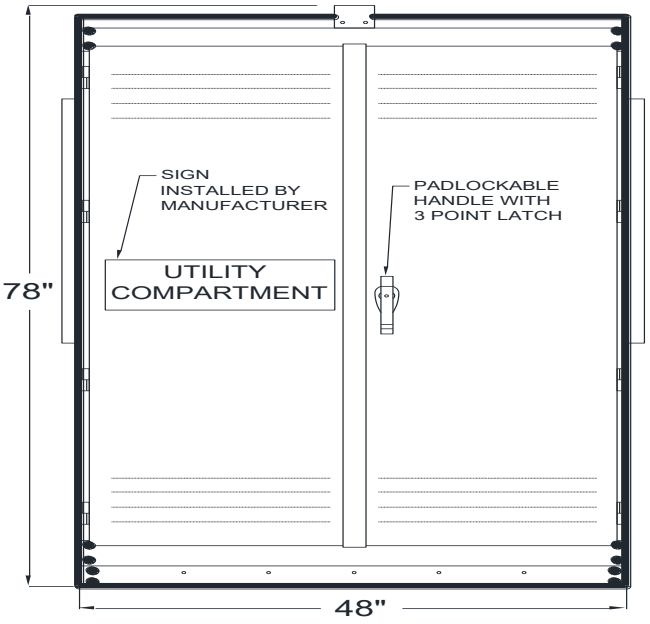
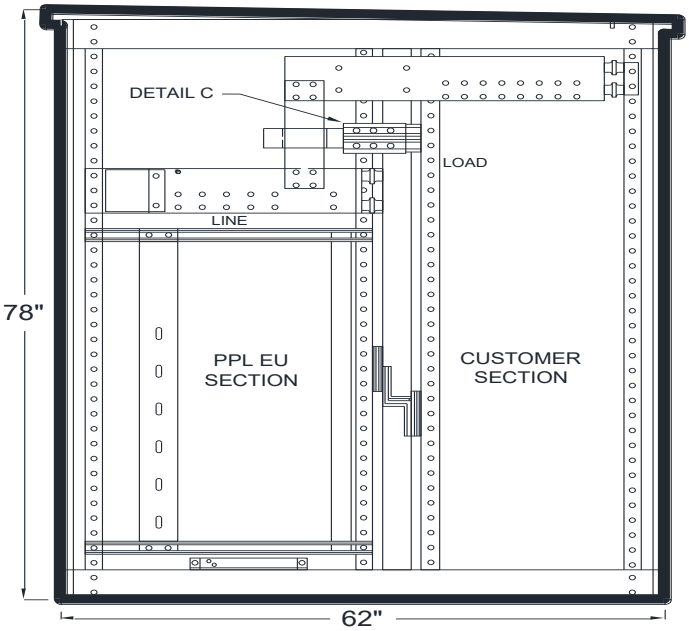
SKETCH #16A
Typical Arrangement of Pad Mounted Metering and Service Termination Cabinet up to twelve 750 KCMIL conductors per phase

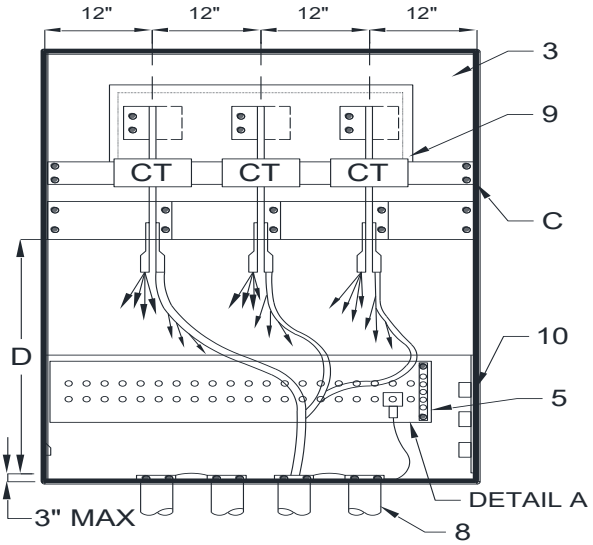
REFERENCE:	VOLTAGE:	SERVICE TYPE:	AMPERAGE:	CABINET LOCATION:
CRS: 6-15-180, 6-19-100 **SKETCH**: 8C, 8D, 20, 50 **RULES**: 5, 13, 15	3 Ø, 4 Wire Wye 120/208V 3 Ø, 4 Wire Wye 277/480V	Underground	3200A Max	Outdoor



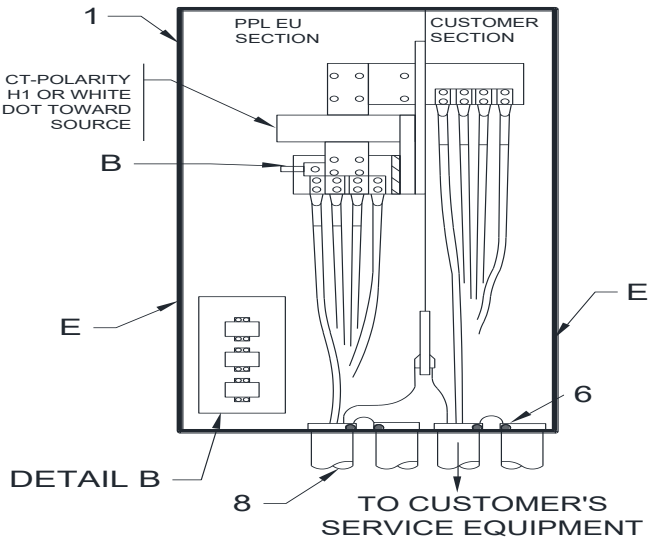
CABINET EXTERIOR (PPL EU SECTION) - FRONT VIEW



CABINET EXTERIOR – SIDE VIEW

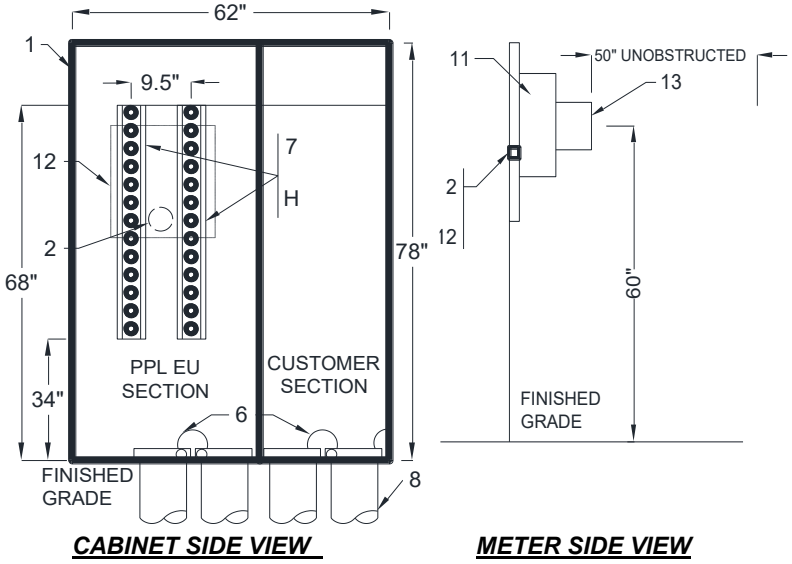


CABINET INTERIOR (PPL EU SECTION) - FRONT VIEW



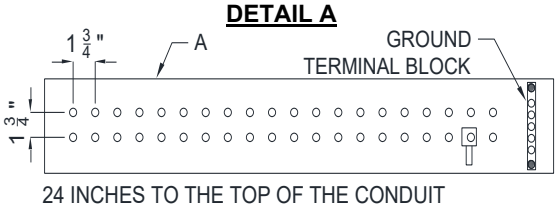
CABINET INTERIOR – SIDE VIEW

SKETCH #16A
Typical Arrangement of Pad Mounted Metering and Service Termination Cabinet up to twelve 750 KCMIL conductors per phase (cont.)

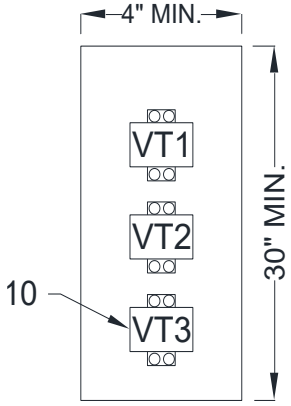


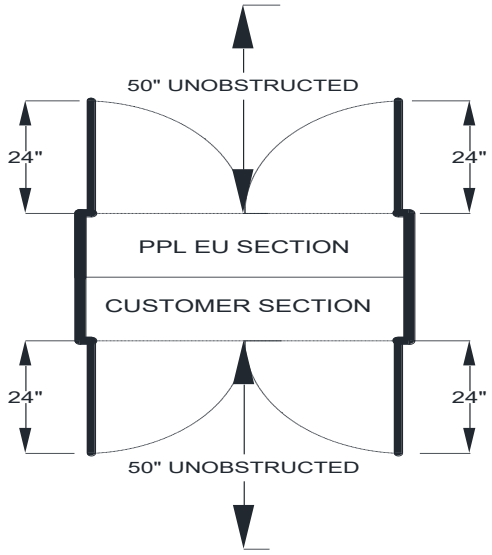
CABINET SIDE VIEW ***METER SIDE VIEW***

DETAIL A



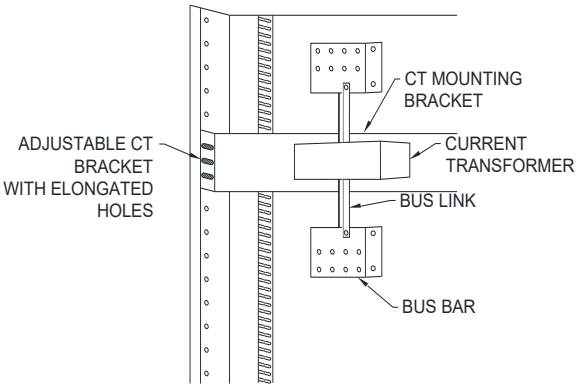
DETAIL B





TOP VIEW – CABINET DOOR CLEARANCE

DETAIL C



RESPONSIBILITY	PART NO(S)
Customer Furnishes, Installs, Maintains	1, 2, 3, 4, 5, 6, 7
Customer Furnishes, Installs; **PPL EU Maintains**	8
PPL EU Furnishes, Maintains; **Customer Installs**	9, 10, 11
PPL EU Furnishes, Installs, Maintains	12, 13

SKETCH #16A
Typical Arrangement of Pad Mounted Metering and Service Termination Cabinet up to twelve 750 KCMIL conductors per phase (cont.)

1. **Metering/ Service Termination Cabinet** - Sealable metal cabinet minimum 48” W x 78” H by 62” D.
   - Outdoor Cabinet must be NEMA-3R (Weatherproof).
   - Includes all conduits, buswork, hardware, etc. except for that equipment designated as being provided by PPL EU.
   - Cabinet shall be selected from REMSI Table 1 – Approved Pad-Mounted Metering and Service Termination Cabinets.
2. **Instrument Transformer Conduit** - 1-1/4” minimum size
   - Threaded galvanized, steel intermediate metal conduit (IMC), or schedule 40 PVC conduit and fitting between instrument transformers and meter panel.
3. **Internal Cabinet** - Customer is responsible for ensuring bus arrangement, internals components, and overall cabinet design provided meets all PPL EU requirements.
4. **Meter grounding terminal block**
   - Must accommodate two #6 and five #10 stranded copper conductors
5. **Neutral bus**
   - Neutral bus shall be bolted to cabinet for bonding purposes.
   - Termination to customers’ ground bus is not permitted inside the cabinet.
   - Neutral bonding shall be terminated on the ground bus in the customer termination cabinet.
6. **Grounding bushings**
   - Shall be attached to all metal conduits. The conduits shall be bonded together to the cabinet and the neutral bar.
7. **Unistrut Mounting (Provided by Cabinet Manufacturer**)
   - Two 34” lengths of Unistrut mounted vertically.
   - Spacing: 9-1/2” center to center.
     - Bottom of Unistrut: 34” from cabinet bottom.
     - Top of Unistrut: 68” from cabinet bottom.
   - Unistrut shall be mounted on one or both sides of the PPL EU section of the cabinet.
   - See **Note H** for more information.
8. **Service Conduits (PPL EU Section):** 4” minimum trade size
   - Number of conduits is determined by the size of the transformer service entrance up to 16 parallel conduits.
   - Galvanized rigid steel or steel IMC sweeps shall have a minimum 36” bending radius.
9. **Current Transformers.**
10. **Voltage Transformers for 277/480V services**.
11. **Meter Panel**.
12. **Wiring between instrument transformers and meter panel**. See Rule 15.
13. **Meter**.

SKETCH #16A
Typical Arrangement of Pad Mounted Metering and Service Termination Cabinet up to twelve 750 KCMIL conductors per phase (cont.)

NOTES:

A. **Neutral Bar Connection**
PPL EU and customer shall each make neutral bar connections starting from the right side of the neutral bar, when accessed from their respective sections of the cabinet.

B. **Metering Voltage Connection** - ¼" x 20 Tapped hole and hex head.

C. **Current Transformer (CT) support**
CT support shall be provided with elongated slots for CT bracket adjustment.

D. **Conduit Clearance**
Minimum clearance from the bar to the top of conduits. See Rule 15F and Sketch #50 for cable limiter details.

E. **Cabinet Doors**
Both PPL EU and customer doors must be triple hinged, with non-removable hinges and hinge pins. Doors must be sealable.

F. **Door Latching and Locking Mechanism**
A three-point section mechanism that secures both doors is required.

- Latching bars shall pass through guides to ensure proper engagement.
- The latching mechanism cannot protrude more than 1" inside the cabinet.
- All connection bolts must be permanently secured to prevent accidental contact of any metal part should the latching assembly fail.
- The handle shall provide a locking provision in the closed position with a ½" diameter hole
- Key- locking handles are not permitted.

G. **Approved Cabinets**
Refer to the **Approved Metering and Equipment Tables (Table 1)** for pre-approved pad mounted metering and service termination cabinets.

Cabinets not listed must have detailed construction drawings submitted to PPL EU for approval by the area Design Supervisor prior to construction.

H. **Unistrut Installation Requirements** – If the Unistrut is not installed by the cabinet manufacturer, the meter panel shall not be mounted on the cabinet. In this case:

- The meter panel shall then be installed on a separate mounting arrangement within visual distance of the cabinet. See sketch #8D.
- Contact metering support for location of meter panel. Refer to sketch #8C for panel details.
- Metering conduit will need to be installed in the foundation to run between the instrument cabinet and the meter panel. The metering conduit shall be bonded to the other conduit and the cabinet.

I. **Clear Space Requirements** - Refer to sketch #8C and Rule 13 for more information.

J. **Barrier Requirements** – Refer to Barrier sketch #20 as required by PPL EU.

SKETCH #16A
Typical Arrangement of Pad Mounted Metering and Service Termination Cabinet up to twelve 750 KCMIL conductors per phase (cont.)

FOUNDATION DETAILS

