# American Electric Power Customer Owned Meter Main/Combinations Specifications

Customer-owned meter sockets used in AEP's service territories shall meet the requirements listed below and shall be produced by one of the approved Manufacturers on the approved Manufacturers List at the end of this document. It shall be the Customer's responsibility to maintain Customer-provided/own meter enclosures.

#### **Enclosure Construction**

- Steel enclosures shall be a *minimum* of G-90 galvanized steel.
- All edges shall be smooth after forming. Enclosure shall be painted after fabrication. Finish coat shall be a minimum of 2 mils thickness and provide a tough, non-chalking weather resistant finish.
- Construction shall be in accordance with ANSI/UL50.
- Outdoor enclosures shall be rated Type 3R. Mounting bosses shall provide 0.125-inch minimum air space between back of the socket and the mounting surface.
- Meter socket sealing shall be provided by *minimum* 304 stainless steel latch and rivet with provision for 3/8-inch padlock and/or ribbon seal.

#### **Protection**

- Enclosure shall:
  - o Be designed to protect personnel against accidental contact with the electrical devices.
  - o Guard against unauthorized use of electric service, and
  - o Not be openable without either breaking the seal or visibly damaging the enclosure.

### Meter main/combinations Jaws

- Block assemblies shall be replaceable from the front.
- Current carrying socket jaws shall be reinforced and have meter blade guides.
- Socket jaws shall be tin\zinc plated, capable of carrying full rated (continuous) current and withstand the mechanical and heat rise requirements of ANSI/UL 414.

#### **Terminal Connectors**

- Terminal connectors shall be suitable for use with aluminum or copper conductors.
- Connectors shall be tin\zinc plated and capable of carrying full rated (continuous) current and withstand the mechanical and heat rise requirements of ANSI/UL 486B.

## Labeling/Listing

- All meter sockets shall be UL or ETL Listed and Labeled.
  - UL: Underwriters Laboratories Listed and Labeled or
  - ETL: Electrical Testing Laboratories Listed and Labeled.

### **Meter Sockets/Terminals**

- 125- and 200-amp 4-terminal meter main/combinations shall have provisions for a 5th terminal and bypass horns for utilities use for manual bypass using jumper cables.
- When a 5th terminal is required, it shall be installed in the (9 o'clock position) for residential services and (6 o'clock position) for Commercial services, and securely tied to the neutral. Reference the Meter & Service Guide for 5<sup>th</sup> terminal socket requirements.

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#### **Meter Site link:**

https://www.aepnationalcustomers.com/business/builders/

https://www.aepnationalcustomers.com/business/builders/new-home

https://www.aepnationalcustomers.com/business/builders/requirements

https://www.aepnationalcustomers.com/account/service/modify/business

https://www.aepnationalcustomers.com/account/service/modify/home

- All meter mains shall have a double lay-in for the neutral connection.
- 200-amp underground meter main/combinations shall have one set of concentric knockouts in bottom left for 3-inch conduit and be of the side wire/bused design for straight in wiring.
- The left side will be for the line side and the right load side.
- 200 amp 5- and 7- terminal and all 320-amp meter main/combinations shall have a good quality jaw release manual operated bypass which is rated for 100% of the meter socket current rating.
- 100–125-amp meter sockets are prohibited for use on underground service in AEP East.
- 100–125-amp meter sockets are prohibited for use in AEP West.
- Socket/breaker combinations or multi-gang polyphase sockets shall be approved by local supervision.
- All meter main and combinations shall be ringless style and shall be approved by local supervision and only to be used on residential sites.

#### **Corrosive Environments**

Corrosive areas are installations within 30 miles of the Texas Gulf of Mexico coast and any other area where high moisture or chemical exposure may exist such as chemical plants or water treatment plants.

- Enclosures in corrosive areas shall:
  - o Be of aluminum construction,
  - o Have bottom front lip to be continuous fold up with slot cut for stainless steel hasp,
  - o Have latch, rivet, hasp, and exposed hardware of minimum 316 series stainless steel, and
  - o Have a minimum of five welds on the back and three welds on the side, top, and bottom.

### **Additional Note:**

- ➤ AEP does not support the use of K-base meter base.
- AEP does not support the use of anti-inversion feature on 320-amp meter sockets.

AEP accepted and approved Meter sockets and Meter/Main combinations that meet the above requirements are only accepted from the following manufacturers.

## **Approved Manufacturers:**

Siemens/Talon

Leviton

Milbank

Midwest

Murray (Siemens)

Square D

**General Electric** 

Cutler Hammer (Eaton) Horn bypass kit required MBHBP kit.

**B-LINE** Horn bypass kit required EHB125: 125/150A EHB200:200/320