



P-277 POLYPHASE METER SOCKET TESTER

Product Data Sheet

The Brooks P-277 Polyphase Socket Tester is a safe and effective way to protect the meter installer from dangerous fault situations on 277/480 volt meter sockets.

FEATURES

- Detects grounds, wiring errors, short circuits, and backfeed conditions on 277/480 volt installations.
- Provides an “extra layer” of protection to the meter installer.
- Convenient handle makes installation safe, quick, and easy.
- Easy to see lights and fault lights indicate whether the meter is safe to set.
- Two replacement fuses included.

NOTE: THE P-277 METER SOCKET TESTER IS NOT INTENDED AS A REPLACEMENT FOR NORMAL SOCKET CHECK PROCEDURES. IT WILL NOT DETECT BACKFEED IN ALL SITUATIONS.

APPLICATIONS

This meter socket tester should be used by meter installers to check 277/480 volt meter sockets for backfeed, grounds, wiring errors, and short circuits PRIOR to setting the meter.



MODEL NUMBER

- **P-277 Standard Polyphase**

TESTING PROCEDURE

Step 1:

Place P-277 so the bottom (load) socket blades of the tester touch the bottom (load) of the meter socket.

1. If the safe lights of the tester DO NOT GLOW, proceed to Step 2.
2. If safe lights glow it indicates backfeed, internal jumpers in the socket, or reverse of line and load wires. DO NOT proceed to Step 2 and DO NOT set the meter.

Step 2:

Insert the P-277 into the meter socket. 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 glow 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 safe light or any fault lights glow, DO NOT set the meter. After problem is corrected, replace the blown fuses and repeat the testing procedure.
2. If both safe lights glow and no fault lights glow, it is safe to set the meter.

ANALYSIS OF RESULTS

Reference is made to Step 1 of testing procedure.

Backfeed Indication: One or more safe lights glow. The P-277 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 safe lights will glow. 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 & Load Wires Indication: Both safe lights will glow. If the socket box is wired incorrectly resulting in load wires connected to the bottom terminals of the socket, both safe lights will glow. DO NOT SET METER.

Reference is made to Step 2 of testing procedure.

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

Short Circuit Indication: One or more fault lights glow. 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 glow. DO NOT SET METER.

Backfeed Indication: One or more fault lights glow. 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 glow. DO NOT SET METER.

THE P-277 SHOULD NEVER BE LEFT IN THE SOCKET FOR ANY TIME LONGER THAN NEEDED TO PERFORM THIS TEST. REMOVE IMMEDIATELY AFTER TESTING.

Replacement fuses: Bussman KTK 30 only! Fault lamps should be tested periodically by removing the fuses. If operating correctly, this will cause the fault lamps to glow.