

## 10 Commercial, Industrial, Agricultural Services

This section describes the Power Company requirements for commercial, industrial, and agricultural services. This section covers single phase and three phase services for direct-connect and current transformer type metering. The Customer is responsible to coordinate service requirements with the Power Company before purchase of material and installation.

All commercial, industrial, or agricultural customers must coordinate their service requirements with the Power Company before purchase and installation of equipment.

Single phase and three phase services over 200 amps require current transformer (C.T.) metering. **For all services that require C.T. metering, the customer shall provide, install and own the secondary conductor and conduit ([see paragraph 6.1 in section 6.0 Underground Requirements for additional important information regarding transfer of ownership at the point of delivery](#)).** The customer shall terminate the secondary conductor on the line and load side of the C.T. The Power Company shall provide and own the C.T.'s, the customer shall install the C.T.'s. The Power Company shall terminate the secondary conductors in the transformer. Customer shall coordinate with the Power Company to schedule the termination of the secondary conductor in the transformer. Power Company shall wire, own and operate meter wiring from the C.T.'s to the meter. Power Company shall also install and own the meter.

Switchboard metering is required whenever a service exceeds 800 amps. Primary service refers to delivery at greater than 600 volts. The Power Company must be consulted before installation of primary service.

The Customer must not terminate the principal grounding conductor in the Power Company's sealed termination compartment.

### 10.1 Direct-connect (Self-contained) Metering

The Power Company requires a direct-connect socket-type meter when the ampacity of a single phase or three phase service is 200 amperes continuous or less.

Limit the continuous duty on self-contained meter sockets for motor loads to:

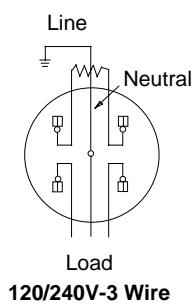
- 60 hp at 208Y/120-volt, three phase
- 60 hp at 240/120-volt, three phase delta
- 125 hp at 480Y/277-volt, three phase

Motor sizes above these horsepower values will be metered with current transformers (see section 10.6).

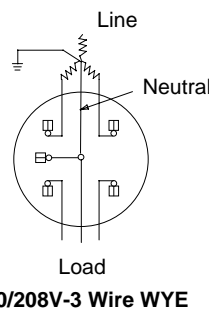
**Table 10-1 Direct-connect Meter Socket Requirements**

Type of Service	Socket Type
120/240 volt, single phase, 3 wire	4 jaw
120/208 volt, single phase (network), 3 wire	5 jaw
208/120 volt, three phase, 4 wire	7 jaw
480/277 volt, three phase, 4 wire	7 jaw
240/120 volt, three phase, 4 wire	7 jaw

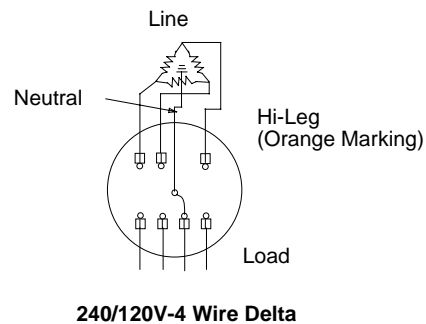
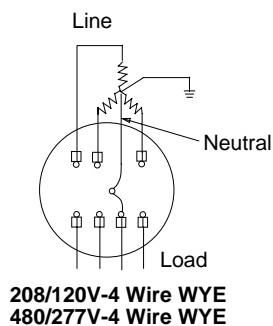
**Single phase**



5th Terminal in 9 o'clock position



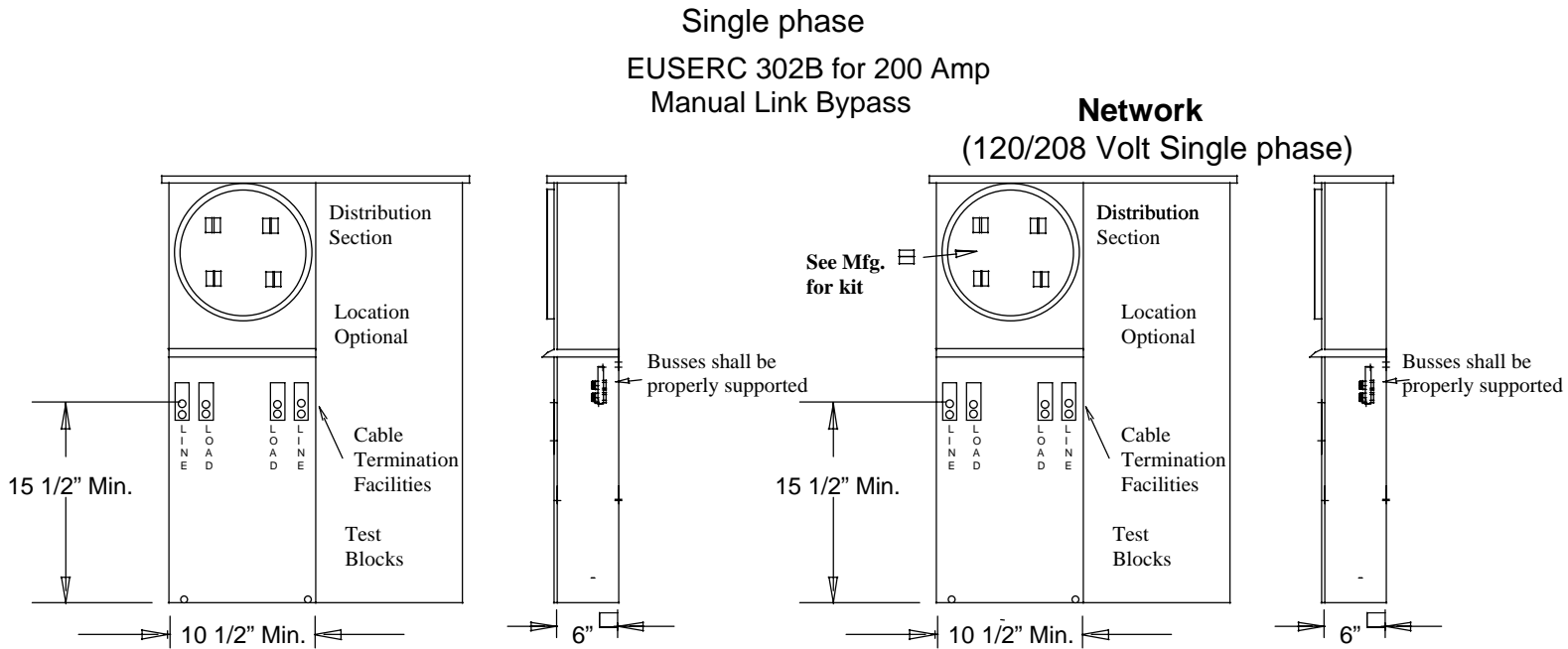
**Three phase**



**Notes:**

- a. For network meters, the 5<sup>th</sup> terminal must be at 9 o'clock position.
- b. For safety socket requirements refer to figure 10-1.

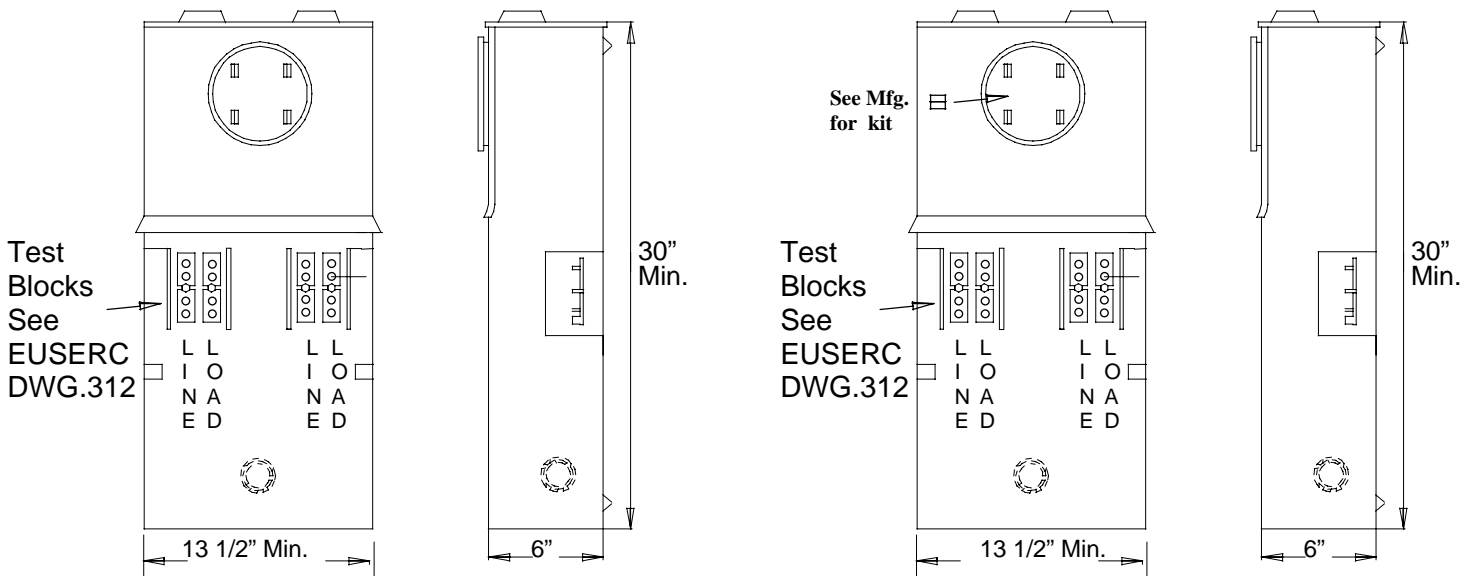
Figure 10-1 Commercial Single phase, Direct-connect Meter Sockets



-OR-

EUSERC 305 for 200 Amp  
Safety Socket

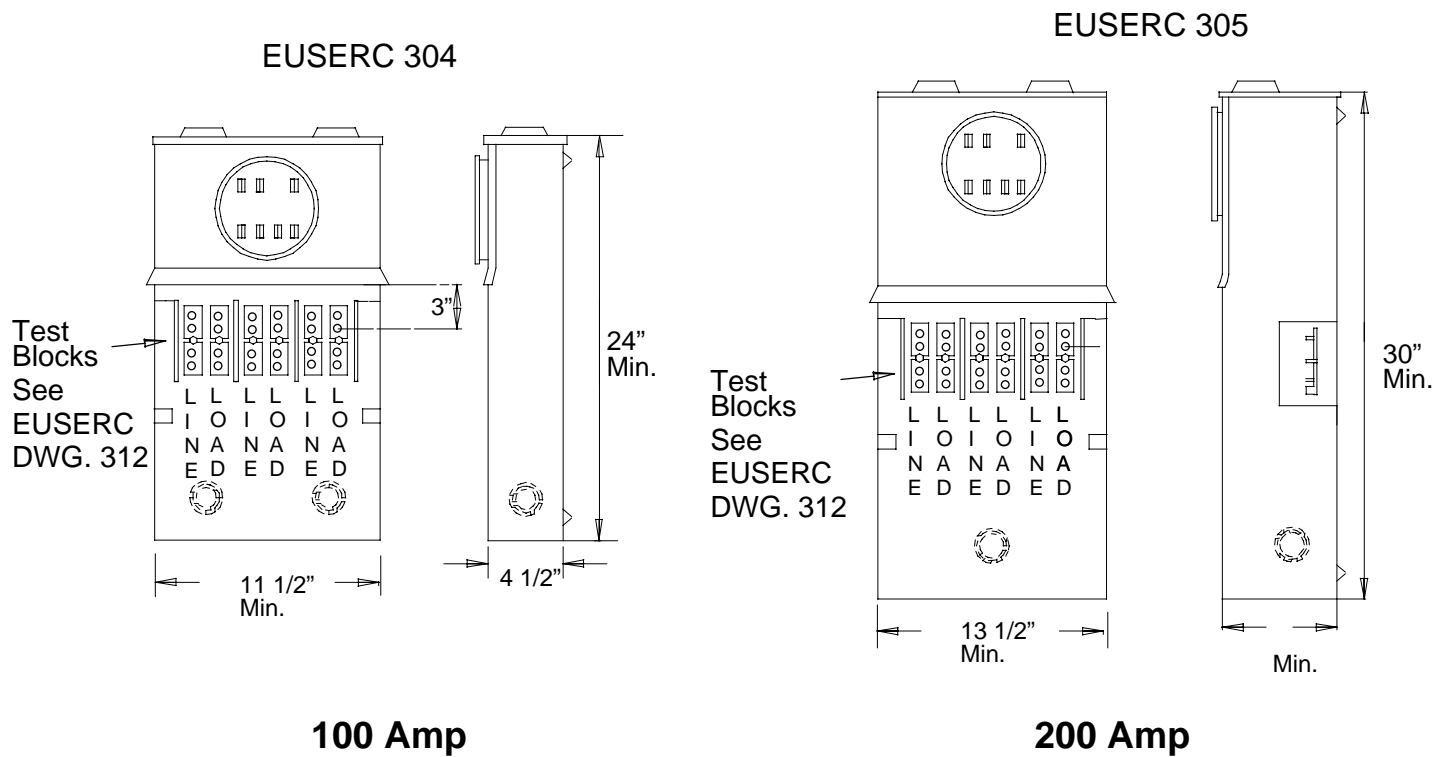
**Network**  
(120/208 Volt Single phase)



**Notes:**

- a. The EUSERC manual link bypass or safety socket is required for all 200 amp commercial services.
- b. Ringless panels are **NOT** acceptable.

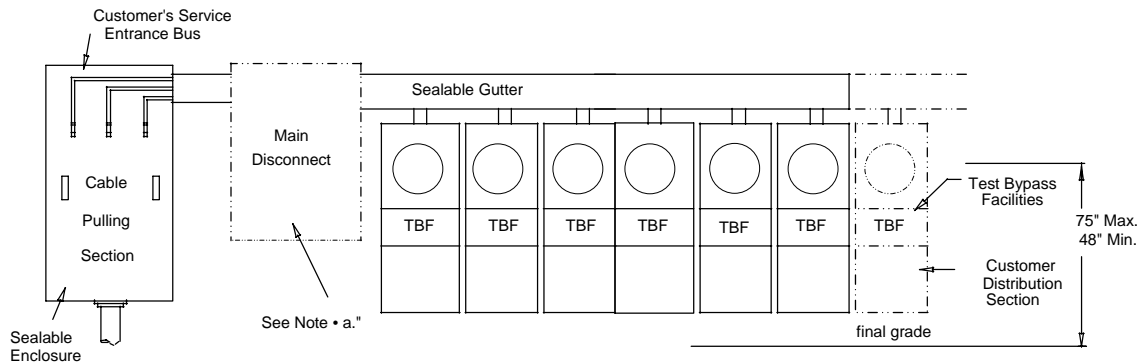
Figure 10-2 Three phase, Direct-connect Meter Sockets  
Three phase Safety Socket



**Notes:**

- a. The socket must be an approved EUSERC Safety Socket with test blocks which maintain service to the customer while the meter is removed for test or inspection.
- b. Three phase and single phase 320 amp services are not approved for commercial use.
- c. For 4 wire delta services, the high (power) leg conductor must be identified by orange marking. The test block must also be marked and readily identified.

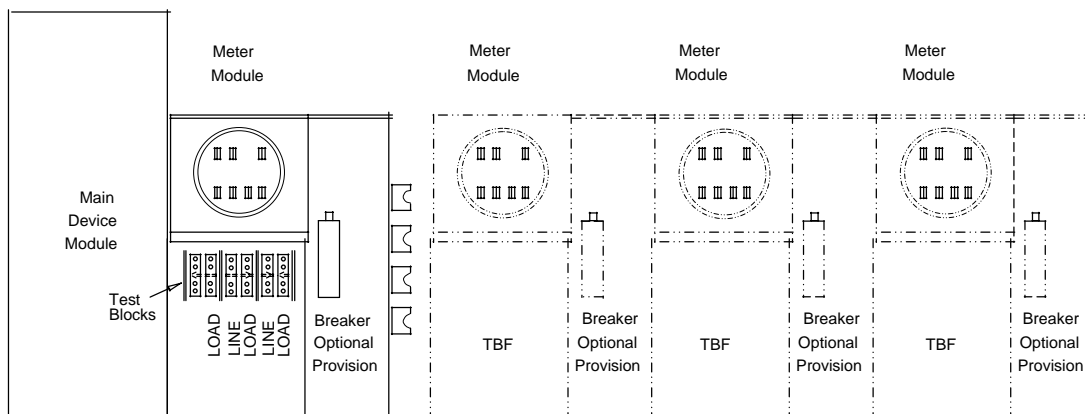
**Figure 10-3 Commercial Ganged Meter Socket Installation**



**Notes:**

- a. Cable pulling section must be sized for Power Company service termination EUSERC 343 and must have bus extension drilled for landing lugs. *NEC requires main disconnect when more than 6 services are connected. (When the sum of distribution section ampacities exceed the pulling section ampacities the customer will be responsible to provide NEC approved load calculations.)*
- b. Meters must be accessible during normal work hours for meter reading and testing.
- c. Each metered service must have a permanently engraved metal or hard plastic label to identify the Customer's address. Consult Power Company for specifications.

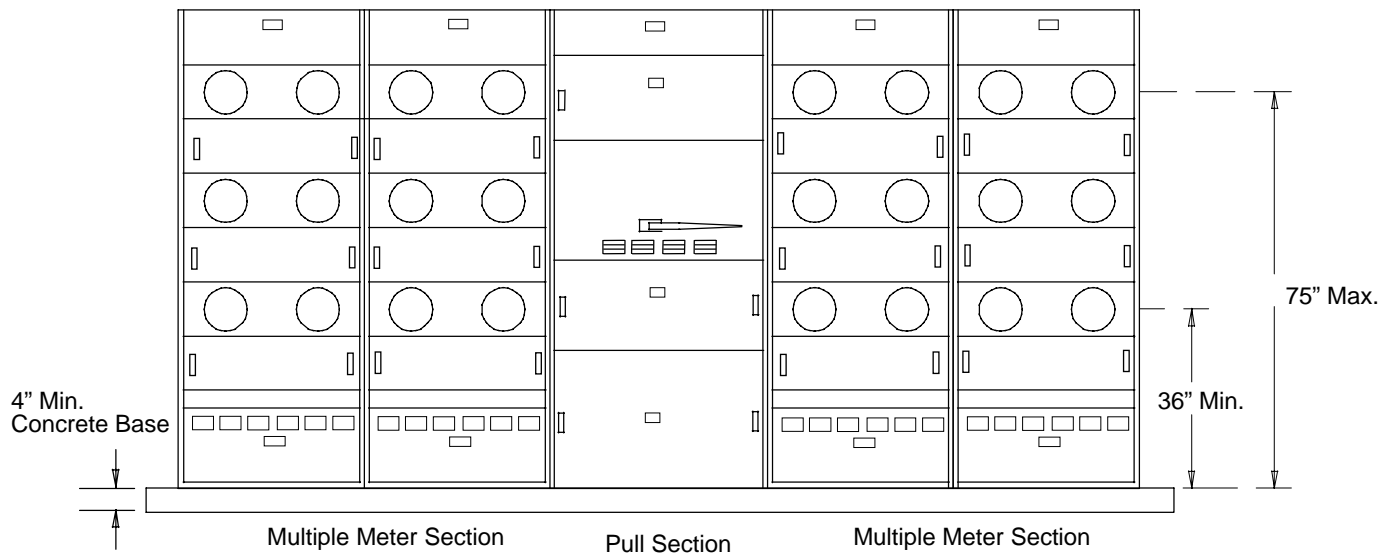
**Figure 10-4 Commercial Module Meter Socket Installation**



**Figure 10-5 Commercial Multiple Metering**

(Direct-connect, Floor Mounted)

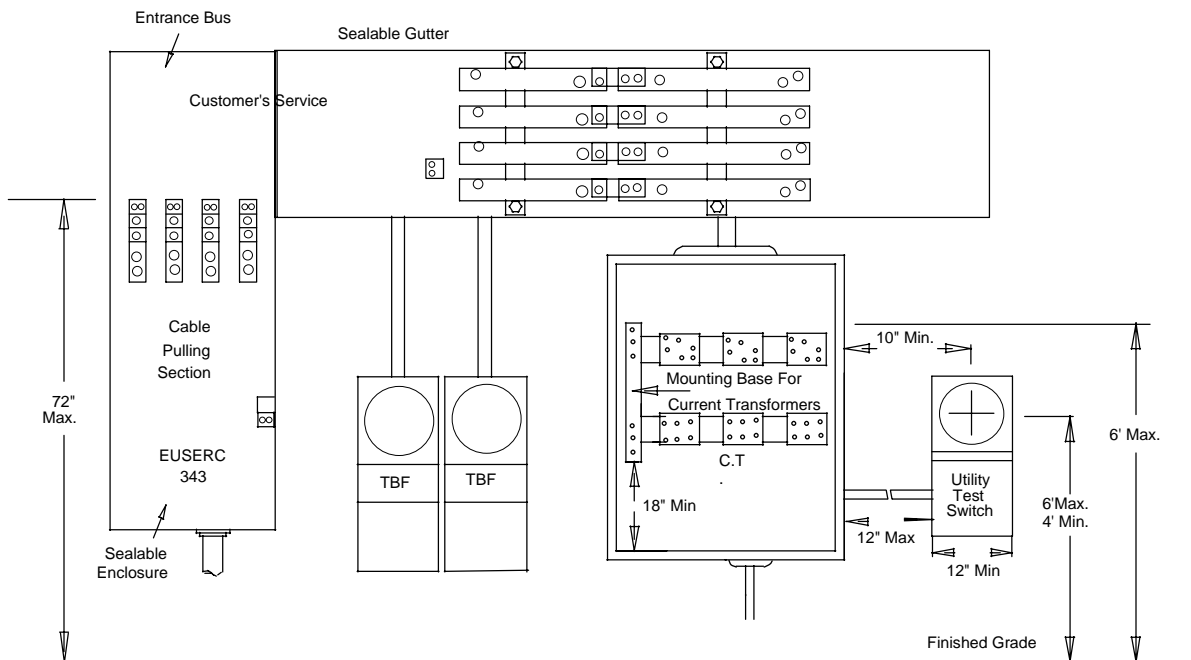
EUSERC 306



**Notes:**

- a. All removable panels and covers to compartments used for metering shall be sealable.
- b. Metering conductors shall not pass through adjacent metering compartments except in enclosed wireways.
- c. Test blocks with rigid insulating barriers shall be furnished, installed, and wired or bussed to the meter sockets. Test block cover panels shall be sealable and fitted with a lifting handle.
- d. Meter panels shall be removable but shall be non-removable when meter is in place.
- e. Each metered service must have a permanently engraved metal or hard plastic label to identify the Customer's address.
- f. For pull box details when used on underground services see Figure 10-7 or EUSERC 343.
- g. The Customer must provide an acceptable concrete pad for all switchboard metering service sections and pull boxes.
- h. Each metered service must have safety socket test bypass facilities.
- i. If free standing unit can be expanded beyond 6 sockets, (from load growth) then a main disconnect will be required in the initial installation.
- j. Vacant meter positions shall be factory sealed or the meter base shall be in position before the panel is activated.

**Figure 10-6 Combination Current Transformer Compartment**  
Direct-connect Wall Mount



**Notes:**

- a. Bonding jumpers shall be used around knockouts.
- b. Pull section must be rated at the sum of the service maximum ampacity.
- c. Bonding and grounding per NEC, Article 250.

### **10.1.1 Pull Box Requirements**

Locate and make accessible all compartments for termination of the Power Company's service laterals as close as possible to where the conductors enter the building. When connecting two or more sets of service equipment to a single-service lateral, the Customer must provide a sealable terminal box complete with terminating positions. The Customer must also provide an approved method in which to make multiple taps. Do not install Customer-owned devices (such as limiters, fuses, etc.) in terminal boxes. The Customer must supply any terminal blocks.

The Power Company requires a ground floor location for termination of load-carrying conductors. Any equipment located on the second floor will require *prior written approval* from Power Company.

The termination compartment for Power Company conductors must meet EUSERC 343 requirements shown in Figure 10-7, (*Pull Box Requirements*). The Customer must supply any terminal blocks used. All doors must open outward from rooms that contain Power Company metering or termination equipment. (See Figure 10-6 and 5-2)

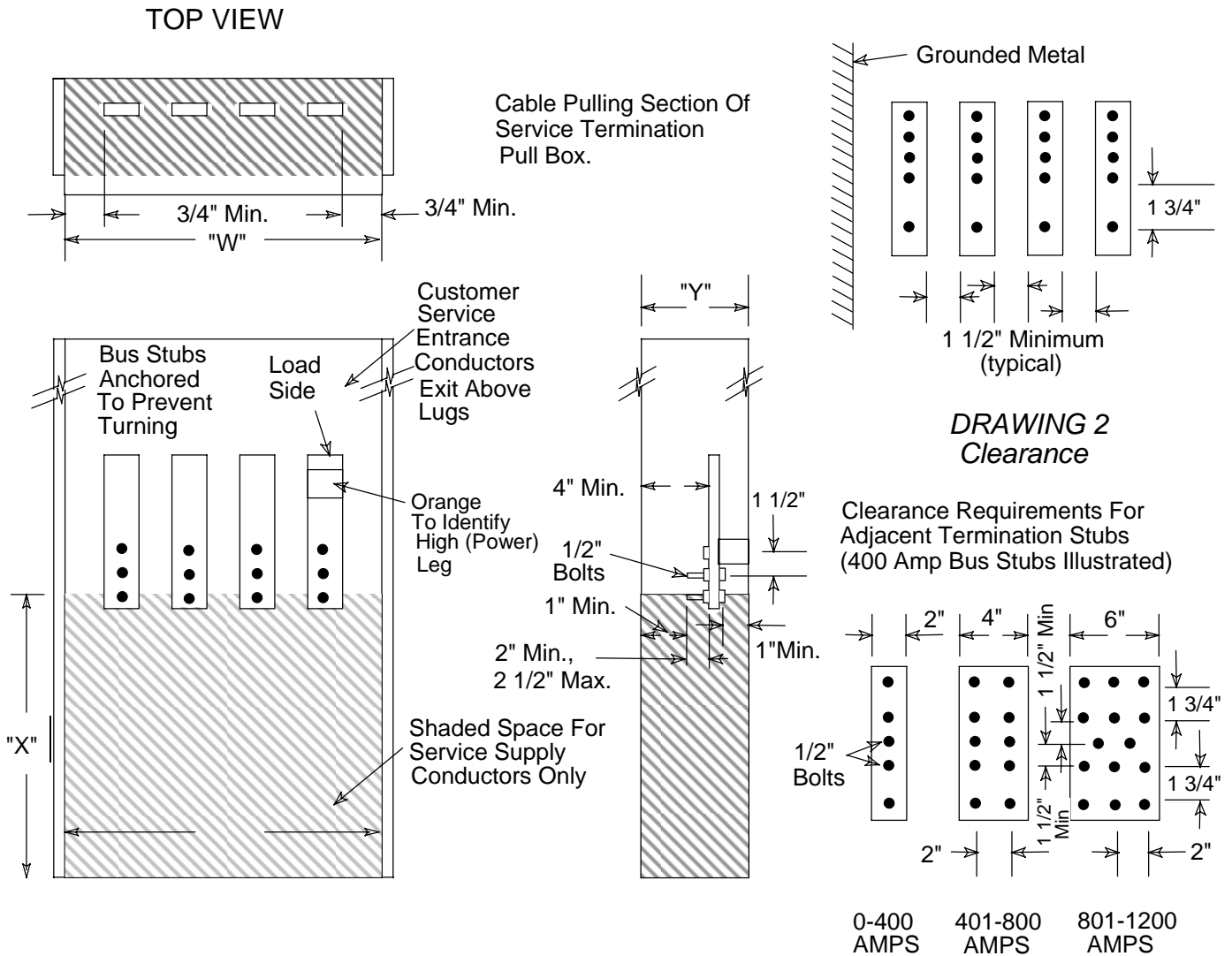
Cable pulling section must be sized for Power Company service termination EUSERC 343 and must have bus extension drilled for landing lugs. *NEC requires main disconnect when more than 6 services are connected.* (When the sum of distribution section ampacities exceed the pulling section ampacities the customer will be responsible to provide NEC approved load calculations.)



**Figure 10-7 Pull Box Requirements**

0-600 Volts, 0-1200 Amps

EUSERC 343 & 347



Note: See section 10.2.4 for clear working space.

**Minimum Pull Box Dimensions**  
(Applies Only To Power Company Portion of Pull Box)

**DRAWING 3 Bus**

Total Service Amps	"W"		"Y" Depth	"X" Lug Height
	3 Wire	4 Wire		
0-200	10 1/2"	14"	6"	11"
201-400	10 1/2"	14"	6"	22"
401-800	16 1/2"	22"	11"	26"
801-1200	22 1/2"	30"	11"	26"

## 10.2 Current Transformer Metering – 800 Amps Maximum

Current transformer (C.T.) metering is required when a three phase service exceeds 200 amperes, or when a single phase service exceeds 200 amperes. **For all services that require C.T. metering, the customer shall provide, own, and install the secondary conductor and conduit.** For services over 800 amps see section 10.3 (*Switchboards*).

The C.T. can and meter shall be mounted outside of the building within 50 feet of the transformer. Where metering equipment is installed in a location where it might be struck by a motorized vehicle, the Customer is to install and maintain a Power Company approved barrier post. Refer to section 6.4.5, and figure 6-3.

### 10.2.1 The Customer will provide and install:

- Provide, own, and install line and load side service conductors on the current transformer mounting base. Provide, own, and install a weather tight NEMA 3R rated metallic cabinet securely mounted on a rigid surface. The door is to be *hinged* and capable of being sealed. The cabinet is to be sized in accordance with Table 10-3, *Current Transformer Cabinet*.
- EUSERC approved current transformer mounting base rated 50,000 ampere fault duty.
- The remote socket enclosure drilled and tapped for a Power Company test switch.
- The conduit between the socket enclosure and current transformer mounting base.
- Barrier post (6" diameter) required where metering equipment is installed in vehicle traffic area. Refer to section 6.4.5 and figure 6-3.
- Grounding and bonding per NEC (Article 250) for all meter and C.T. enclosures.
- Both the current transformer cabinet and meter socket must be mounted plumb in both directions.

*Note: Consult the Power Company for current transformer installation specifications.*

### 10.2.2 The Power Company will:

- Provide, own, and install the meter, current transformers and test switch, with their associated wiring.

*Note: Power Company equipment shall not be located higher than the C.T. cans to minimize water drainage into the customers' equipment.*

### 10.2.3 Current Transformer Metering Conduit

The Customer must provide conduit between meter socket and the current transformer cabinet. Use the following guidelines to install the conduit:

- Use rigid steel or IMC conduit. A minimum of 1-1/4" is required with proper fittings and bushings to protect metering conductors.

- Conduit must be of sufficient length to insure a minimum distance of 10” between the center of the meter socket and the current transformer cabinet. The conduit should not exceed 12” in length.

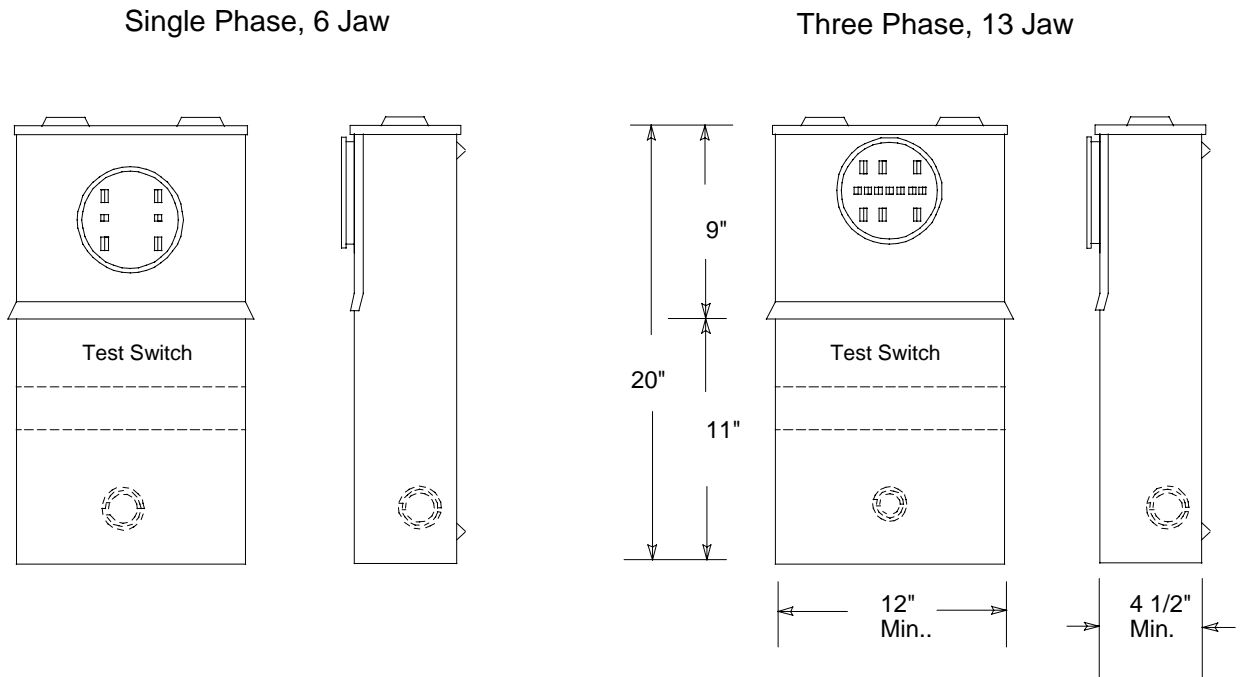
If the standard location is not suitable or workable, an alternate location may be approved. Any alternate location must have prior written Power Company approval and must adhere to the following guidelines:

- Conduit runs must be 50 feet or less, with no more than three bends totaling 270°. No one bend greater than 90° will be allowed. Runs longer than 50 feet must be approved by the Power Company.
- Pull lines are required in all conduit as specified in table 6-1 note g.
- Use rigid steel or IMC conduit (1-1/4” minimum). EMT conduit will be allowed for runs less than 10 feet.
- When steel C.T. metering conduit deadends on the back of a C.T. cabinet, use PVC flex tubing to extend from the back wall to the front of the cabinet.
- Secure all removable conduit fittings with 1/4” x #20 metal screws with sealing provisions. (LB’s are not allowed outside the enclosure without prior written Power Company approval.)

### 10.2.4 Current Transformer Cabinets

- Only conductors associated with metering shall be permitted in the current transformer enclosure. No connections shall be made in any current transformer enclosure to supply any other meter.
- Customer conductors shall exit the enclosure on the load side of the current transformers. Customer’s conductors will not be permitted in the Power Company terminating and pull space. For other underground service applications, a separate terminating pull box will be provided for the Power Company service lateral. See EUSERC 343 for pull box requirements.
- The cabinet must be mounted in a readily accessible location acceptable to the Power Company. Current transformers shall be installed by Customer and electrical connections tightened to Power Company provided torque specification.
- The top of the C.T. mounting bracket shall not be more than 6 feet above floor level. The cover shall have factory installed *hinges* for side opening with sealing provisions and shall be able to hold the cover in the open position at 90° or more.
- A clear work space (see figure 5-2) is required in front of this cabinet. The hinged door, when open, shall not block access and egress from the room. The preferred location of cabinets shall be on the ground floor.
- The Customer will connect conductors to the line and load-side of the EUSERC approved mounting base. Line and load-side terminations on C.T. landing pads require two bolts per connector.

**Figure 10-8 Remote Socket for Current Transformer Meters**  
EUSERC 339



Use a meter socket enclosure for current transformer metering with a space reserved below the socket for a Power Company test switch 9 1/2 inches in length. Use the following guidelines for the enclosure and meter socket:

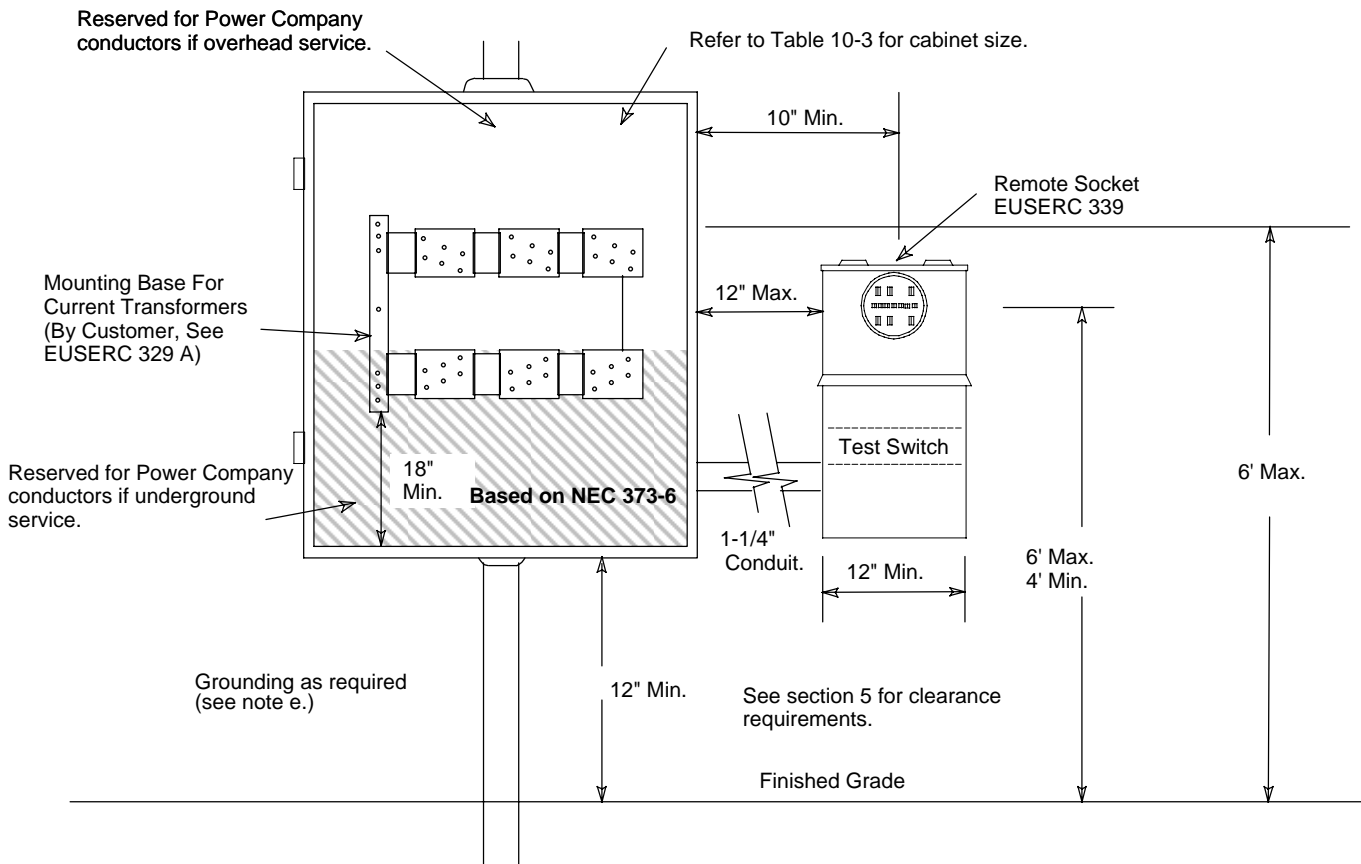
- Verify that the enclosure contains a mounting perch, drilled and tapped, for a test switch. The Power Company will furnish and install the test switch.
- Do **NOT** use meter sockets with circuit closers or bypass clips. They will not be approved.
- All unused openings must be covered and secured by the Customer.

**Table 10-2 Current Transformer Meter Socket Requirements**

Type of Service	Socket Type
120/240 volt, single phase, 3 wire	6 jaw
120/208 volt, three phase, 4 Wire	13 jaw
277/480 volt, three phase, 4 Wire	13 jaw
240/120 volt, three phase, 4 Wire	13 jaw

Figure 10-9 Current Transformer Metering - Wall Mount

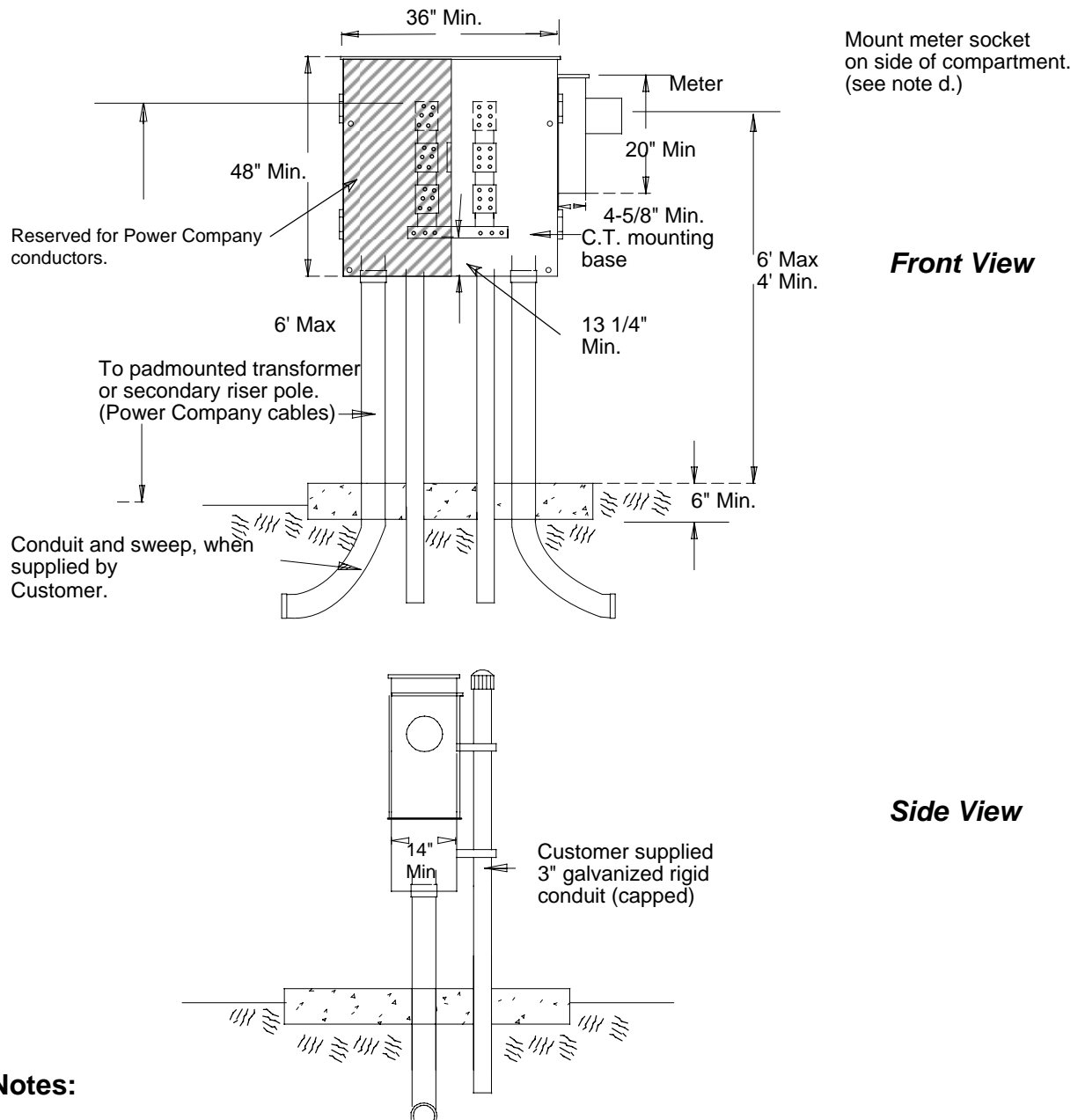
Service Below 600 Volts, 800 Amps Max.



**Notes:**

- a. The Customer service entrance conduit must exit the enclosure on the load side of the current transformer. The Power Company will not allow Customer conductors in the Power Company's terminating and pull space.
- b. Do **NOT** allow exposed conduit for the Power Company service lateral to extend more than 5'6" or less than one foot into the building if indoors.
- c. Current transformer cabinet door must be *hinged*.
- d. For 4-wire delta services, identify center C.T. mounting base as the high (power) leg. The high (power) leg conductor must be identified by orange marking, and located in the center of the C.T. mounting base (NEC Article 215-8).
- e. Grounding must be in accordance with latest issue of NEC (Article 250 Grounding). The Code enforcing agency may require ground connection to be visible when electrical inspection is made.
- f. Meter sockets shall not be located above C.T. cans due to safety of working in front of live bus.

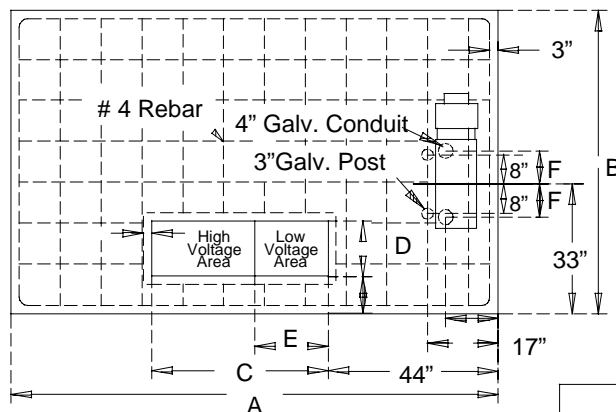
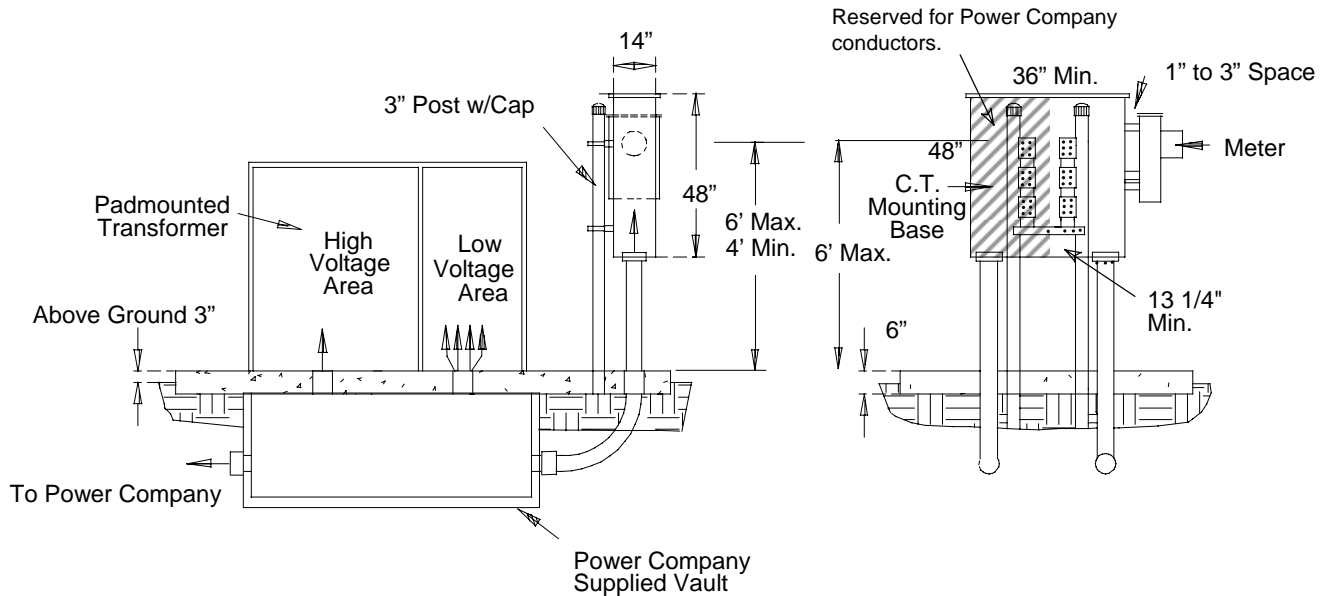
**Figure 10-10 Current Transformer Metering - Post Mounted**  
Service Below 600 Volts, 800 Amps Max.



**Notes:**

- a. Refer to section 6 for underground, conduit, and concrete requirements.
- b. The Customer must consult the Power Company before construction, and follow the guidelines as defined in Figure 10-9.
- c. Cabinet must have two doors with handle in center for opening.
- d. Meter must be mounted so it does not interfere with the opening of the cabinet doors.
- e. For 4 wire delta services, the high (power) leg conductors must be identified by orange marking and located in the center of the C.T. mounting base.
- f. This configuration can be used as a wall mount if clearance allows.

**Figure 10-11 Current Transformer Metering - Padmounted Transformer**  
For 600 Volt, 800 Amps Max.



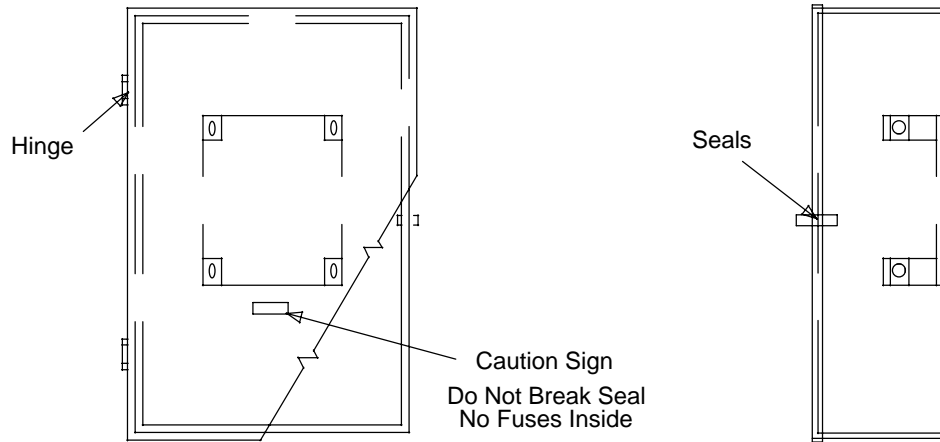
Meter Cabinet Support Spacing		
Service Meter Cabinet Width	1-Phase 3 Wire 24"	3-Phase 4 Wire 36"
Conduit Spacing (F)	9"	15"

Transformer Rating	Transformer Pad or Vault Dimension				
	A	B	C	D	E
Pad/Vault 75-500 kVA	128"	78"	60"	16"	20"
Vault 750-2500 kVA	132"	105"	60"	16"	30"

**Notes:**

- a. Refer to section 6 for underground, conduit, and concrete requirements.
- b. This current transformer padmount metering detail is only to be used after approval from the Power Company.
- c. The Customer must consult the Power Company before construction, and follow guidelines as defined in Figure 10-9.

**Figure 10-12 Current Transformer Cabinet**  
800 Amperes Maximum, 0-600 Volt



**Table 10-3 Current Transformer Cabinet**

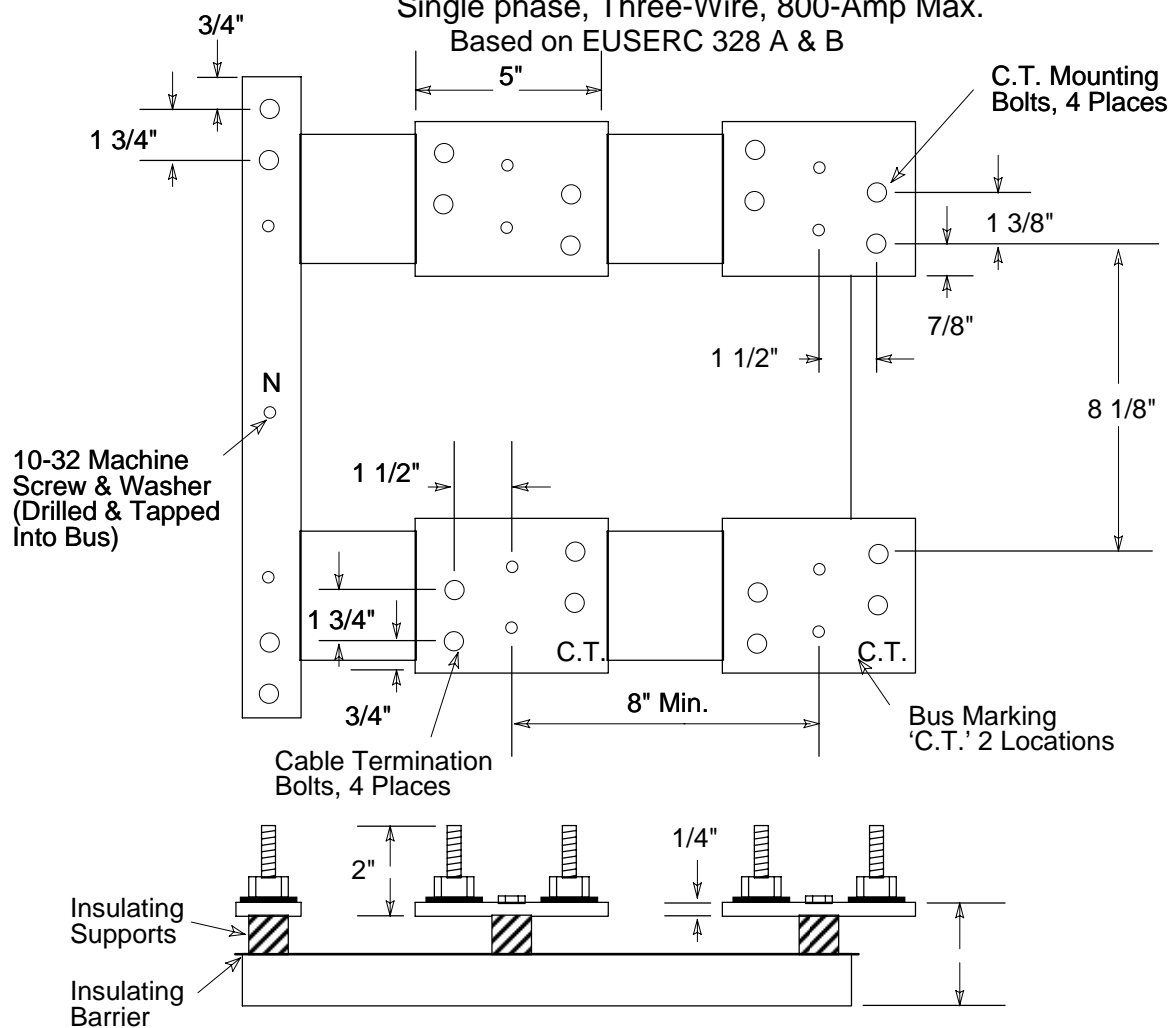
Current Transformer Cabinets				C.T. Mounting Base
Type of Service	Cabinet Dimensions			
	Width	Height	Depth	
Single phase, 3 Wire 201-800 Amps	24"	48"	11"	EUSERC 328A
Three phase, 4 Wire 201-800 Amps	36" Min.	48"	11"	EUSERC 329A
Above 800 amps see section 10.3 ( <i>Switchboard Metering</i> )				

*Note: Cabinet dimensions are greater than EUSERC 316 minimums.*



**Figure 10-13 Transformer Mounting Base for Installation in Current Transformer Enclosure**

Single phase, Three-Wire, 800-Amp Max.  
Based on EUSERC 328 A & B

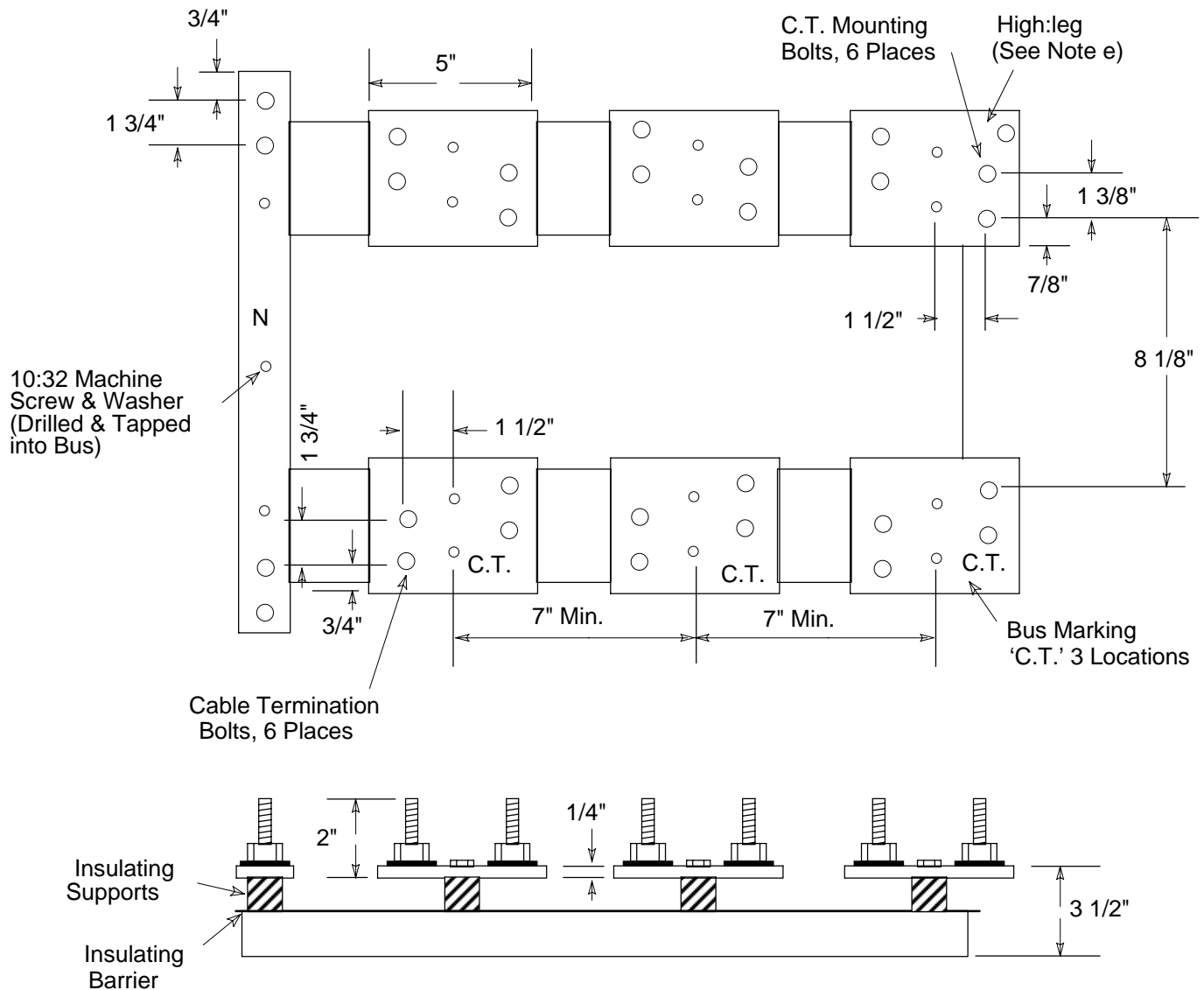


**Notes:**

- a. The Customer must furnish all lugs and connect conductors to the line and load terminals of the current transformer mounting base.
- b. Mounting base accepts bar-type current transformers only.
- c. Verify that the mounting base for C.T.'s meets ratings for available fault current (50,000 amp minimum).
- d. Line and load-side terminations on C.T. landing pads require two bolts per connector.

**Figure 10-14 Transformer Mounting Base for Installation in Current Transformer Enclosure**

Three Phase, Four-Wire, 800-Amp Max.  
Based on EUSERC 329 A & B



## 10.3 Switchboard Metering

A EUSERC switchboard metering section is required when the service entrance rating is greater than 800 amperes (may also be used for three phase services over 200 amperes and single phase service over 320 amperes). The metering current transformers will be located in the current transformer compartment. The meter and test switch is to be mounted remotely. Contractor/Owner shall coordinate the location of the meter and the EUSERC section with the Power Company before purchasing electrical equipment. Contractor shall provide drawings stamped “Approved for Construction” to Power Company for Power Company approval of the location and layout of the meter and EUSERC section. The Power Company shall provide written approval of the installation. If the Contractor chooses to purchase electrical equipment before Power Company approval, it is entirely at Contractor’s risk. Under no circumstances shall the linear length of wires from the C.T.’s to the meter be greater than 50 feet. Meters shall be mounted on the exterior of the building. The area below this compartment’s barrier may be used as a main switch (breaker) compartment, a load distribution compartment, or a bottom-fed terminating pull section. The metering compartment shall be on the supply side of the main switch or breaker. ***The point of delivery will be located no more than 5 feet vertical or horizontal inside the building from the point of entrance.***

Mounting pad for all switchboard metering enclosures will be a minimum 4” thick concrete pad.

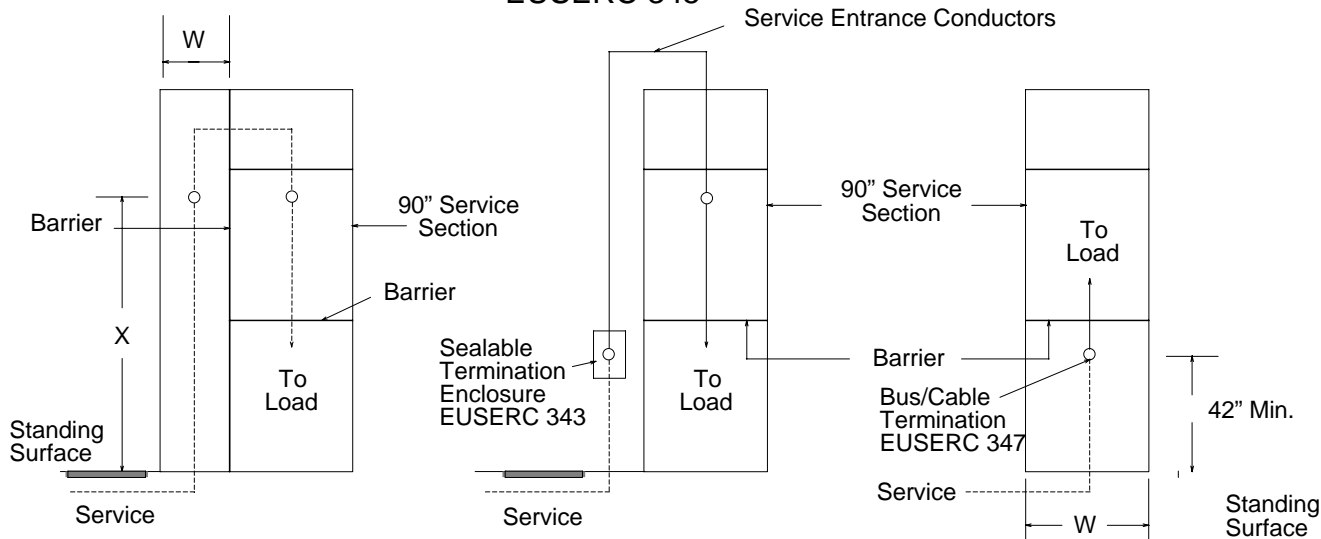
### 10.3.1 Switchboard Service Termination

- The Customer will provide the switchboard service section, instrument transformer mounting base, panels, and meter socket, with provisions for a test switch.
- Meter and test switch are to be owned, provided, and installed by the Power Company in the Customer-owned metering compartment. Window or doughnut type current transformers for switchboards are provided by the Power Company and installed by the Customer. Current Transformer line and load side connections are to be installed by the Customer and electrical connections are to be tightened to Power Company provided torque specification. For underground service, the Customer will terminate the line and load side service conductors on lug landings in the pull section.
- Customer locking mechanism for the metering enclosure must provide for independent access by the Power Company.

### **EUSERC Notes:**

- Terminating bolts must be secured in place and shall be provided with nuts, flat washer, and a spring washer, and all parts must be plated to prevent corrosion. Bus bars are required from the pull section into the service section.
- The NEC requires a clear work space of 78” high by 30” minimum width by 48” deep in front of distribution metering equipment.
- Grounding must meet NEC requirements. Lugs for terminating the Customer’s ground wire (or other grounding conductors) shall be located outside of the sealable section and shall be designed to readily permit the Customer’s neutral system to be isolated, when necessary, from the Power Company’s neutral.
- All removable panels and covers to the compartments used for terminating or routing conductors shall have sealing provisions.
- All pull and termination sections shall be full front access. Cover panels shall be removable, sealable, provided with two lifting handles, and limited to a maximum size of 9 square feet in area.

**Figure 10-15 Underground Service Termination  
Switchboard Service Section**  
400 to 2000 Amp, 0-600 Volts  
EUSERC 345



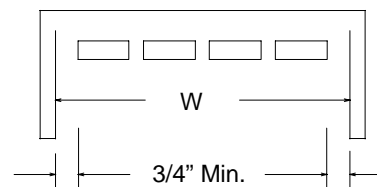
*Switchboard Pull Section*

*Separate Termination Enclosure*

*Bottom (Reverse) Feed*

**Minimum Pull Section Dimensions**

Switchboard Rating - Amps	Minimum Width "W"		"X" Minimum Dimension
	3-Wire	4-Wire	
400 - 800	24"	24"	42"
801 - 1200	24"	30"	42"
1201 - 2000	30"	35"	42"
2001 - 3000	-	42"	60"
3001 - 4000	-	48"	60"



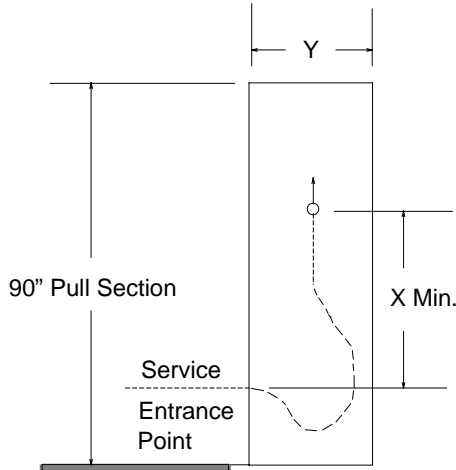
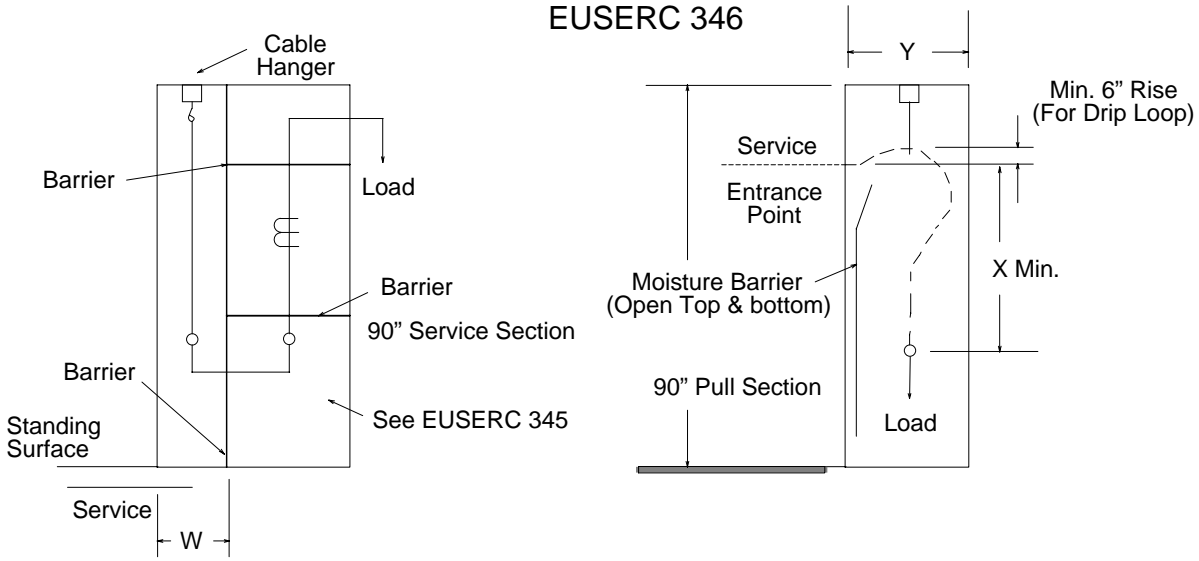
*Typical Top View*

**Notes:**

- A switchboard pull section, a separate termination enclosure, or a bottom feed service section shall be provided for all switchboard underground services.
- Bus bars, with provisions for termination lugs per EUSERC 347, are required from the pull section into the service section when the main switch is rated above 800 amperes, or when multiple metering is to be supplied.
- Side or rear entry of the service cable into the pull section may require greater dimension than that shown in the table.
- All pull and termination sections shall have full front access. Cover panels shall be removable, sealable, provided with two lifting handles, and limited to a maximum size of 9 square feet in area.
- Customer shall provide a drawing with dimensions of proposed service equipment.

**Figure 10-16 Underground Service Termination  
In A Pull Section Below Ground Level**

0-600 Volts  
EUSERC 346



*Side View  
(Back Low Level Entry)*

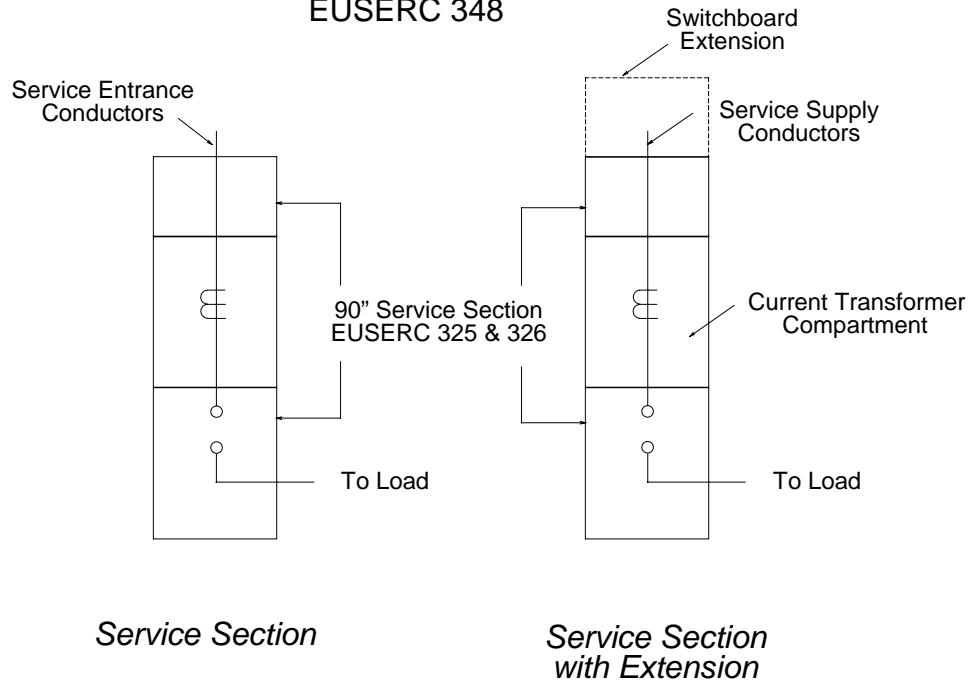
**Minimum Pull Section Dimensions**

Switchboard Rating - Amps	Width "W"		Pull Space "X"	Depth "Y"
	1-Phase 3-Wire	3-Phase 3 or 4 Wire		
400 - 800	24"	24"	42"	25"
801 - 1200	24"	30"	42"	30"
1201 - 2000	30"	35"	42"	30"
2001 - 3000	-	42"	60"	
3001 - 4000	-	48"	60"	

**Notes:**

- a. An underground service may enter the back of a switchboard pull section as shown, when the pull space has the required "X" dimension above or below the cable terminating facilities, and the pull section has the required "Y" depth.
- b. For side entry, the "W" dimension of the pull section shall be not less than "Y" dimension.
- c. The Customer is responsible to recognize potential surface and sub grade water flows and coordinate with the Power Company to minimize potential run-off.
- d. When the point of delivery is located at the customers building, the Power Company will only install service connections to the Customer's metering equipment at the main or entry floor level.

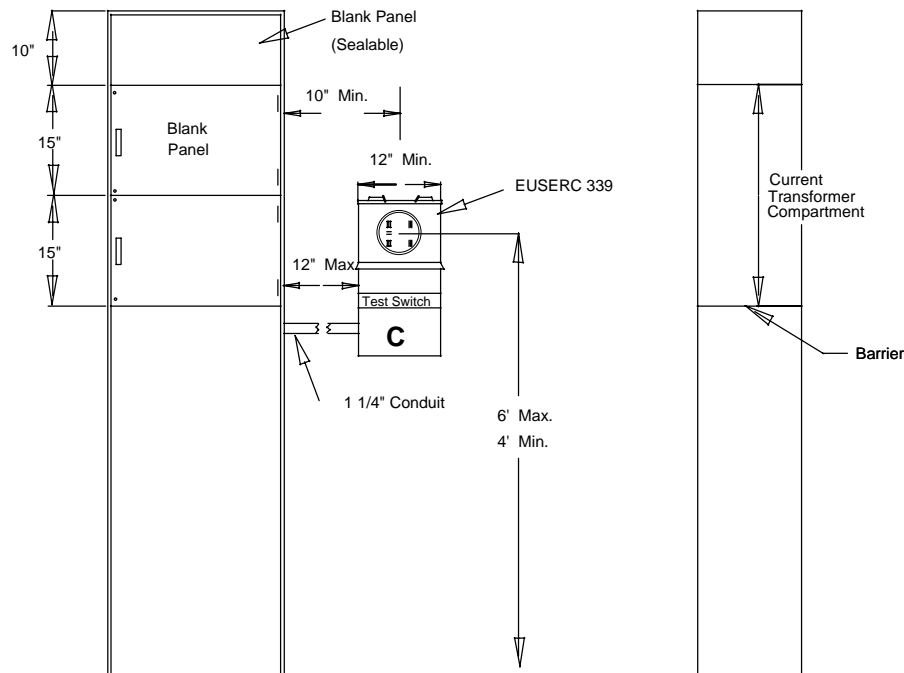
**Figure 10-17 Overhead Service Termination  
Switchboard Service Section  
0-600 Volts  
EUSERC 348**



**Notes:**

- a. The service entrance conductors, cable or bus bar, are furnished and installed by the Customer in the following manner:
  1. When the switchboards are served with bus bar conductors, the conductors shall enter through the top or at the side or back in the upper 10" section.
  2. When switchboards are served with cable conductors, the conductors shall only enter the top of the switchboard.
- b. When conduits enter from the side or rear, an extension may be required.
- c. The direction of feed is from top to bottom in the switchboard service section. Load conductors shall leave below the metering compartment and may not be routed back through the current transformer compartment in order to exit the service section.

**Figure 10-18 Remote Switchboard Metering Enclosure  
EUSERC 325**

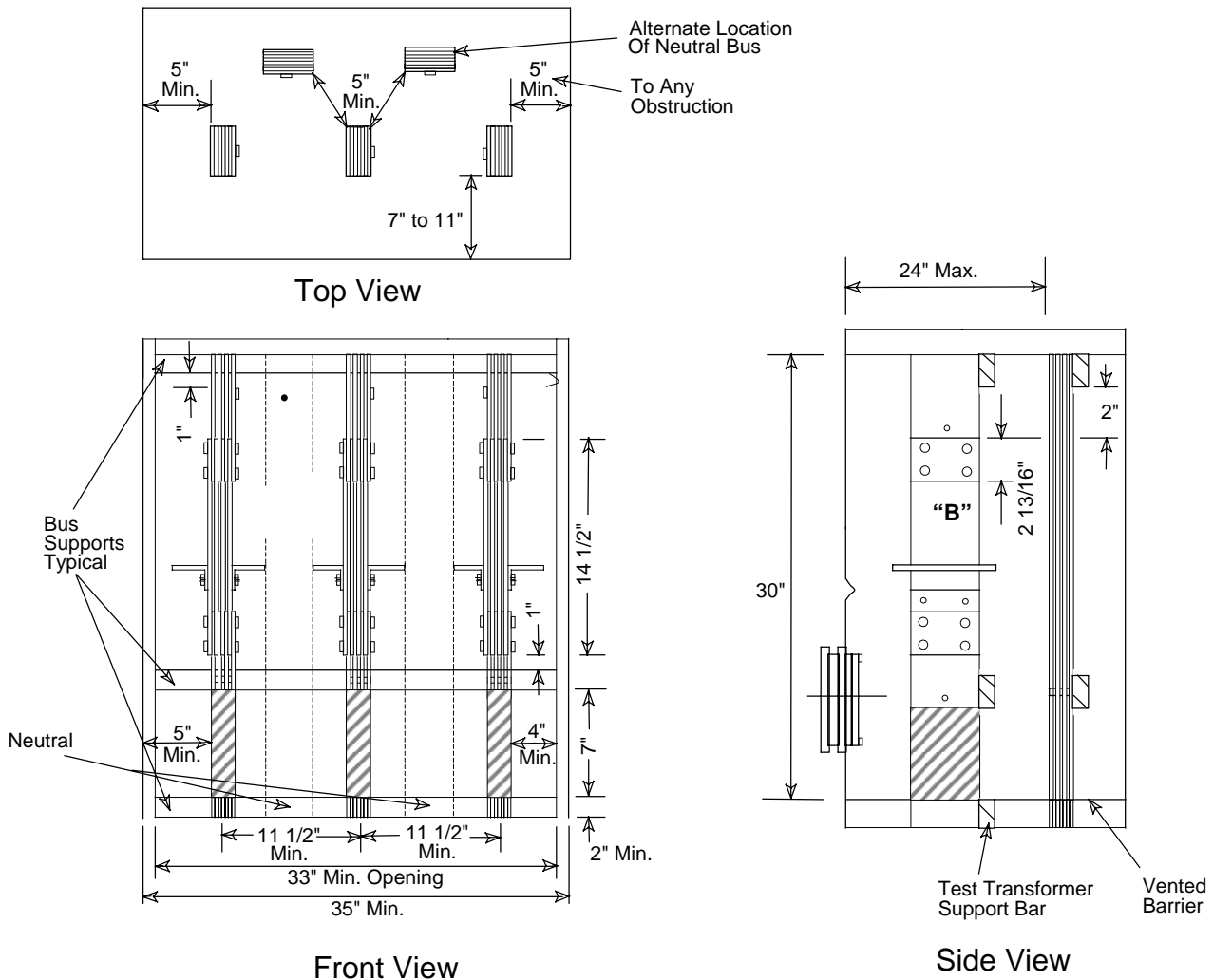


**Notes:**

- a. The service termination and metering equipment should be located outside near the transformer. If the Power Company allows the service termination to be located inside the building, the metering enclosure must be located outside the building.
- b. The conduit in the switchboard section shall be PVC flex tubing and shall be terminated in the current transformer compartment in front of the current transformers. 90 degree sweeps (LB's or similar devices) are not permitted inside the enclosure.
- c. If, in the opinion of the Power Company, the switchboard service section is inaccessible for meter testing and maintenance, the Customer must provide direct access between the remote meter and the current transformer.
- d. The Customer must provide and install the remote meter socket enclosure, metering switchboard section and 1 1/4" conduit for the metering secondary conductors. Refer to 10.2.3 (*Current Transformer Metering Conduit*) for conduit requirements.



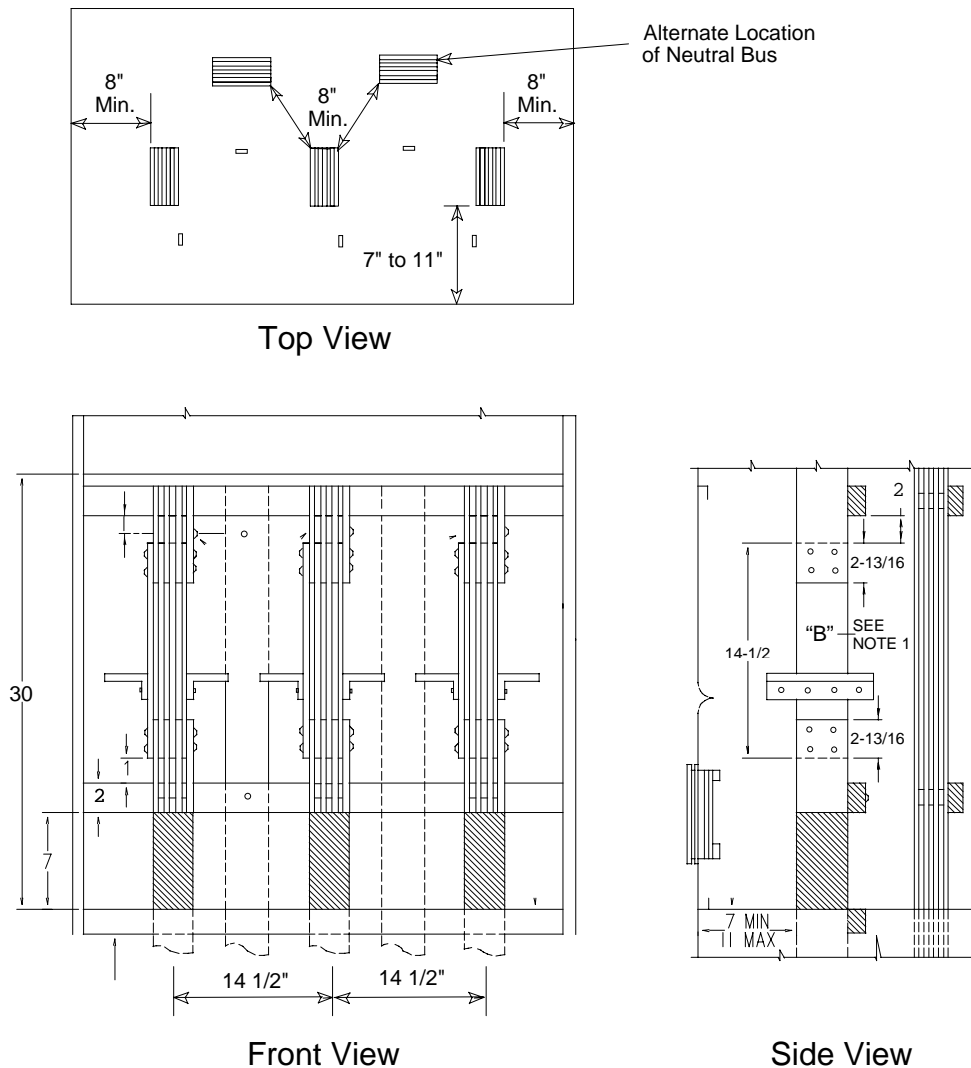
**Figure 10-19 Current Transformer Compartment for Switchboards**  
**3000 Amp Maximum, 0-600 Volts**  
 Three phase, 4 Wire Service  
 EUSERC 322



**Notes:**

- a. Busways must remain in position when the removable section "B" is out.
- b. Set the direction of feed from the top or bottom. No other conductors shall pass through this compartment. When horizontal-cross busways supply the service section phase buses, a neutral bus bar extension shall be provided in the instrument transformer compartment above the lower C.T. bus support.

**Figure 10-20 Current Transformer Compartment for Switchboards**  
**3001 Amp and Above, 0-600 Volts**  
 Three phase, 4 Wire Service  
 EUSERC 324



**Notes:**

- a. The bus units may be supplied from the top or bottom.
- b. Bus units shall be anchored so that buses will remain in position when section "B" is removed. Consult the Power Company for the use of buses larger than 5 inches. Bus supports shall be constructed of a continuous bar of insulating material.
- c. When the compartment is supplied from horizontal cross-bussing, the bussing shall pass through the compartment or in the sealed area above the compartment. No other conductors shall pass through the compartment.

## **10.4 Primary Voltage Service (Over 600 Volts)**

### **10.4.1 General**

High-voltage instrument transformers and transformer rated meters are required for Customers taking service at primary voltage under provisions of the Power Company's rate schedule. To establish a mutually satisfactory location for the point of delivery and metering details, the Customer must consult the Power Company before construction begins.

The Power Company will provide primary voltage delivery to qualified Customers directly, without transformation, from the high voltage or "primary" distribution system standard for the location in which service is requested, if the following conditions apply:

- Service at primary voltage will not, in the Power Company's judgment, adversely affect the operations of the Power Company distribution system or service to other Customers.
- The service supplied is distributed in a safe and reliable manner.

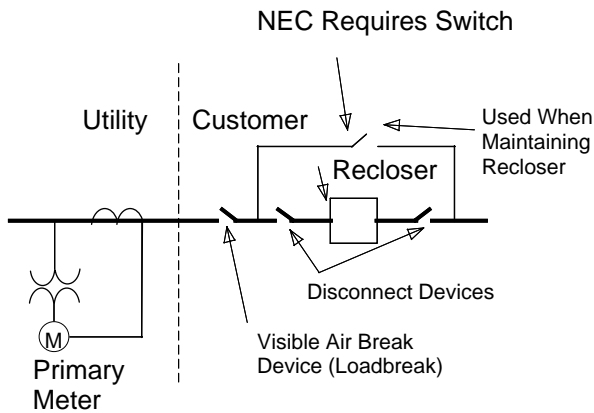
### **10.4.2 Customer Equipment**

The Customer receiving service at primary voltage may own poles, conductors, cables, transformers, and associated protective devices in accordance with the filed rate schedule or special contract. The Power Company must approve all such equipment, its installation, and its operation. Except by prior written approval from the Power Company, three phase transformers connected to primary voltage lines must have a grounded wye high-side winding and a grounded wye low-side winding with a four-or-five-legged core. To reduce ferroresonance related problems, consult the Power Company for transformer types.

To assure timely restoration of service in case of failure, the Customer should own primary voltage wiring and equipment (including transformers and associated protective devices) of the same types and characteristics as those by the Power Company.

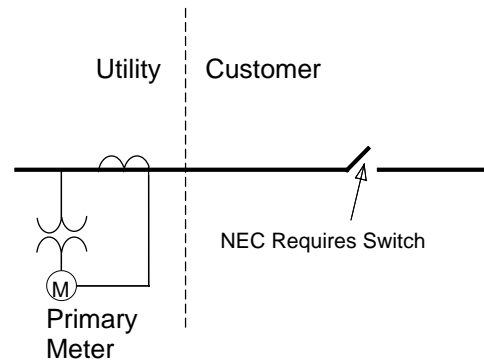
**OPTION - 1**

Primary Delivery Point Protected By Reclosing Device



**OPTION - 2**

Primary Delivery Point Protected By Fuses



**10.4.3 Power Company Equipment**

The Power Company will install a pole or a padmounted enclosure (both at Customer expense), containing the primary metering equipment in accordance with the current filed Electric Service Regulations and rate schedule and, in addition, will normally provide a disconnecting means at or near the point of delivery to separate the Customer system from the Power Company system. The Power Company will provide one span of overhead primary conductors, from the primary metering pole, to the Customer's facility. This point of interconnection or the padmounted primary metering enclosure when the service is underground shall be designated as the point of delivery.