CUSTOMER INTERFACE RELAY
INSTRUCTION SHEET

MOUNTING POSITION - The CIR-3PS+ may be mounted in any position.

POWER INPUT - For 120VAC, use the 120V terminal for the "hot" lead and the NEU terminal for the neutral power supply lead. For 208 to 277VAC, use the 277V terminal for the "hot" lead and the NEU terminal for the neutral power supply lead. The EGND terminal MUST be connected to the power supply ground.

METER CONNECTIONS - Connect the K, Y, & Z leads from the meter to the KYZ Input #1 terminals in the utility's compartment. K to K; Y to Y; and Z to Z. The CIR-3PS+ provides the +13VDC wetting (sense) voltage to the meter's KYZ terminals. The CIR-3PS+’s KYZ input may be either 2 or 3-Wire input. Place the jumper shunt on the correct pair of pins on JP1 for the input mode. The CIR-3PS+ also has a separate 2-wire (Form A) input for End-of-Interval pulses or any general Form A use. Connect the 2-Wire EOI leads from the meter to T1 and T2 on the terminal strip in the utility compartment. T1 supplies +13VDC wetting (sense) voltage to the meter.

CUSTOMER OUTPUT - The customer's outputs are located at the bottom of the CIR-3PS+ board in the customer compartment. If the customer's output selector switch is in the 2W (2-wire) position, each change of input pulse state (K to Y or K to Z) will cause a single output pulse of 1/10 of a second (100 mS) to occur between the output terminals K & Y. If the switch is in the 3W (3-Wire) position, each K to Y closure will result in a K to Y output. A K to Z closure will result in a K to Z output. The CIR-3PS+ contains an input debouncing circuit which eliminates false pulses. If more than one K to Y input (pulse) occurs when the relay changes state, only the first pulse will be acted upon. This is also true for the K to Z input. Arc suppression for the contacts of the solid-state relay are provided internally. Set the EOI output pulse switch to either "S" for short (fixed length) pulses or "L" for long (actual length) pulses. If set to Short pulses, select the output time on JP2 and JP3 as indicated by the table on the board or on the next page.

UTILITY OUTPUT - The utility's KYZ output is located in the utility compartment and is a fixed 3-wire (Form C) output. Arc suppression for the contacts of the solid-state relay are provided internally.

FUSES - Fuses are 3AG fast-blow type. Fuse F2 in the utility's compartment is coordinated with the customer's fuse F1. Fuse F2 must be larger than Fuse F1. F2 is 3/4 Amp maximum, and F1 is 1/2 Amp maximum. Fuse F3 (1/2 Amp) protects the utility's output only. Fuse F4 (1/2 Amp) protects the customer's time (EOI) output only.
CIR-3PS+ Wiring Diagram

To Line

1 2 3 NEU

To Loads

Service Entrance

Electric Meter

K
Z
Y

KWh Pulse Initiator

Y
Z

Out 1

To Recorder, SCADA, etc.

Out 2

To EMS

Customer Compartment

CIR-3PS+ Customer Interface Relay

T1
T2

Power Supply Connections

EOI Short Pulse Length

<table>
<thead>
<tr>
<th>JP3</th>
<th>JP2</th>
<th>Period (ms)</th>
</tr>
</thead>
<tbody>
<tr>
<td>OUT</td>
<td>OUT</td>
<td>100</td>
</tr>
<tr>
<td>OUT</td>
<td>IN</td>
<td>300</td>
</tr>
<tr>
<td>IN</td>
<td>OUT</td>
<td>500</td>
</tr>
<tr>
<td>IN</td>
<td>IN</td>
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