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# Polyphase Socket Tester

**K-281**

## INSTALLATION/USERS MANUAL



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Specifications are subject to change without prior notice.

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## TESTING INSTRUCTIONS

**NOTE: WEAR ALL APPROPRIATE AND REQUIRED PPE**

### Step 1:

Place Polyphase Tester so the bottom (load) blades or the tester touch the bottom (load) jaws of the meter socket.

1. If the Power Lights DO NOT TURN ON, proceed to Step 2.
2. If Power Lights turn on, it indicates backfeed, internal jumpers in the socket, or a reverse of line and load wires. DO NOT proceed to Step 2 and DO NOT set the meter.

### Step 2:

Insert the Polyphase Tester into the meter socket.

**NOTE:** The customer's main switch should be open for this test. If this cannot be done, it is possible to blow the fuses in the tester and cause the fault lights to turn on provided an energized load of 30 amps or more is present. The meter installer should be aware of this possibility and should proceed according to utility policy.

1. If only one Power Light or any fault lights turn on, DO NOT set the meter. After the problem is corrected, replace the blown fuses and repeat the testing procedure.
2. If both Power Lights turn on and no fault lights turn on, it is safe to set the meter.

## ANALYZING THE RESULTS

**In reference to Step 1 of testing procedure. This step is only necessary to assure correct metering.**

**Backfeed Indication:** One or both Power Lights turn on. The Polyphase Tester will not detect a backfeed condition where both load terminals are fed by the same phase. DO NOT SET METER.

**Internal Jumper Indication:** One or more Power Lights will turn on. This test will detect any devices that jumper or connect the line and load terminals in the socket. DO NOT SET METER.

**Reversal of Line and Load Wires Indication:** Both Power Lights will turn on. If the socket box is wired incorrectly resulting in load wires connected to the bottom terminals of the socket, both Power Lights will turn on. DO NOT SET METER.

**In reference to Step 2 of testing procedure. This step is necessary to assure the meter is set safely.**

**Ground Indication:** One or more fault lights turn on. If a ground exists on one or more phase wires, the respective fuse will blow, allowing the fault lights to turn on. DO NOT SET METER.

**Short Circuit Indication:** One or more fault lights turn on. If a phase to phase, phase to ground, or phase to neutral short circuit exists, one or more fuses will blow and allow the respective fault lamp to turn on. DO NOT SET METER.

**Backfeed Indication:** One or more fault lights turn on. If an out of phase backfeed exists and is not detected in Step 1, one or more fuses will blow, allowing the respective fault lamps to turn on. DO NOT SET METER.