

DESCRIPTION

- The Trailer Connection Panel (TCP) allows for a safe and secure connection between the *HindlePower* Mobile DC Power System and substation DC bus for battery maintenance or emergency use.
- The TCP standard design creates uniformity throughout utilities and includes NEMA 4X twist-lock connectors, test points, power indicators, and a 120Vac GFI outlet.
- There are no adjustments or calibration of the TCP.

OPTIONS

SECONDARY DC CONNECTION TERMINALS

- The TCP can be equipped with a second set of dc connection terminals for connecting ancillary user equipment (e.g. DC load bank).

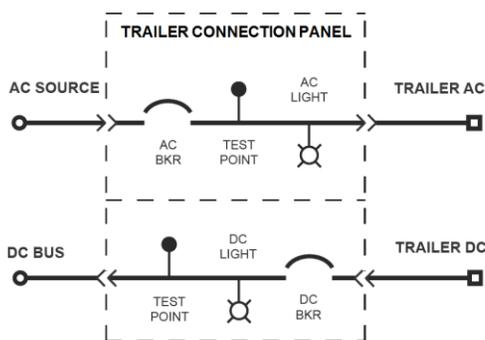
MOLDED-CASE SWITCHES

- The TCP can be equipped with ac and dc molded-case switches.

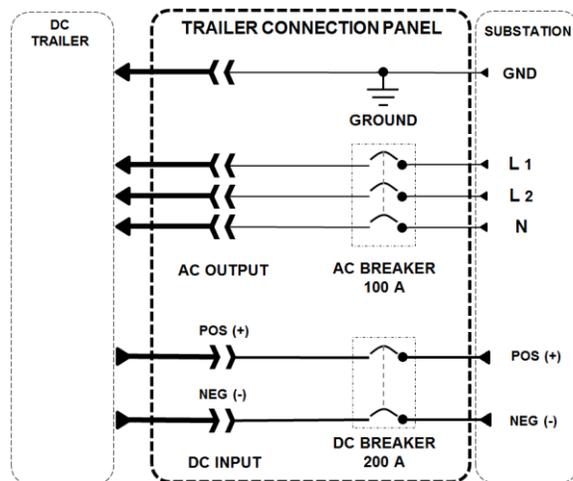
CIRCUIT BREAKERS

- The TCP can be equipped with ac and dc circuit breakers.

SCHEMATIC



CONNECTION DIAGRAM



INSTALLATION

⚠ CAUTION: There may be dangerous voltages inside the TCP. When performing tasks inside the enclosure, make sure to disconnect all ac and dc power sources and lock out breakers and/or safety switches. Safety goggles and gloves should be worn while performing this procedure.

Wall Mounting:

- Locate a dry, solid wall surface near the ac feed, or near the dc bus for easiest cable connection.
- Use 1/4" or 5/16" hardware to wall-mount the enclosure, using the exterior mounting brackets.
- The TCP does not feature standard pre-fab conduit knockouts. The top or upper rear of the cabinet should be modified by the installer to allow cable entry.

Electrical Connections:

- Power and ground wiring to user terminals (molded-case switch, circuit breakers, or ground stud) in the TCP must be rated for the *full* ac load requirements of the trailer and the *full* dc load requirements of the bus.
- Unbolt and remove inner panel to access the connection terminals located on the back side of the panel.
- Connect ground cable to the TCP ground stud using the provided hardware. (1/4"- 20, ZPS)
- Connect ac feed cables to the terminals of the ac molded-case switch or ac circuit breaker.
- Connect facility dc bus pos (+) to the pos (+) terminal of the TCP primary dc molded-case switch or dc circuit breaker.
- Connect facility dc bus neg (-) to the neg (-) terminal of the TCP primary dc molded-case switch or dc circuit breaker.
- If provided, connect facility dc bus pos (+) to the pos (+) terminal of the TCP secondary dc molded-case switch or dc circuit breaker.
- If provided, connect facility dc bus neg (-) to the neg (-) terminal of the TCP secondary dc molded-case switch or dc circuit breaker.
- Connect your ac feed wires to the terminals of the 120Vac GFI outlet.
- Check all connections for tightness.
- Reinstall inner panel while being careful not to pinch any wiring.
- Installation is complete

OPERATION

⚠ CAUTION: There may be dangerous voltages inside the TCP. Before using the TCP please read all instructions and cautionary markings on A) this equipment, B) the connecting trailer, and C) any other equipment to be used in conjunction with the TCP. Safety goggles and gloves should be worn while performing this procedure.

User Connections:

1. Follow your trailer's instructions for proper parking procedures.
2. Follow your trailer's instructions for proper ac input and dc output configuration.
3. Connect the trailer's ground cable to the TCP ground terminal. Rotate the connector a ¼ turn clockwise to ensure the connection is locked.
* Note: please follow ground requirements according to your companies' practices.
4. Connect the trailer's ac cables from the trailer to the TCP ac terminals. Rotate the connectors a ¼ turn clockwise to ensure the connections are locked.
5. Connect the trailer's dc cables from the trailer to the TCP dc terminals. Rotate the connectors a ¼ turn clockwise to ensure the connections are locked.
6. Close AC feed breaker (CB1) in TCP and power your trailer according to trailer's instructions.
7. Close the TCP DC breaker (CB2) to parallel the trailer's on-board battery with the station battery.
8. If your TCP is equipped with an auxiliary DC connection, you can connect the necessary equipment (e.g. DC load bank). Rotate the connectors a ¼ turn clockwise to ensure the connections are locked.
9. Close the auxiliary DC connection's circuit breaker (CB3) when ready.
10. Electrical connections are complete.