INSTRUCTION MANUAL

1. Safety warnings

○ This instrument has been designed, manufactured and tested according to IEC 61010 and Safety requirements for Electronic measuring apparatus, and delivered in the best condition after passing quality control tests. This instruction manual contains warnings and safety notes which have to be observed by the user to ensure safe operation of the instrument and to maintain it in safe condition. Therefore, read through these operating instructions before using the instrument.

○ Read through the safety instructions contained in this manual before using the instrument.

○ Keep the manual available as a quick reference whenever necessary.

○ The instrument is to be used only in its intended applications. The operating instructions described in the manual must be observed.

○ Understand and follow all the safety instructions contained in the manual. It is essential to read the instructions wherever the symbol appears in the manual.

○ DANGER is reserved for conditions and actions that can cause serious or fatal injury.

○ WARNING is reserved for conditions and actions that can cause serious or fatal injury.

○ CAUTION is reserved for conditions and actions that can cause minor injury or instrument damage.

2. Features

○ This is a clamp sensor for our Power meter.

○ Designed to international safety standard IEC61010-2-032.

3. Instrument layout

4. DIN plug pin assignment

5. Specifications

<table>
<thead>
<tr>
<th>Terminals</th>
<th>Pin Order</th>
<th>Electric Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Input side</td>
<td>1-7</td>
<td>A0(A000mA<del>114A/pin) A0(DCA0mA</del>37A/pin) A0(DCA0mA<del>22A/pin) A0(DCA0mA</del>14A/pin)</td>
</tr>
<tr>
<td>Output side</td>
<td>8-14</td>
<td>B0—B0.999V(B0.999V<del>0V/pin) B0(DCB0.999V</del>0V/pin) B0(DCB0.999V~0V/pin)</td>
</tr>
<tr>
<td>Measuring range</td>
<td>A0—1000A</td>
<td>A0—200A</td>
</tr>
<tr>
<td>Input side</td>
<td>1-3</td>
<td>0.1V (1.25V<del>0.125V / 100mV) 0.1V (1.25V</del>0.125V / 100mV) 0.1V (1.25V~0.125V / 100mV)</td>
</tr>
<tr>
<td>Output side</td>
<td>4-6</td>
<td>0.1V (1.25V<del>0.125V / 100mV) 0.1V (1.25V</del>0.125V / 100mV)</td>
</tr>
<tr>
<td>Temperature range</td>
<td>0℃~+40℃</td>
<td>0℃~+40℃</td>
</tr>
<tr>
<td>Measurement accuracy</td>
<td>±0.15%/±0.2%</td>
<td>±0.15%/±0.2%</td>
</tr>
<tr>
<td>Output impedance</td>
<td>Approx. 1Ω</td>
<td>Approx. 2Ω</td>
</tr>
<tr>
<td>Conductor voltage</td>
<td>Up to 200V DC, 250V AC</td>
<td>Up to 200V DC, 250V AC</td>
</tr>
</tbody>
</table>

Safety symbols

- Indicates Instrument with double or reinforced insulation
- Indicates that this instrument can clamp on bare conductors.
- Indicates AC

<table>
<thead>
<tr>
<th>Measurement Category</th>
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</thead>
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| For safe operation of measuring instruments, IEC 61010 establishes safety standards for various electrical environments, categorized as CAT I, II, III, or IV. The IEC categories correspond to electrical environments with greater momentary energy, so a measuring instrument designed for CAT III environments can endure greater momentary energy than one designed for CAT I.

Circuits which are not directly connected to the mains power supply.

CAT I: Electric circuits of equipment connected to an AC electrical outlet by a power cord.

CAT II: Primary electrical circuits of the equipment are connected directly to the distribution panel, and cables from the distribution panel to outlets.

CAT IV: The circuit from the service entrance, and to the power meter and primary protector device (distribution panel).

6. Operating Instructions

DANGER

○ Never make measurements on a circuit in which the electrical potential exceeds AC300V using MODEL8124, MODEL8125 and 8126 in order to avoid possible shock hazard.

○ The transformer jaws are made of metal and their tips are not completely insulated. Be especially careful about the possible arcing where the measured object has exposed metal parts.

○ Always keep your fingers and hands behind the instructions on the instrument to avoid the possible shock hazard.

○ Do not step on the equipment or touch the instrument when it is being damaged.

○ The output current shall be removed or connected without clamping a conductor. Otherwise, it may cause ripples in the output current to direct sunlight, high temperatures, humidity, or dew.

○ Never give shocks by electric vibration or drop, which may damage the instrument.

○ Use a damp cloth and detergent for cleaning the instrument. Do not use abrasives or solvent.

6-1 Measurement procedures

(1) Connect the Output connector to the Input terminal of the measuring instrument.

(2) Press the Trigger to open the transformer jaws and clamp onto one conductor.

In this case, the measured conductor shall be at the center of the jaws. When connecting a sensor with a Power meter (our Power meter, MODEL8300, etc.) match the arrow mark (Power source to load), which is indicated on the transformer jaws with the following direction in order to synchronize the phases of measured current and output voltage.

(3) Ensure that the tips of transformer jaws are firmly closed.

○ Take sufficient care to avoid shock, vibration or excessive force when handling the instrument.

○ Otherwise, precisely adjusted transformer jaws will be damaged.

○ When transformer jaws do not fully close, never try to close them by force, but make them to move to and try again. If a foreign substance is stuck in the jaws, remove it.

○ When making current measurements, keep the transformer jaws fully closed.

○ Otherwise, accurate measurements cannot be taken.

Maximum conductor sizes as follows:

MODEL8124: 60mm2 in diameter
MODEL8125: 85mm2 in diameter
MODEL8126: 24mm2 in diameter

Hold the inserting part (except for the cable) and disconnect the Output connector from the measuring instrument so as not to cause a break in the cord.