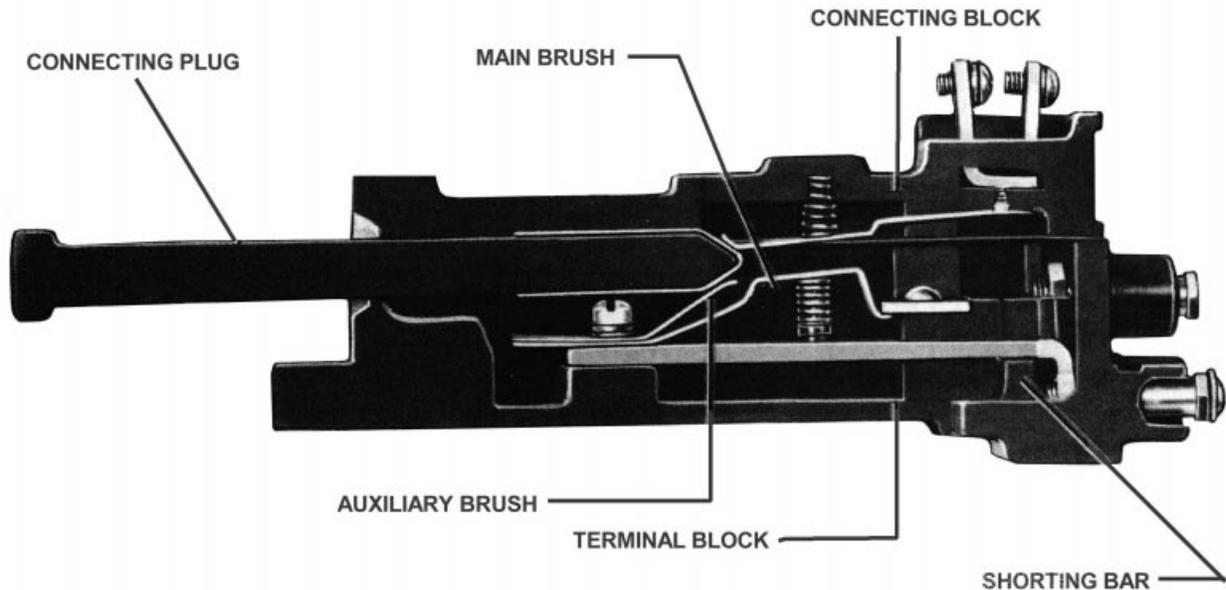


3.1 DESCRIPTION

The components of the relay are mounted on a cradle assembly that can easily be removed from the relay case. The cradle is locked in the case by latches at the top and bottom. The electrical connections between the case blocks and the cradle blocks are completed through removable connection plugs to permit testing the relay in its case, as shown below. The cover is attached to the front of the case and includes two interlocking arms that prevent the cover from being restored until the connection plugs have been inserted.



NOTE: After engaging auxiliary brush, connecting plug travels ¼-inch before engaging the main brush on the terminal block

Figure 3-1: REMOVABLE CONNECTION PLUG

The case is suitable for semi-flush mounting on panels. Hardware is available for all panel thicknesses up to two inches (2"). A panel thickness of 1/8 inch will be assumed unless otherwise specified on the order. The printed circuit boards are mounted behind the nameplate and can be accessed by removing the four screws securing the nameplate. The boards are mounted horizontally in guides.

An internal connection diagram for the MDP is shown on the following page.

3

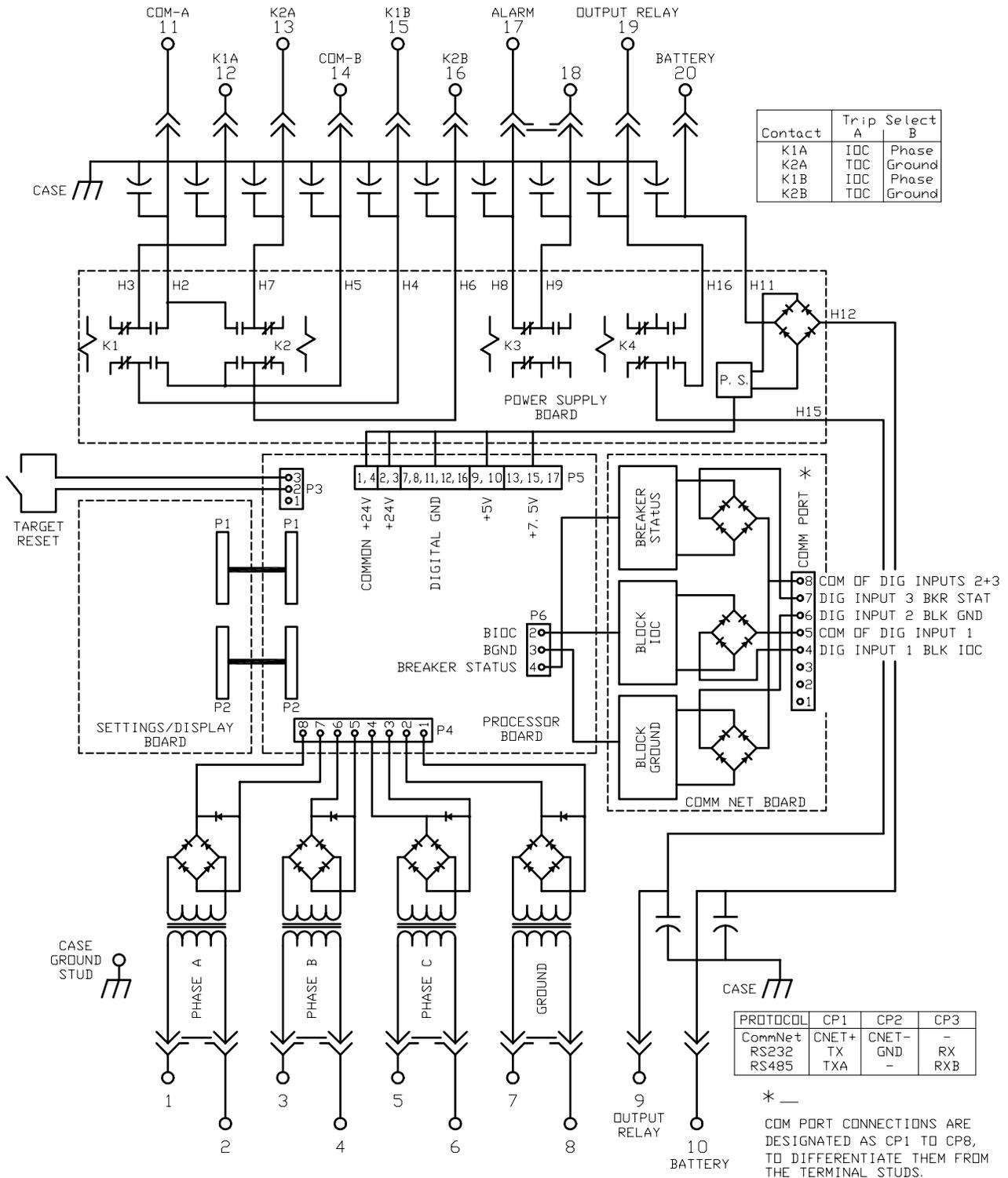


Figure 3-2: INTERNAL CONNECTIONS DIAGRAM

The MDP relay has eight light-emitting diodes (LEDs) at the top of the front of the relay in order to indicate the following situations:

- Ready. A green LED indicates that the relay is in operation.
- Pickup. An amber LED indicates that one of the protection units has picked up.
- Phase A trip. A red LED indicates that the A phase unit has produced a trip.
- Phase B trip. A red LED indicates that the B phase unit has produced a trip.
- Phase C trip. A red LED indicates that the C phase unit has produced a trip.
- Ground Trip. A red LED indicates that the ground unit has produced a trip.

LED combinations are defined as follows:

- Single Phase and Ground red LED indicates phase to ground fault.
- Two Phase red LEDs indicate Phase to Phase fault.
- Three Phase red LEDs indicate Three Phase fault.
- Three Phase and Ground red LEDs indicate three phase to ground fault.
- TOC Trip. A red LED indicates that the TOC element has produced a trip.
- IOC Trip. A red LED indicates that the IOC element has produced a trip.

3.3 RECEIVING, HANDLING, AND STORAGE

This relay contains electronic components that could be damaged by electrostatic discharge currents if those currents flow through certain terminals of the components. The main source of electrostatic discharge currents is the human body, and the conditions of low humidity, carpeted floors and isolating shoes are conducive to the generation of electrostatic discharge currents.

Where these conditions exist, care should be exercised when removing and handling the modules. The persons handling the module should make sure that their body charge has been discharged, by touching some surface at ground potential, before touching any of the components on the modules.

These relays, when not included as part of a control panel, will be shipped in cartons designed to protect them against damage. Immediately upon receipt of a relay, examine it for any damage sustained in transit. If damage resulting from handling is evident, file a damage claim at once with the transportation company and promptly notify the nearest General Electric Sales Office.

The relays should be stored in their original cartons. If the relays are not to be installed immediately, they should be stored indoors in a place that is free from moisture, dust and metallic chips.

