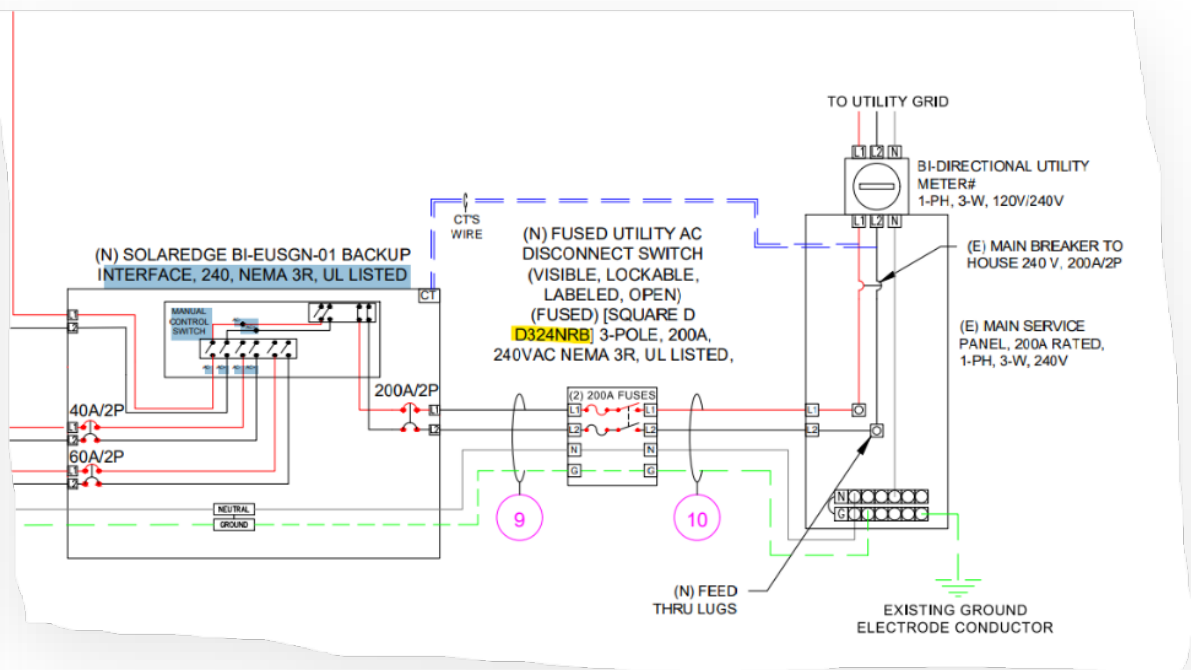
Box bonding when required / Conexión a tierra cuando fusible necesario

Lugs suitable for 75°C Al-Cu conductors.

- If main lugs are replaced or Versa-Crimp® lugs are installed, torque lug mounting screws to 100 in-lb.
- To open cover for examination when on, turn dotted screw on handle side clockwise.
- This switch is suitable for use on a circuit capable of delivering not more than (A) 10,000 RMS symmetrical A, 240 V~ maximum when protected by a circuit breaker, Class H or K fuses or 200 A maximum or (B) 100,000 RMS symmetrical A, 240 V~ maximum when protected by Class J, R or T fuses (rated 200 A maximum).
- Neutral not supplied. Voltage for 200A required use 41 no. 000A, for 200A and one neutral jumper kit no. SN200 is required.
- Suitable for use as service equipment.

Zapatas adecuadas para conductores de Al-Cu para 75°C.

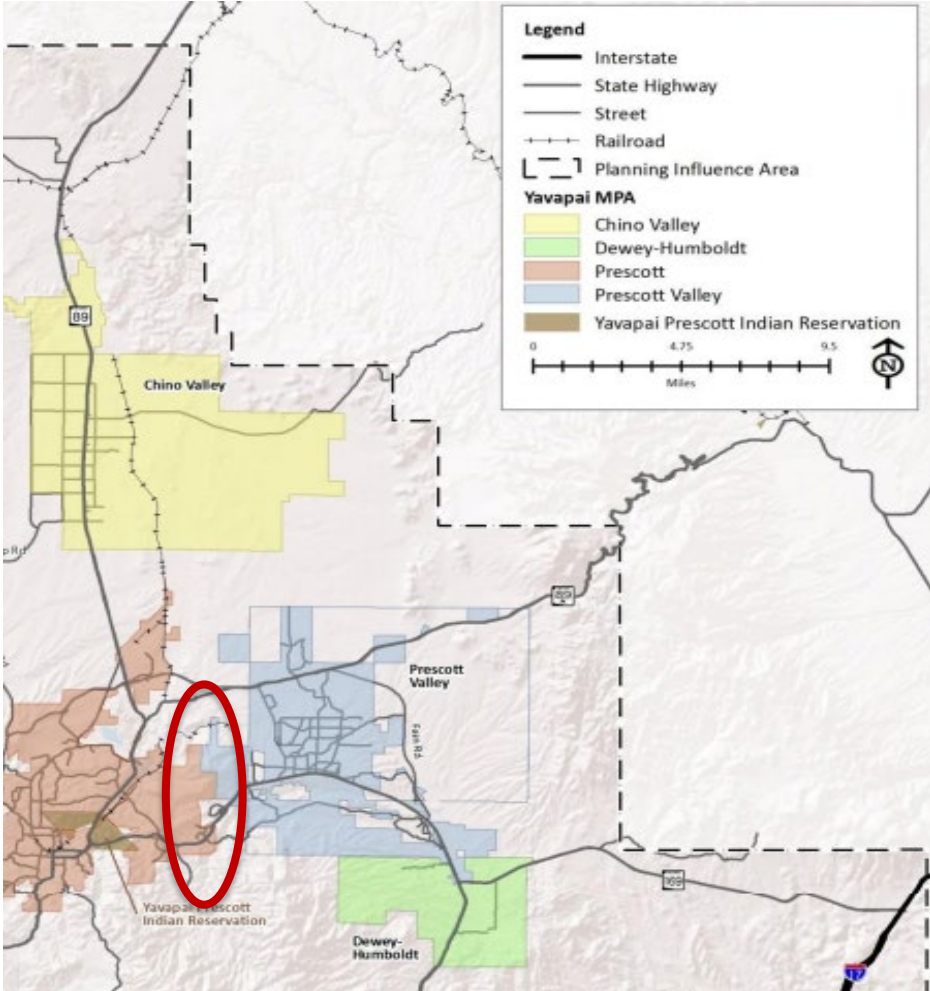
- Si se reemplazan las zapatas principales o se instalan zapatas Versa-Crimp®, asegure los tornillos de montaje de las zapatas de 1,30 Nm (100 in-lb).
- Para abrir la cubierta para una inspección cuando el equipo está en servicio, gire el tornillo ranurado en el lado de la palanca en sentido de las manecillas del reloj.
- Este desconector se puede usar en un circuito capaz de suministrar no más de (A) 10,000 A simétricos rms, 240 V~ como máximo cuando está protegido por un interruptor automático o por fusibles clase H o K de 200 A nominales como máximo, o (B) 100,000 A simétricos rms, 240 V~ como máximo cuando está protegido por fusibles clase J, R o T de 200 A nominales máximo.
- No incluye el neutro. Donde se requiere el neutro, utilice el accesorio no. SN200. Para requisitos de neutro del 200A, se necesitan los accesorios de neutro de 200A y un accesorio de puente para el neutro no. SN200.
- Adecuado para usarse como equipo de acometida.



Clearance or Letter-In-Lieu of Electrical Clearance

When a De-Rate or Line Side Tap is required to complete a solar installation, it is the responsibility of the installer to determine whether an inspection by the local Authority Having Jurisdiction (AHJ) or a completed Letter-in-Lieu from the onsite installer is needed. APS will not reinstall the meter or restore power until the appropriate verification has been provided.

Installers should contact the local municipality or county permitting agency to confirm whether an onsite inspection is available or if a Letter-in-Lieu will be required.



The Letter-in-Lieu form is available online under Common Documents and Resources, at aps.com/dg.

LETTER IN-LIEU OF ELECTRICAL CLEARANCE

Customer Name: _____

Project Name (if applicable): _____

Service Address: _____ City/Town/County: _____

IMPORTANT NOTICE

Under applicable rules of the Arizona Corporation Commission, it is the customer's responsibility to ensure that all facilities on the customer's side of the point of delivery of electricity are maintained in safe operating condition. A.A.C. Rule R14-2-208 (B)(1). This responsibility includes ensuring that the customer's electrical facilities comply with all local construction codes and safety standards. Customer should coordinate this responsibility with their architectural and engineering consultants, construction contractors, or subcontractors, as appropriate, before their electrical systems are energized. Failure to do so may result in injury or damage resulting from unsafe conditions. APS is not responsible for unsafe or noncompliant conditions on the customer's side of the point of delivery.

Customer's Certification Of Readiness

The undersigned customer or authorized representative does hereby certify to Arizona Public Service Company and agree that customer:

- Has read the foregoing notice and fully understands the customer's obligations under the rules of the Arizona Corporation Commission for operating safely;
- Has conferred with the architect, engineering consultant, general contractor, or subcontractor(s), as applicable and appropriate, responsible for the design and construction of the facilities, to verify that the electrical systems on the customer's side of the point of delivery have been constructed to the best of customer's knowledge in compliance with local construction and safety standards (including, for example, the National Electrical Code);
- Has determined and confirmed to the best of customer's knowledge that the electrical systems do in fact comply with these local construction and safety standards;
- Understands and agrees that in reliance on these representations, APS has agreed to energize electrical service to the customer's service entrance section at such facilities;
- Assumes full responsibility for any and all damages and injuries that may occur to the customer's property, employees or members of the public or other parties as a result of conditions on the customer's side of the point of delivery at the service address noted above, unless caused by the acts or omissions of APS or its employees and agents; and
- Hereby releases APS from any and all damages, or injuries that may occur as a result of the electric service supplied by APS, provided that said damages or injuries are not caused by APS' negligence or willful misconduct, and that APS' service meets the applicable requirements of the National Electrical Safety Code (NESC) and the standards of the Arizona Corporation Commission.

Customer or Authorized Representative Name: _____

Signature of Customer or Authorized Representative: _____

Business Name: _____

Business Address: _____

Telephone Number: _____ Date: _____

Notarized By: _____

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MSA (Meter Socket Adaptors) Function and Scheduling

ConnectDER Meter Collars are utilized in our service territory for eliminating the need for an MPU / Main breaker De-Rate and requires a Neutral bond connection

TESLA/ENPHASE MSA is utilized to provide real time information to the TESLA/ENPHASE solar system and solar customer of system operation

When an MSA / Meter collar is required, there are two options for scheduling:

1. **Device left on site** - we complete the install between 3-5 business days once we process the request.
2. **Appointment** - APS will schedule an appointment (subject to availability) between 7-10 days to complete the installation. Please provide a contact number for our service man to verify solar tech or MSA / Meter Collar is or will be onsite for install.



Workspace Encroachment

ESRM 301.7

301.7 WORKING SPACE (600 VOLTS OR LESS)

NOTES:

1. TO PERMIT ACCESS TO THE METERING INSTALLATIONS AND PROVIDE SAFETY FOR PERSONNEL, A WORKING AND STANDING SPACE ENTIRELY ON THE PROPERTY OF THE CUSTOMER SHALL BE PROVIDED IN FRONT OF ALL METERING EQUIPMENT.
2. WORKSPACE SHALL BE CLEAR OF OBSTRUCTIONS, INCLUDING A/C UNITS AND PIPING SYSTEMS AND SHALL HAVE A SLOPE TO PROVIDE DRAINAGE AWAY FROM THE METERING EQUIPMENT. MAXIMUM SLOPE ALLOWED IS 1 INCH IN 3 FEET. THERE SHALL BE 10" MINIMUM HORIZONTAL AND 9" MINIMUM VERTICAL CLEARANCES FROM THE CENTER OF THE METER SOCKET TO ANY OBSTRUCTION. WHEN THE PANEL WIDTH IS LESS THAN 36", THE CLEAR WORKING SPACE SHALL BE 18" MINIMUM HORIZONTALLY FROM THE CENTER OF PANEL. IN ALL CASES THE HORIZONTAL CLEARANCE SHALL BE THE GREATER OF EITHER THE 10" MINIMUM FROM THE CENTER OF THE METER SOCKET TO ANY OBSTRUCTION OR 18" MINIMUM FROM CENTER OF PANEL CLEARANCE.

Our workspace that is required per the ESRM/IRM is defined in ESRM 301.7

We require 36"x36"x78" for the proper workspace in front of APS required equipment nothing can be encroaching our workspace to allow the safe operation and maintenance of all APS required equipment.

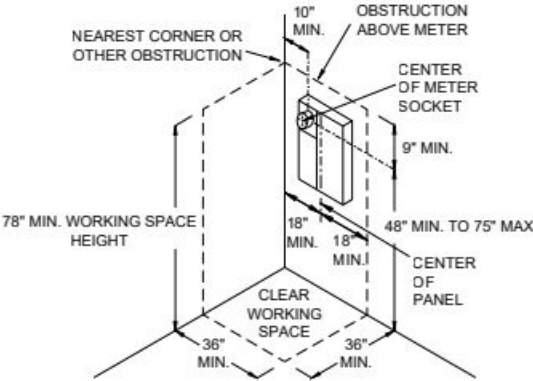


FIGURE 1
SURFACE OR SEMI-FLUSH
METER INSTALLATIONS

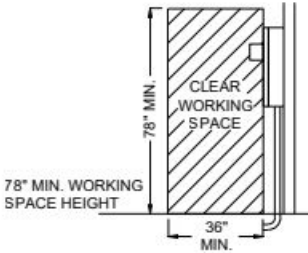
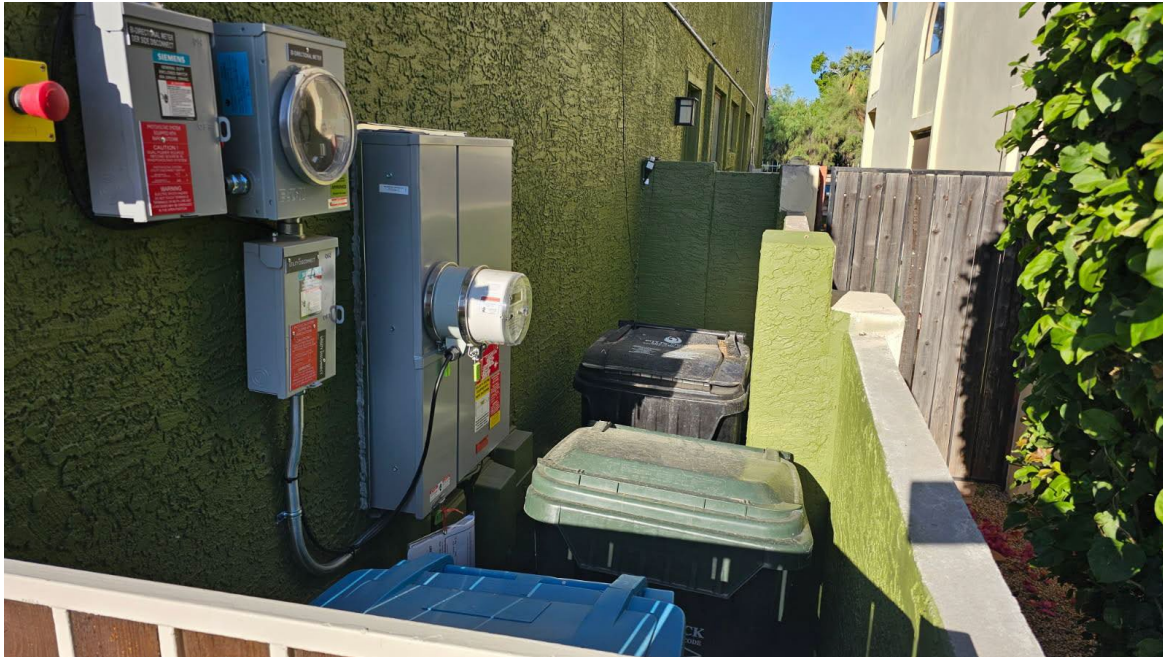


FIGURE 2
WORKING SPACE - SIDE VIEW

Workspace Cont.

Examples of workspace encroachment and access issues where there is not enough workspace to work on our equipment properly and safely.



Required Labels

Proper labeling is imperative for safe and proper maintenance / operation of APS equipment. APS has standardized our residential required solar equipment.

IRM 8.6 A,B,C,D,E
ESRM 302.1

All APS required equipment shall be labeled per the APS approved three-line drawings submitted with the solar application. (see ESRM 302.1) Any revisions shall note correct labeling indicating identification and function of equipment.

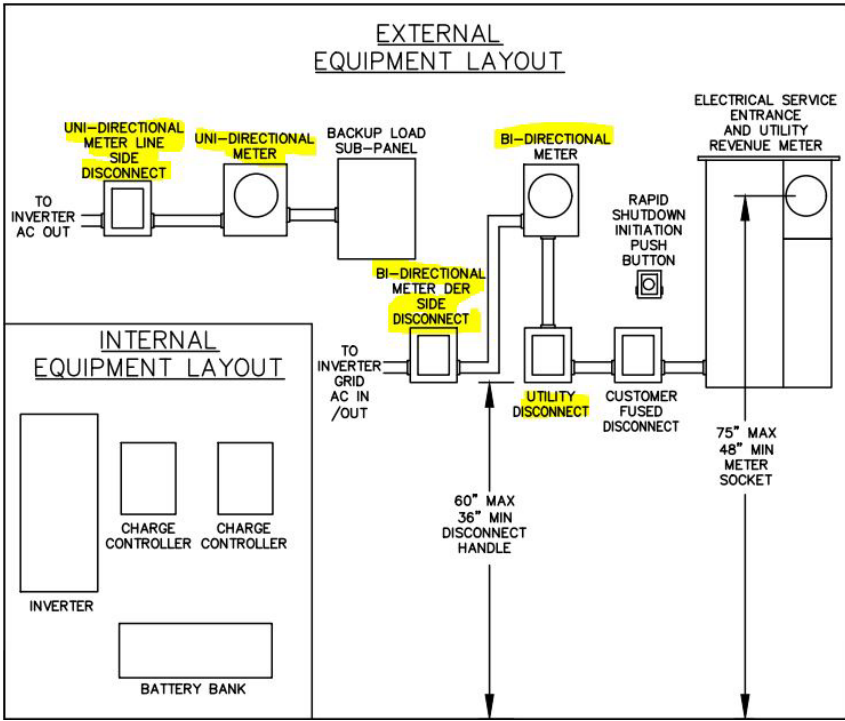
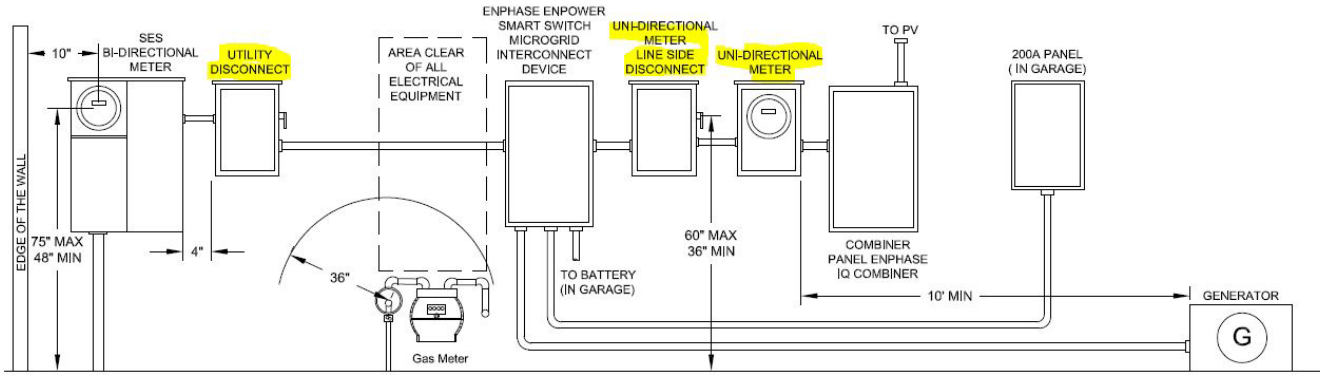
This standardized labeling allows APS and Installers to know direction of all potential sources for isolation while performing inspection and maintenance of equipment.

UTILITY DISCONNECT		PV SOLAR BREAKER DO NOT RELOCATE THIS OVERCURRENT DEVICE
UNI-DIRECTIONAL METER LINE SIDE DISCONNECT	BI-DIRECTIONAL METER LINE SIDE DISCONNECT	
UNI-DIRECTIONAL METER	BI-DIRECTIONAL METER	
UNI-DIRECTIONAL METER DER SIDE DISCONNECT	BI-DIRECTIONAL METER DER SIDE DISCONNECT	

Required Labels Cont.

Examples can be found on the <https://www.aps.com/dg#Interconnection> website under Residential sample design requirements

GENERAL NOTES:
 NOTE: UTILITY HAS 24-HR UNRESTRICTED ACCESS TO ALL PHOTOVOLTAIC SYSTEM COMPONENTS LOCATED AND SERVICE ENTRANCE.
 NOTE: WORKSPACE IN FRONT OF AC ELECTRICAL SYSTEM COMPONENTS SHALL BE IN ACCORDANCE WITH APS AND NEC REQUIREMENTS. FOR WORKSPACE AND ELEVATION OF PV SYSTEM UTILITY DISCONNECT, APS PRODUCTION METERS WITH ASSOCIATED DISCONNECTS, REFER TO SECTION 300 OF THE APS ESRM.
 NOTE: REFERENCE SECTION 301.15 OF THE APS ESRM FOR ELECTRIC METER SEPARATION BETWEEN WATER, GAS METER AND FUEL SOURCES.



Required Labels Cont.

Labeling accuracy is imperative to APS, installers, customers and emergency personnel.

Equipment all looks the same



Only label what pertains to the equipment



Required Labels Cont.

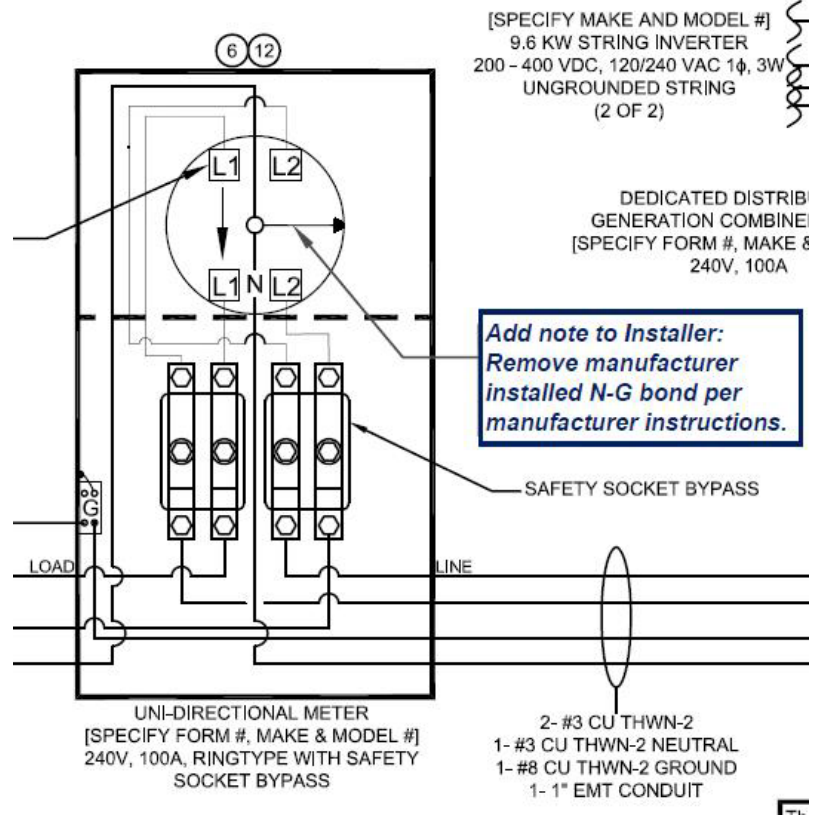
The label should only indicate what that piece of equipment is and should not have multiple tags saying the same thing.

Labels must be installed using two rivets.



NG Bond Removal Note

NOTE: Remove manufacturer installed N-G bond per manufacturer instructions.



As a reminder, any service rated Energy Management Devices shall also have the same note.