**Hazard of Electric Shock, Explosion, or Arc Flash**

- Follow local electrical work practices. See NFPA 70 in the US, or applicable local codes.
- This equipment must be installed and serviced by qualified electrical personnel.
- Read, understand and follow the instructions before installing this product.
- Turn off all power supplying equipment before working on or inside the equipment.
- Any cover that may be displaced during the installation must be reinstalled before powering the unit.

**NOTICE**

- This product is not intended for life or safety applications. The installer is responsible for conformance to all applicable codes. Mention this product inside a suitable fire and electrical enclosure.
- Do not use voltage sensing devices to completely disconnect the GP from the supply source. Place the device in close proximity to the equipment and within easy reach of the operator, and install it as the disconnecting device.

Power disconnecting device shall meet the relevant requirements of UL 693 and EN 60755-1 and shall be suitable for the application. In the US and Canada, disconnecting devices are to be used. Provide permanent protection and disconnecting device for device conductors with approved current limiting devices suitable for protecting the witnesses. If the equipment is used in a manner not specified by the manufacturer, the protection provided by the device may not be sufficient.

**DISCONNECT POWER PRIOR TO INSTALLATION.**

Any covers that may be displaced during the installation must be reinstalled before powering the unit.

Mount the meter in an appropriate electrical enclosure near equipment to be monitored.

Exposure to VFD harmonics may cause permanent damage to this device. Power line harmonics can be harmful or fatal if not properly mitigated. The installation shall not cause harm to personnel or damage to equipment. To prevent potential shock, the installer shall ensure that the equipment is installed in accordance with the manufacturer's instructions. To reduce the risk of electrocution, the installer shall ensure that the equipment is installed in accordance with the manufacturer's instructions. To prevent potential shock, the installer shall ensure that the equipment is installed in accordance with the manufacturer's instructions.

**SUPPORTED SYSTEM TYPES**

Power and Energy Meters have a variety of different possible system wiring configurations (see Wiring Diagrams, page 9-10). To configure the meter, set the System Type to the line interface that matches the requirements of the user interface. The system type determines which phase loss algorithm is to be used. The phase loss algorithm is configured as a percent of the output of the device may be impaired.

**DIMENSIONS**

Table of dimensions for the product:

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Height</td>
<td>4.2”</td>
</tr>
<tr>
<td>Width</td>
<td>4.2”</td>
</tr>
<tr>
<td>Depth</td>
<td>1.9”</td>
</tr>
</tbody>
</table>

**SPECIFICATIONS**

- **Abnormality Accuracy:**
  - **Normal Power and Energy**
  - **Modbus**
  - **Frequency Range**
  - **Measurement Input Range**
  - **DC Input**
  - **Max Inrush Current**
  - **Accuracy Compliant**
  - **RoHS**

- **MES Complete Specifications:**
  - **Design and Marking Information**
  - **System Type**: Ed Wye
  - **Connection System**: 4 3 A, 4 3 A, 4 3 A
  - **System Type**: Phase Loss Measurements Wiring Diagram
  - **System Type**: Number of inputs, Number of outputs, Number of inputs, Number of outputs, Number of inputs, Number of outputs
  - **System Type**: Compliant
  - **System Type**: RoHS

- **Installation:**
  - **System Type**: Three-Phase Wiring
  - **System Type**: Single-Phase Wiring
  - **System Type**: Three-Phase Wiring

- **System Type**: Three-Phase Wiring
  - **System Type**: Single-Phase Wiring
  - **System Type**: Three-Phase Wiring

- **System Type**: Single-Phase Wiring
  - **System Type**: Three-Phase Wiring
  - **System Type**: Single-Phase Wiring

**PRODUCT DIAGRAM**

- **System Type**: Single-Phase Wiring
  - **System Type**: Three-Phase Wiring
  - **System Type**: Single-Phase Wiring

**CAUTION**

- **Use of Equipment Data:**
  - **System Type**: Single-Phase Wiring
  - **System Type**: Three-Phase Wiring
  - **System Type**: Single-Phase Wiring

**To avoid distortion, use parallel lines for control power and voltage inputs.**

The following symbols are used in the wiring diagrams on the following pages.

- **Symbol**: Voltage Disconnect Switch
- **Symbol**: Fuse (installers are responsible for ensuring compliance with local requirements. No fuses are installed with the device.)
- **Symbol**: Earth ground
- **Symbol**: Current Transformer
- **Symbol**: Potential Transformer
- **Symbol**: Protection containing a voltage disconnect device with a heat or disconnect circuit breaker. The protection device must be used for the available thermal current at the connection point.

- **System Type**: Single-Phase Wiring
  - **System Type**: Three-Phase Wiring
  - **System Type**: Single-Phase Wiring

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Setting In Structure

**NOTES:**
- RS-485 communications.
- Wiring diagram.

**Diagram 1:** 1-Phase Line-to-Neutral 2-Wire System 1 CT

When tightening terminals, ensure that the correct torque is applied: 0.37-0.44 ft·lb

Connect Shield to Earth Ground somewhere on the RS-485 bus.

Shield is not internally connected to Earth Ground.

Wire the RS-485 bus as a daisy chain from device to device, without any stubs. Use 120 Ω.

The terminal's voltage and current ratings are compliant with the requirements of the EIA.

Provide overcurrent protection and disconnecting devices appropriate for the wiring.

The earth connection is required for electromagnetic compatibility (EMC) and is not a protective earth ground.

**Diagram 2:** 1-Phase Line-to-Line 2-Wire System 1 CT

**Diagram 6:** 3-Phase 4-Wire Wye Connection 3 CT 3 PT

**CONTROL POWER**

Open Control Panel Power (Phase to Phase)

Open Control Panel Power (Phase to Neutral)

Set Current Transformer (CT) Connection

Set Potential Transformer (PT) Connection

**SOLID-STATE PULSE OUTPUT**

The Solid-state output is rated for 30VDC max. Maximum load current: 30mA or 5VDC max. A short circuit rating: 500mA or 5VDC max.

The meter has one normally open (NO) Form A output and one normally closed (NC) solid-state output.

For technical support, contact Kele at 888-357-5335 (toll free USA) or via email at info@kele.com.

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