COMBITEST test system
Safer secondary injection testing of protective relays

The COMBITEST relay test system provides a safe, secure and user-friendly method of secondary injection testing of relay protection systems, switchboards, meters and more during commissioning and maintenance.

**Challenges**

- **Efficiency**
  Traditional test systems are often time-consuming and complex, due to the need for proper and safe handling of instrument wiring.

- **Safety**
  The testing personnel are routinely exposed to live wiring, which can create serious safety risks.

- **Space**
  The installation space needed for traditional test systems often require a considerable portion of the cabinet dedicated just for testing.

**The ABB solution**

- **Efficiency**
  COMBITEST quickly and automatically isolates the protection device from the rest of the system and allows testing of its performance and operation limits without requiring the user to interfere with relay or instrument wiring.

- **Safety**
  COMBITEST is a finger-safe solution with no exposure to energized components. It also increases safety for personnel and equipment with an automatic sequence-controlled mechanism.

- **Space**
  Maximum space savings with compact design and up to six times more test points available than with traditional solutions.
**Key benefits**

COMBITEST provides a fail-safe sequence-controlled testing mechanism that automatically:

- Disconnects trip circuits sequentially when the test-plug handle is inserted
- Completely isolates the secondary circuits of the measuring transformers
- Returns the device from test mode to service mode upon withdrawal of test handle

COMBITEST is designed for safety and convenience:

- Finger-safe components
- No risk of accidental opening of the CT secondary or tripping a circuit breaker during testing
- No need for manual test preparations resulting in shorter test duration
- Makes auxiliary station power supply available for test equipment (RTXP 18 and 24 only)

COMBITEST maximizes space savings:

- Available in various sizes with high density of test points and a modular design
- Perfect solution for applications with limited space requirements and expanding test needs

COMBITEST includes a 10-year warranty. More details can be found in our purchase agreement.

**Enabling products**

- **Test switch** (RTXP 8, RTXP 18, RTXP 24)
- **Test-plug handles** (RTXH 8, RTXH 18, RTXH 24)
- **Trip-block plug** (RTXB) – Isolates a trip circuit without interrupting other circuits. Allows the trip output to be monitored and also provides visual indication of an isolated trip circuit.
- **Block-plug handle** (RTXF) – For disconnecting all circuits routed through the test switch.
- **Ammeter test-plug** (RTXM) with local automatic shorting device in case of inadvertent opening of a CT circuit.