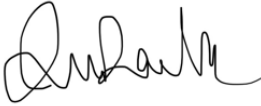
	SMARTPOLE METER FOR SERVICE TO POLE-MOUNTED COMMUNICATION EQUIPMENT	094675
Asset Type: Electric Metering		Function: Design, Estimating, and Field Metering
Issued by: Quoc Hoang (QxH1)		Date: 3/25/2022
Rev. #00: This new document replaces bulletin TD-027911-B002, Rev. #07. For a description of the changes, see Page 11.		

Purpose and Scope

This document describes a PG&E meter, called a SmartPole meter, approved for use with services connected to communication equipment mounted on steel and wood poles. The SmartPole meter and its enclosure is the preferred method for metering loads less than 68 amps. This document also provides ordering information for the multiple types of SmartPole meters and enclosures as well as construction details to properly install a SmartPole meter.

References

References	Location	Document
Installation Details for Service to Pole-Mounted Communication Equipment	OH:Services/EMWP:TD-6250M	027911
SmartPole Meter for Service to Pole-Mounted Communication Equipment		094675
PG&E Electric Service and Meter to Antenna and Communication Equipment on PG&E Owned Steel Streetlight Poles		094677
PG&E Electric Service and Metering to Antenna and Communication Equipment on Non-PG&E Owned Steel Streetlight Poles		094678
PG&E Electric Service and Metering to Antenna and Communication Equipment on Non-PG&E Telecommunication Owned Poles		094679

General Requirements

1. Use Engineering Document 027911 and corresponding reference documents for installation and clearance requirements for service to communication and antenna equipment. This document provides modified and additional installation requirements for installing service to a SmartPole meter.
2. Install a 2-wire (1-hot, 1-neutral) 1-phase 120 volt service to the SmartPole meter.
 - A. The customer load must not exceed 16 amps for non-transformer rated SmartPole meters.
 - B. The customer load must not exceed 68 amps for transformer rated SmartPole meters.

Note: For locations where an existing 2-wire 1-phase 240 volt secondary system is available the SmartPole meter may be connected. These locations are not common.

3. A 3-wire 1-phase 120/240 volt service is allowed with a SmartPole meter if the communication equipment requires 3-wire.
4. Installation of a NEMA 3R enclosure unit with pole bracket is required. The enclosure with receptacle, pole bracket, and meter strap come together as one unit manufactured by Tesco Advent. See Table 1 and Figure 2, 3, 4, and 7 for enclosure unit options. There is also a combination enclosure that includes a disconnect switch and receptacle for the SmartPole meter as well as a transformer rated enclosure unit.
5. Install the SmartPole Meter enclosure unit (Figure 2 or Figure 3 & 4) on the pole at a minimum of 7 feet to a maximum of 8 feet above grade, as measured from the bottom of the enclosure, and not exposed to vehicular traffic.
6. The disconnect switch for customer equipment load (e.g., Communication Equipment and Backup Power Supply) is required and must be installed above, below, or on the side position of the SmartPole meter equipment. 12 inches of vertical clearance is required when placed above the SmartPole meter. Six inches of horizontal

SmartPole Meter for Service to Pole–Mounted Communication Equipment






clearance is required when placed on the side or below SmartPole meter equipment. The clearance distance is measured from the closest edges of any part of the equipment.

7. The installation of all customer equipment and PG&E's Smart Pole metering equipment must meet all PG&E requirements and CPUC General Order 95 rules.
8. Inspection and approval by a qualified PG&E inspector are required.
9. PG&E Meters must not be installed on poles that are in traffic medians or traffic islands where vehicle thoroughfares are on more than one side of the pole. A different pole must be selected for the meter, service, antenna, and communication equipment. Also meters must not be installed in any unapproved areas described in [Section 5.3.2](#), "[Prohibited Meter and Service Equipment Locations](#)", in the PG&E Electric & Gas Service Requirements Manual.
10. Do not install the SmartPole Meter in the shroud at the top of the pole for new or upgraded installations. The meter and enclosure must be installed as described in Note 5.

SmartPole Meter for Service to Pole–Mounted Communication Equipment

OH: Meters
UG: Services
Greenbook

Table 1 Bill of Material to Be Furnished and Installed by the Communication Company

Item	Description	Code	Image
1	Conduit, Rigid, PVC, Schedule 80, size as required	–	–
3	Conduit Fittings, as required	–	–
4	Wire, 600 V, Size as Required	–	–
12 ¹	Catalog # 701–120, Enclosure Unit, NEMA 3R, 3–pin receptacle, ground/bond lug, meter strap, pole bracket, 2– wire 1–phase 120 V	M241572	
	Catalog # 702–120, Disconnect Enclosure Unit, NEMA 3R, 3–pin receptacle, ground/bond lug, meter strap, 2–wire 1–phase 120 V	M241698	
	Catalog # 702–240, Disconnect Enclosure Unit, NEMA 3R, 3–pin receptacle, ground/bond lug, meter strap, 2–wire 1–phase 240 V	M241677	
	Catalog # 703–120, Transformer Rated Disconnect, Enclosure Unit, NEMA 3R, 4–pin receptacle, ground/bond, lug and meter strap, 2–wire 1–phase 120 V	M241697	
	Catalog # 703–240, Transformer Rated Disconnect Enclosure Unit, NEMA 3R, 4–pin receptacle, ground/bond lug and meter strap, 2–wire 1–phase 240 V.	M241692	
13	Disconnect Switch, for customer equipment (e.g. Communication Equipment and Backup Power Supply), as required	–	–

¹ Product is manufactured by Tesco Advent. Order using the PG&E material code. For questions contact John Greenewald at (609) 864–3358, john.greenewald@tescometering.com.

SmartPole Meter for Service to Pole-Mounted Communication Equipment

Table 2 Bill of Material to Be Furnished and Installed by PG&E

Item	Description	Code
11	SmartPole Meter, Non-transformer Rated, Watthour, 3-pin SmartMeter, 2-wire 1-phase 120 V or 2-wire 1-phase 240 V	M241490
	SmartPole Meter, Transformer Rated, Watthour, 4-pin SmartMeter, 2-wire 1-phase 120 V	M241508
	SmartPole Meter, Transformer Rated, Watthour, 4-pin SmartMeter, 2-wire 1-phase 240 V	M241492

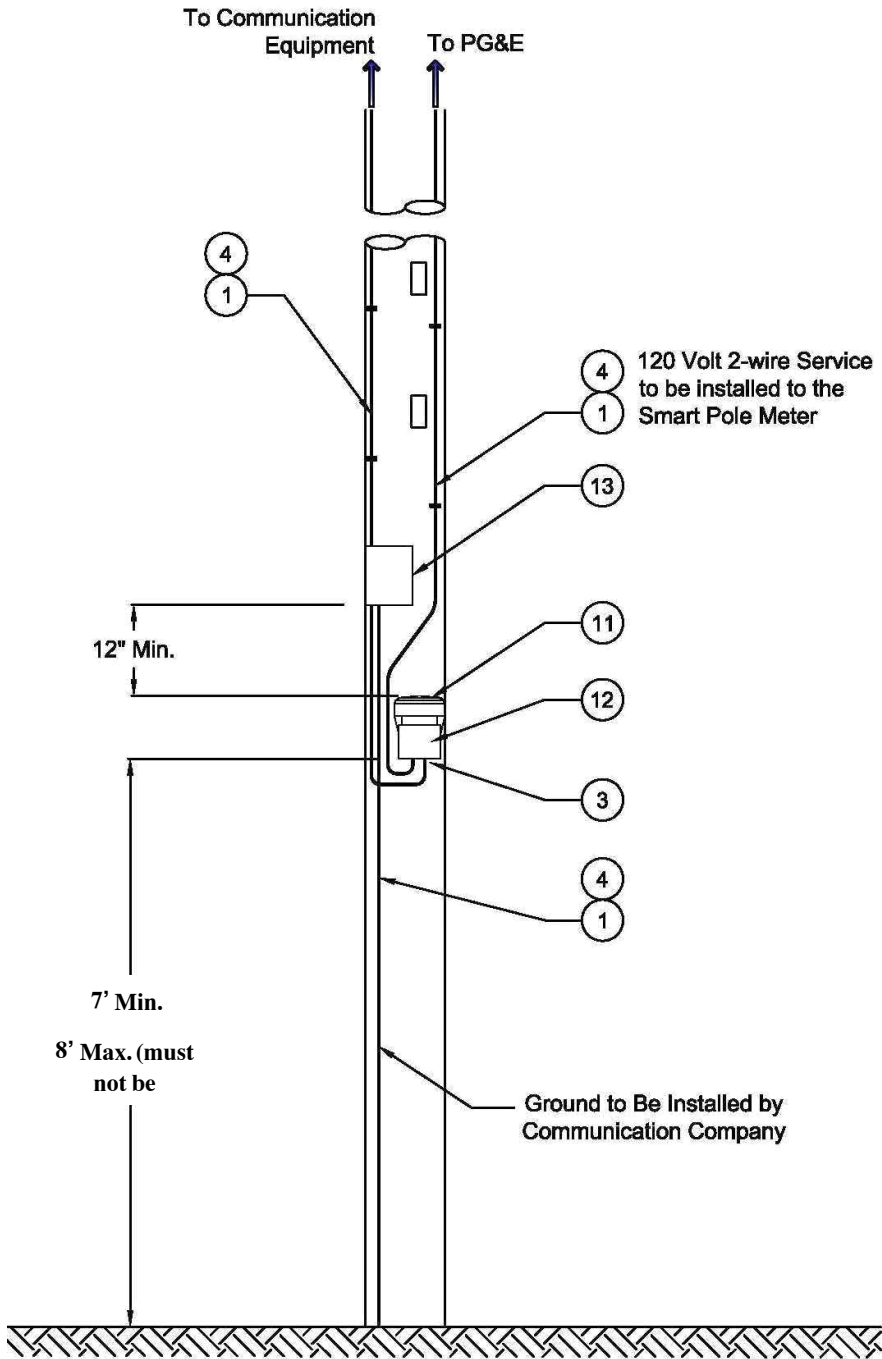
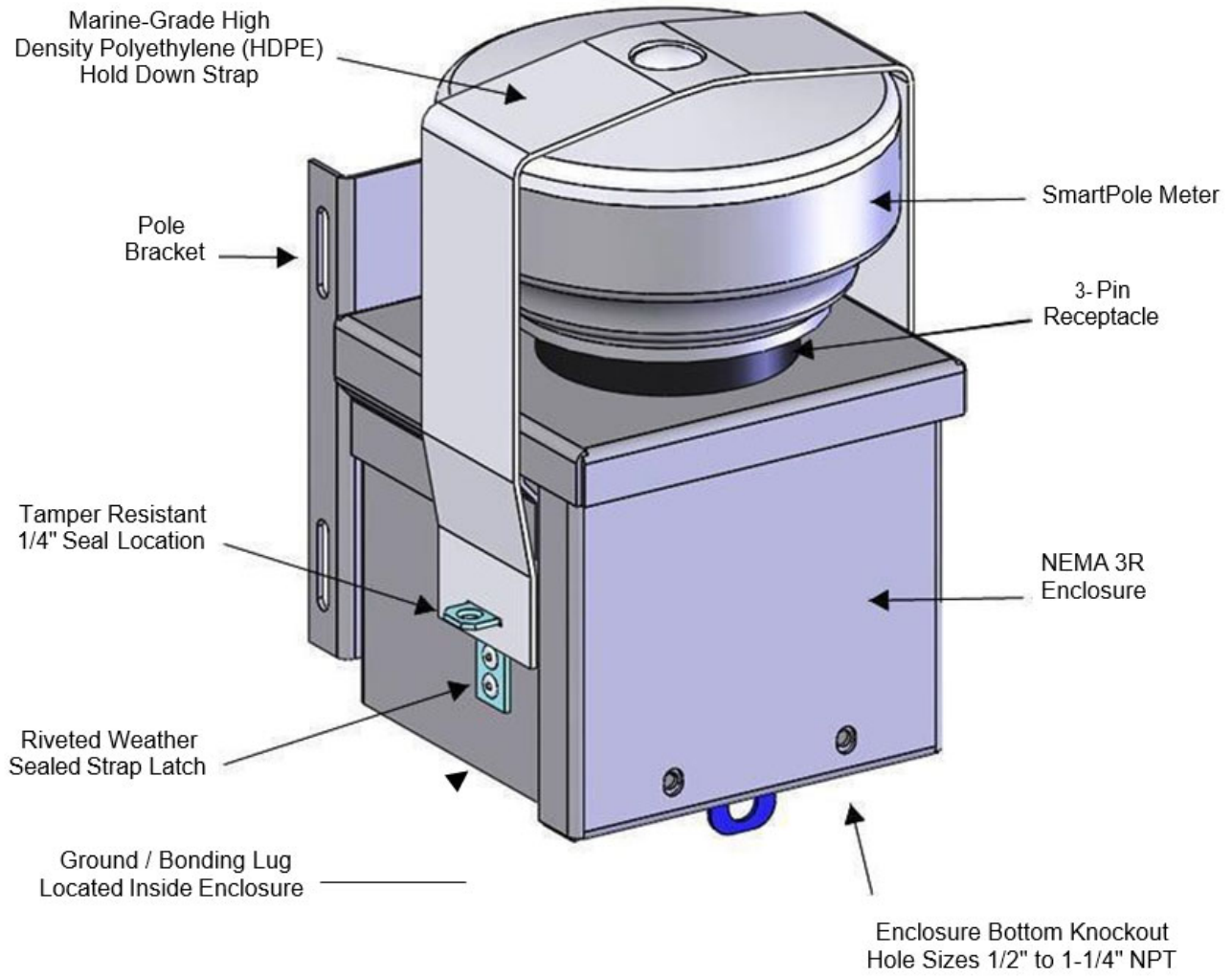


Figure 1
SmartPole Meter on Wood Pole with 120 Volt 2-Wire
Service Connection to Communication Equipment

**SmartPole Meter for Service to Pole-Mounted
Communication Equipment**



**Figure 2
SmartPole Meter, Enclosure, and Pole Bracket**

SmartPole Meter for Service to Pole-Mounted Communication Equipment

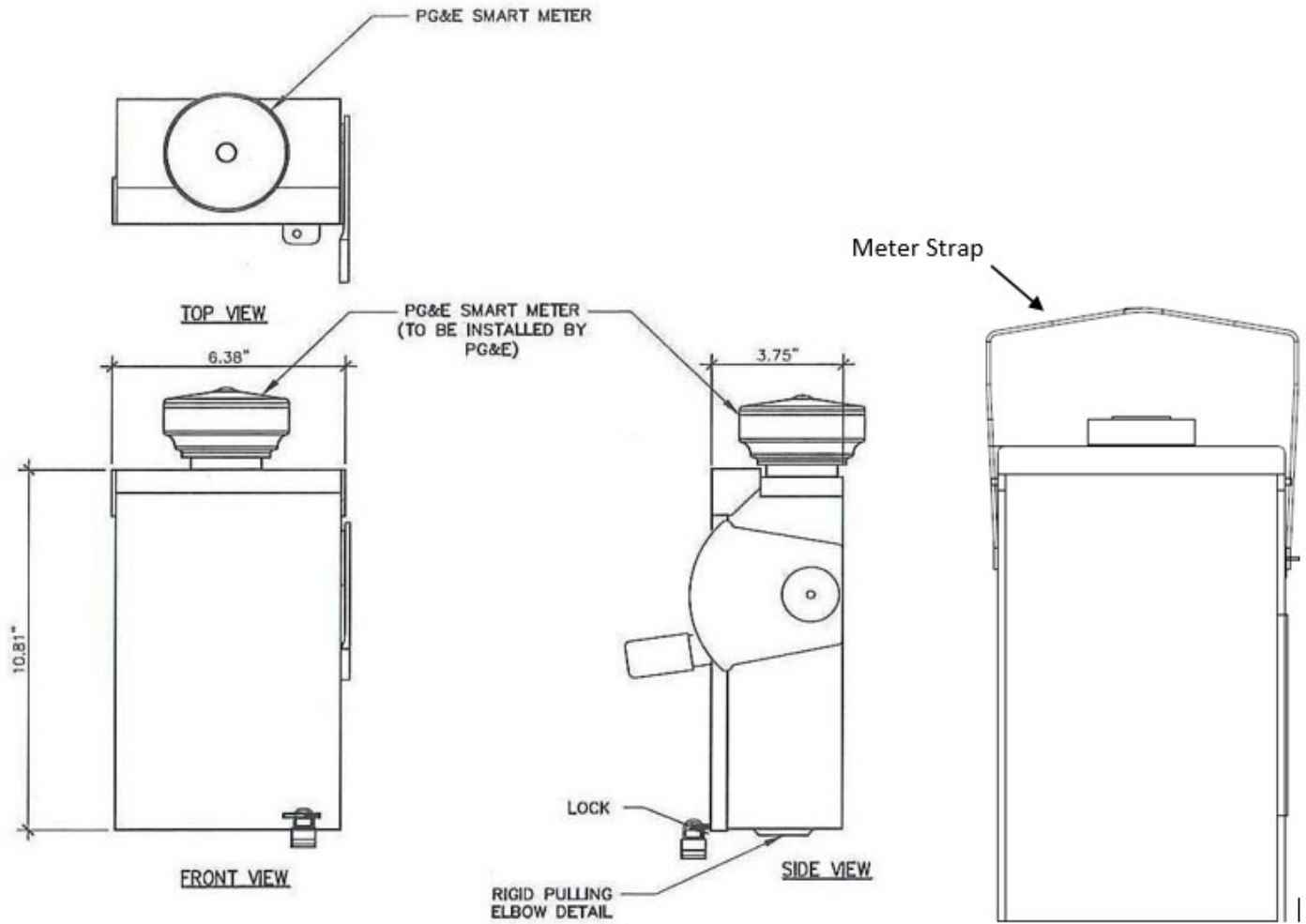
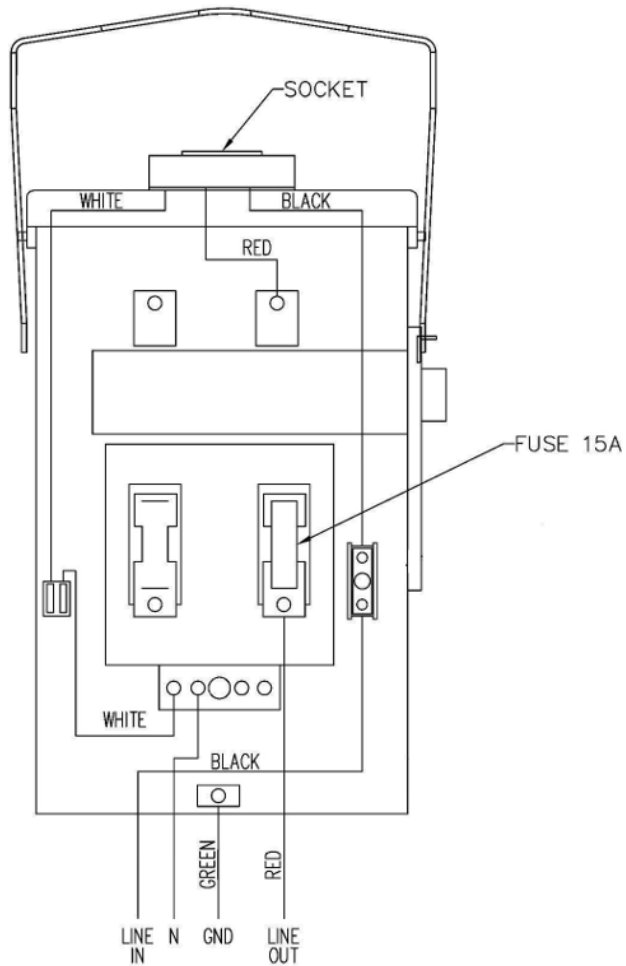


Figure 3
Meter and Disconnect Switch Combination Enclosure

**SmartPole Meter for Service to Pole–Mounted
Communication Equipment**

**OH: Meters
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**Figure 4
Wiring for Meter and Disconnect Switch Combination
Enclosure**

3-Pin Receptacle

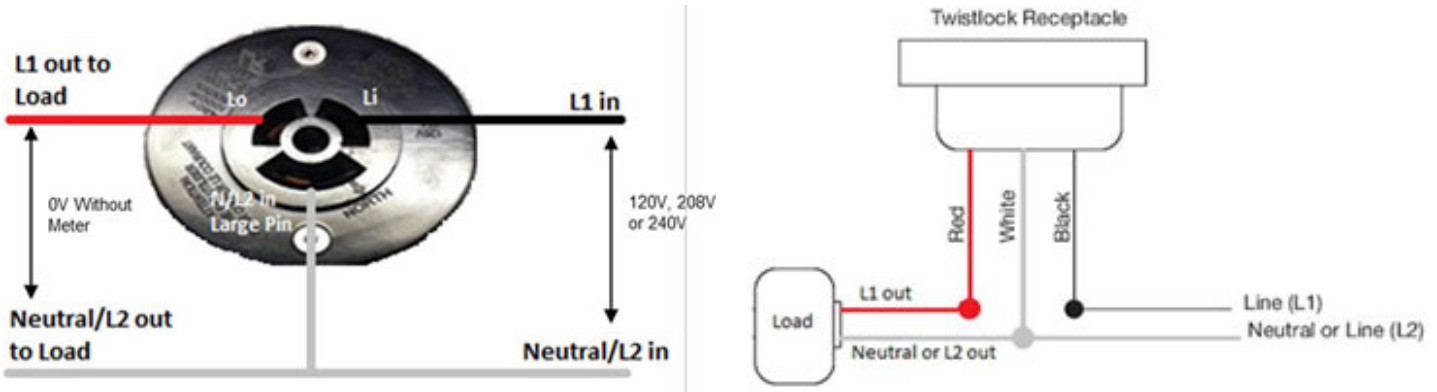


Figure 5
Wiring Diagram For 3-Pin Receptacle



Figure 6
Example Receptacle



Figure 7
Transformer Rated SmartPole Meter, Current
Transformer and Enclosure

SmartPole Meter for Service to Pole-Mounted Communication Equipment

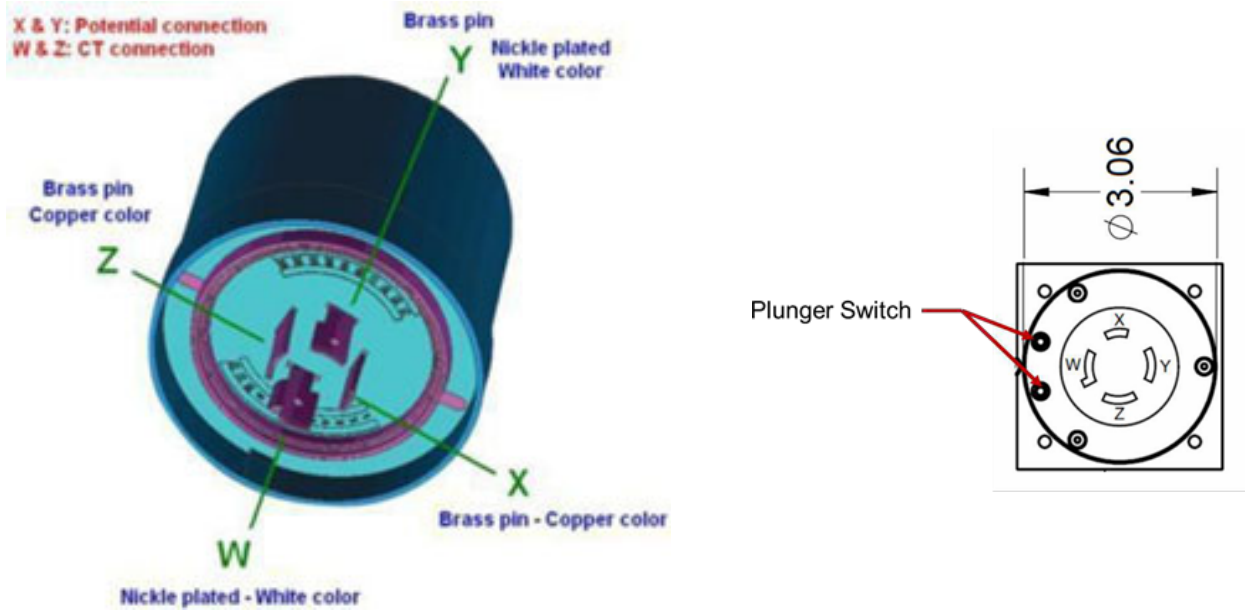


Figure 8
Transformer Rated SmartPole Meter And 4-pin Socket

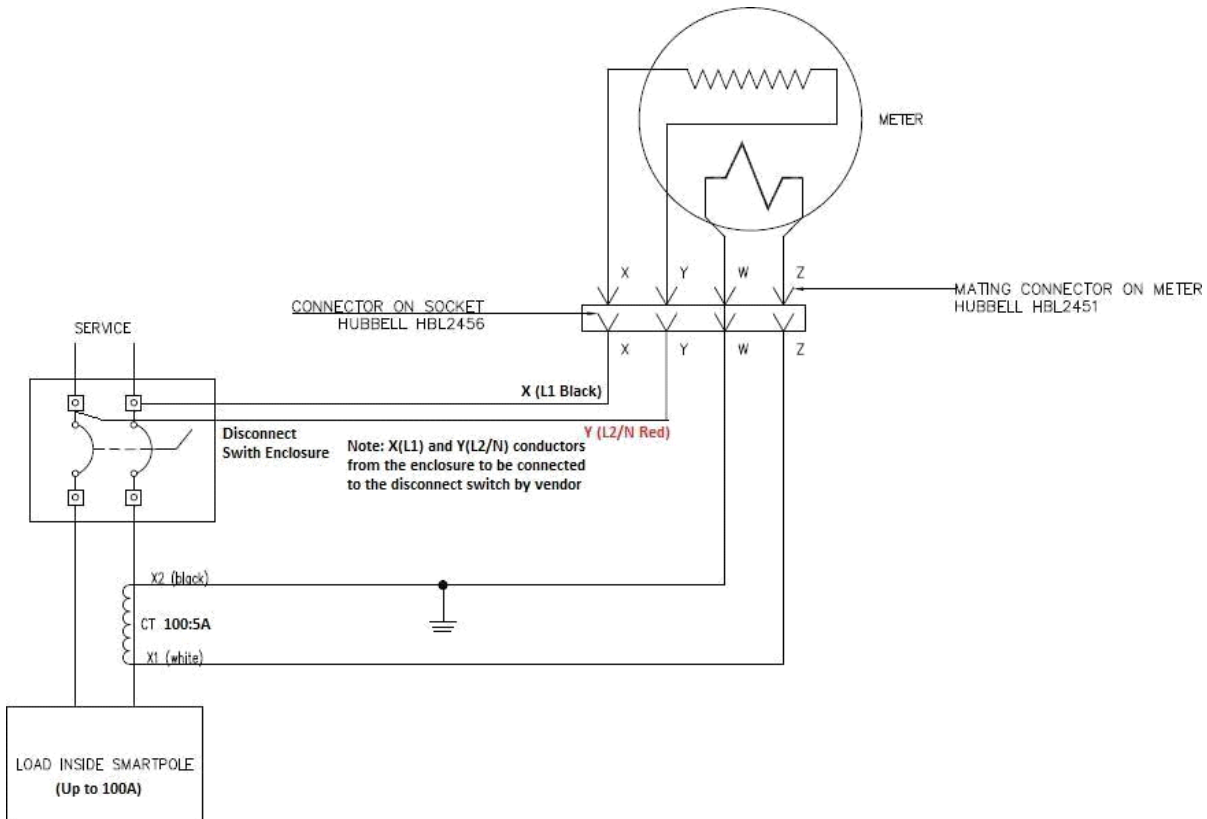


Figure 9
Wiring Diagram Transformer Rated SmartPole

SmartPole Meter for Service to Pole-Mounted Communication Equipment

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Revision Notes

Revision 00 has the following changes:

1. Converted Bulletin TD-027911-B002 to this new numbered engineering document.