



## **OPERATING INSTRUCTIONS – CATALOG NO. 630 Light Weight Meter Test Kit**

NOTE: If installing a Radian Standard into the Cat. 630 test kit, see connection and installation diagrams part number 630-170, supplied with these instructions.

Before connecting any leads to the Cat 630:

- 1) Move LOW BURDEN/HIGH BURDEN switch to “LOW BURDEN” position.
- 2) Move 100% P.F./ 50% P.F. switch to “100% P.F.” position.
- 3) Rotate current “ADJUST” fully counter clockwise.
- 4) Set current AMPERES to selected test value of current.
- 5) Connect current and potential leads to the Cat 630 Test Kit and meter under test.  
See example for form 1s meter.
- 6) Note that the potential that is externally wired into the unit will automatically be sensed so long as that potential is either 120V, 240V, 277V, or 480V and within a tolerance band of +/-10%. If the potential being wired to the unit does not fall within these bands, the unit will not operate properly.
- 7) Place the FORWARD/REVERSE switch to Forward.

**CAUTION: NO SWITCHING OR CHANGING OF CURRENT LEADS SHOULD BE MADE UNLESS THE CURRENT “ADJUST” IS FIRST ROTATED FULLY COUNTER CLOCKWISE.**

**CAUTION: ANY UNUSED CURRENT PHASES MUST BE SWITCHED TO THE “OFF” STATE BEFORE ENERGIZING THE UNIT. FAILURE TO DO SO COULD CAUSE DAMAGE.**

Make potential and current connections to two-wire energy source and meter under test according to diagram. Connect the current meter (clamp) to LOAD output wire at current binding post(s) of the Cat 630.

Rotate current “ADJUST” clockwise until the current meter reads desired amperage.

Run meter test according to your company’s Meter Testing Procedures.

For lagging power-factor test, move the power-factor switch to the 50% P.F. position.

For high test burdens, usually at 30 amperes with all three phase currents turned “ON” and the current “ADJUST” at full clockwise rotation, the Cat 630 may not deliver full scale value at the LOW-BURDEN setting. To correct for this, reduce the current “ADJUST” to zero and move the “BURDEN” switch to HIGH-BURDEN, then increase current “ADJUST” until the desired current is reached.

To simulate customer generated power, place the FORWARD/ REVERSE switch to Reverse. This will create a 180 degree phase shift in the Load output current.



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Figure 1: Example connections with Form 1S meter:

