

## I-Line™ Smart Cell—Power Meter Shorting Block Kit

Retain for future use.

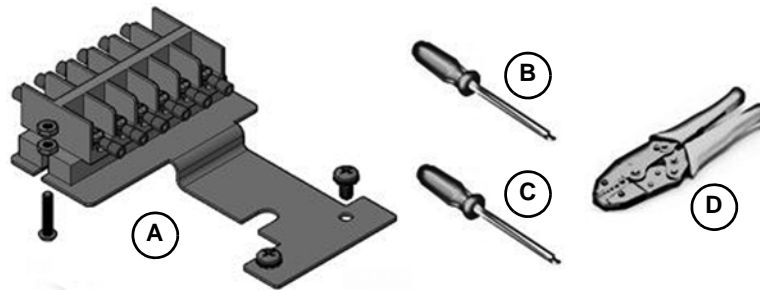
### **⚠ DANGER**

#### **HAZARD OF ELECTRIC SHOCK, EXPLOSION OR ARC FLASH**

- Apply appropriate personal protective equipment (PPE) and follow safe electrical work practices. See NFPA 70E, CSA Z462, or NOM-029-STPS.
- This equipment must be installed and serviced only by qualified electrical personnel.
- Turn off all power supplying this equipment before working on or inside equipment.
- Always use a properly rated voltage sensing device to confirm power is off.
- Installation of a "shorting block" must be utilized in conjunction with iron-core current transducers. Without the secondary being grounded, while current is passing through the current transducer(s), the system may store potential energy which can discharge without warning.
- Read and understand this entire instruction bulletin before installing, operating, or maintaining this equipment.
  - Local codes vary, but are adopted and enforced to promote safe electrical installations.
  - A permit may be needed to do electrical work and some codes may require an inspection of the electrical work.
- Replace all devices, doors and covers before turning on power to this equipment.

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

### Kit Contents / Necessary Tools



- A. Shorting Block Assembly/Kit
- B. Flathead screwdriver
- C. #2 Phillips screwdriver
- D. Crimping, wire stripping tool

**Table 1: Catalog Numbers of Metering Units**

Catalog Number	Voltage Vac	Feature
ICWL263X5563	120–600	Bottom feed, Power Meter 5563, basic metering with Modbus/Ethernet/BACnet
ICWR263X5563	120–600	Top feed, Power Meter 5563, basic metering with Modbus/Ethernet/BACnet
ICWL263X8244	120–600	Bottom feed, Power Meter 8244, intermediate metering (full color display)
ICWR263X8244	120–600	Top feed, Power Meter 8244, intermediate metering (full color display)

## Installation

**NOTE:** This Shorting Block Kit should be used in conjunction with an I-Line Power Meter Smart Cell and iron-core CTs. The Shorting Block Kit should be installed onto the pan prior to installing the Smart Cell unit.

**NOTE:** Turn off all power supplying this equipment before working inside the panelboard. Follow all Lockout/Tagout procedures.

1. Remove the deadfront and trim front.
2. Strip the ends of the Current Transducers (CTs) wires back ½" (primary = "X1" = "+").
3. Crimp the provided ring-tongue terminals onto the wires, using a crimping tool capable of crimping 14 gauge insulated terminals.
4. Connect the CT wires to the shorting terminal block according to the installation schematic (see Figure 5 on page 4), using a flathead screwdriver.
5. Identify and mark (as necessary) the lower edge of the smart cell unit as shown in Figure 1 on page 3 (refer to Figure 3 on page 3 for wide left / bottom feed panelboards and Figure 4 on page 3 for wide right / top feed panelboards).
6. Place the two ¼" holes over the third and sixth round holes from the lower edge of the smart cell unit as shown in Figure 1.
7. Mount the shorting block mounting plate to the I-Line pan using the provided ¼"-20 x ½" SEMS pan head screws.
8. Install the smart cell power meter according to NHA999570 provided with the smart cell.
9. Connect the green 8-pin connector to the power meter smart cell unit.

## Shorting Block Operation

### **⚠ DANGER**

#### **HAZARD OF ELECTRIC SHOCK, EXPLOSION OR ARC FLASH**

- Current Transducers (CTs) leads **MUST** be shorted prior to disconnecting the CTs from the power meter.
- Unapproved wiring modification may result in hazardous high voltages being generated in CTs.

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

1. In order to modify the current transducer wiring at the meter or metering side of the CT shorting block, the "positive" ("X1"s of Figure 5 on page 4) leads of the CTs must also be shorted out to the shorting strip using the additional screws found on the corners of the shorting block.
2. Once the current transducers are properly shorted using the CT shorting block, to make wiring modifications on the meter side of the shorting block.
3. Once the intended wiring modifications have been completed, remove the shorting screws from the positive CT lead terminals in order to return the meter to proper operation.
4. Refer to this video for additional information  
<http://www.schneider-electric.us/en/faqs/FA274542/>

Figure 1 – Mounting Block Installation

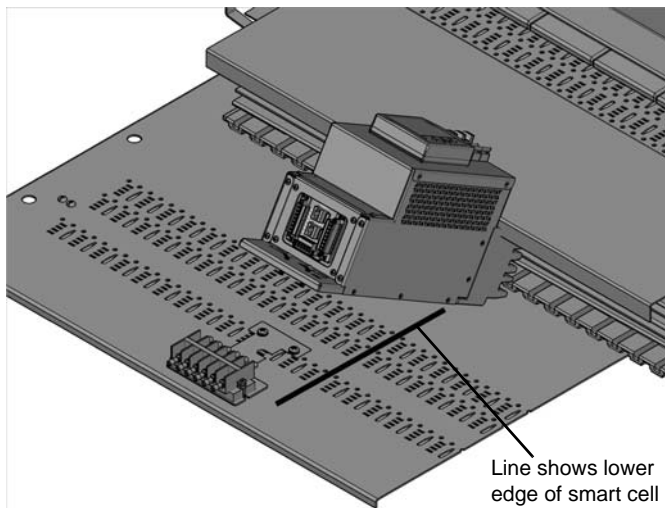


Figure 2 – Smart Cell Installation

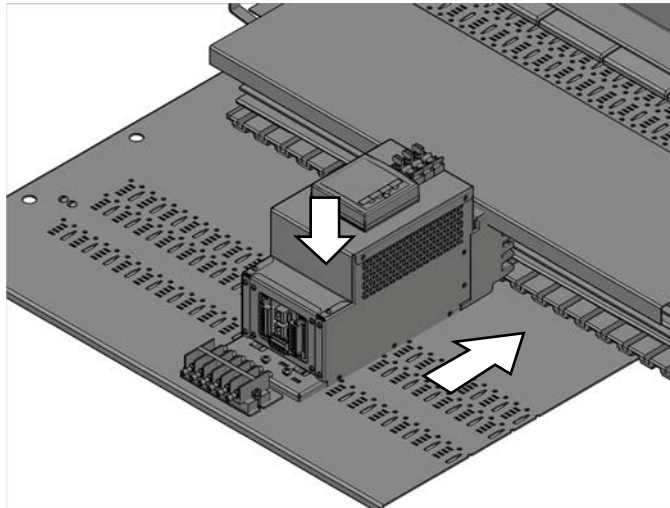


Figure 3 – Wide Left / Bottom Feed

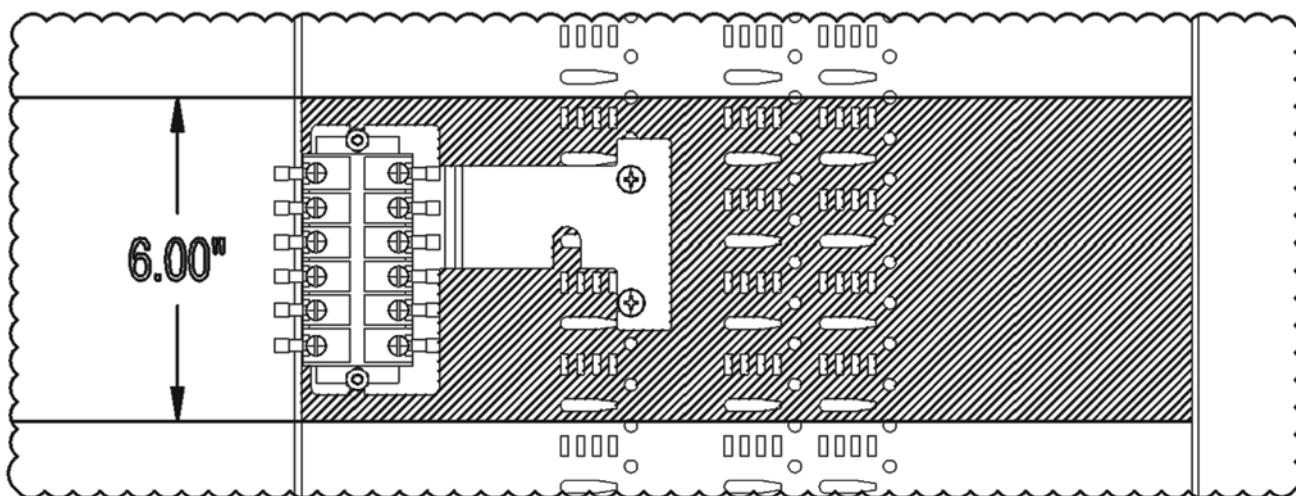
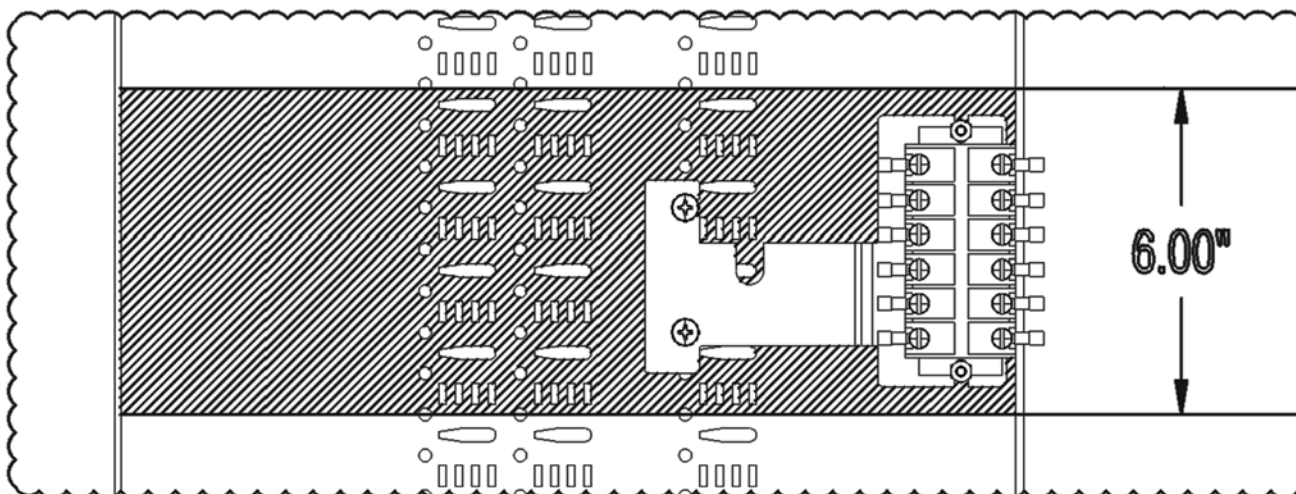
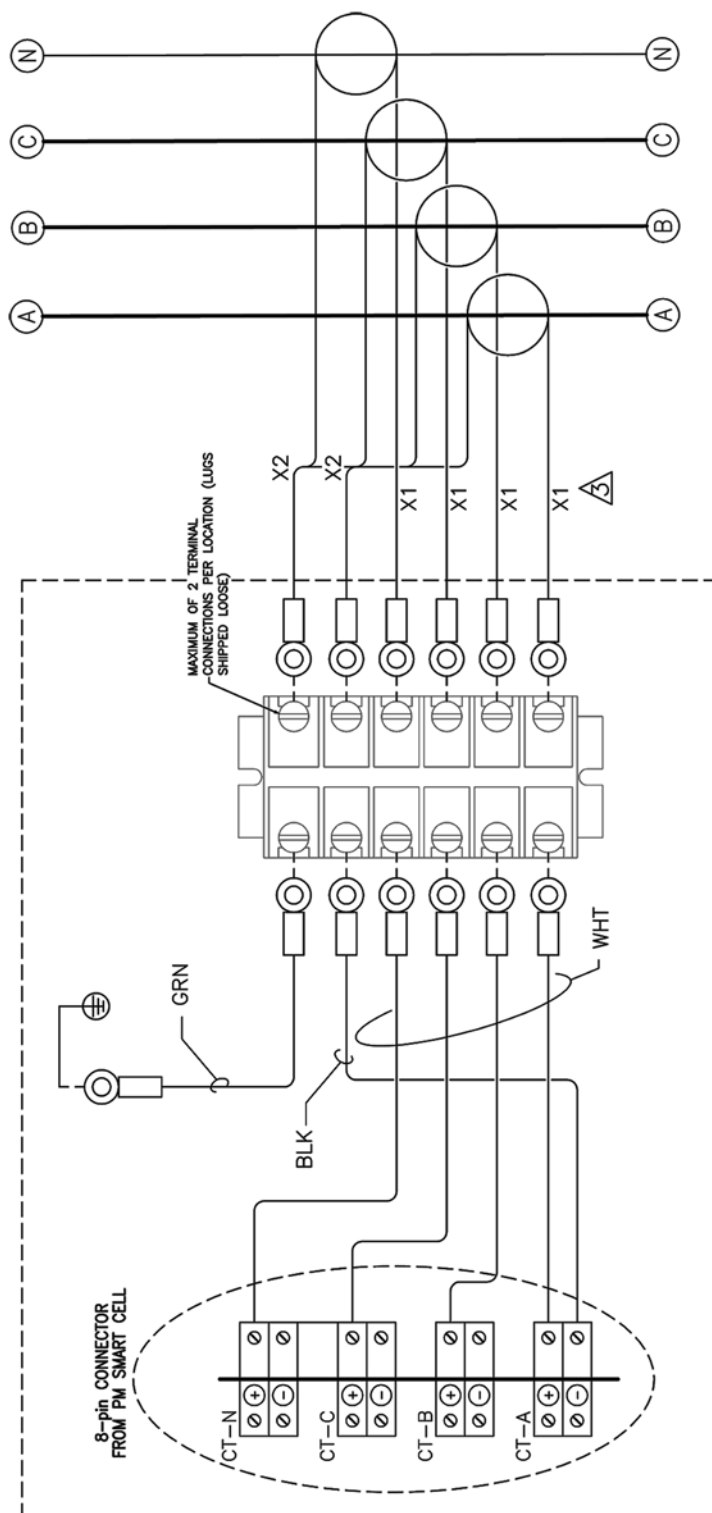


Figure 4 – Wide Right / Top Feed



ENGLISH

Figure 5 – Installation Schematic



NOTES:

- 1) RING TERMINALS FOR CURRENT TRANSDUCCERS (CTs) SHIPPED LOOSE. CUSTOMER TO CRIMP ONTO PRIMARY AND SECONDARY WIRES FROM CTs USING APPROPRIATE CRIMP TOOL.
  - 2) DANGER: CURRENT TRANSDUCER (CTs) PRIMARY LEADS MUST BE SHORTED PRIOR TO DISCONNECTING THE 8-PIN CONNECTOR FROM THE SMART CELL UNIT. UTILIZE THE SHORTING BLOCK PROVIDED. FAILURE TO FOLLOW THESE INSTRUCTIONS WILL RESULT IN DEATH, SERIOUS INJURY AND/OR EQUIPMENT DAMAGE.
- ⚠ X1=SECONDARY1=S1="+"; X2=SECONDARY2=S2="+". REFER TO CT MANUFACTURER SPECIFICATIONS FOR EXACT NOMENCLATURE.

Electrical equipment should be installed, operated, serviced, and maintained only by qualified personnel. No responsibility is assumed by Schneider Electric for any consequences arising out of the use of this material.

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