FT-14D Digital Flexitest™ Switch

Product presentation
FT-14D Digital Flexitest™ Switch
The innovative test switch for digital switchgear

Product description
The FT-14D integrates low-energy current and voltage sensors within digital switchgear and Relion® protection relays. The FT-14D is a member of ABB’s FT Flexitest™ switch product family.

With the FT-14D a new era of testing protection relays can now be performed safer, faster, and easier.
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Key benefits

**Easy to use** - plug and play connections with clearly defined labels for commissioning, testing, and measuring of the relays and current/voltage sensors

**Safety and protection** - small objects (>1mm) and dripping water protection, together with low energy (mV) through the test switch removing any shock hazards

**Increased efficiency** - capable of simultaneous testing of current and voltage circuits

**Easy to install** - connect and disconnect: rear plug-in RJ45 connectors labeled for each phase
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Key features

FT-14D Switch meets ANSI/IEEE Standard C37.90 and is ESD proven for added security
Connects to low energy current and voltage sensors (millivolts)
No current transformer (CT) shorting required
Two pole options available – 12 potential and 2 current (terminals 13 and 14 for an optional ground CT) or 14 potential poles
Color-coded and lamicoid labeled front handles for easy identification of circuits for testing
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Testing

For testing purposes, use the FT-14D in conjunction with two accessories: the FT-14 separate source test plug and the FT-14D test harness.

- First, connect the FT-14D test harness RJ45 connectors to an interface adapter that is plugged into the protection relay test equipment.
- Then, insert the banana plugs into the FT-14 separate source test plug.
- Last, insert the FT-14 separate source test plug into the FT-14D by placing the switch blades in the open position.

This procedure disconnects the low-energy current and voltage sensors from the relay, and allows testing to be performed with the relay test equipment.
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Typical connection diagram

FT-14D with current and voltage sensors and REF615 sensor relay

General concept FT-14D with separate current and voltage sensors, external ground CT and REF615 sensor relay

1. If separate current and voltage sensors are used in application, use optional R345 adapter to merge the signals from current and voltage sensors. The R345 adapter is not required if only current sensor is used.
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**Ordering information**

The FT-14D is available in 2 styles, each consisting of 14 poles. Twelve potential and 2 current (terminals 13 and 14 for an optional ground CT) or all 14 potential poles can be ordered with any clear or black cover option.

The shallow clear or black covers come standard with the FT-14D.

A test harness, used with existing FT-14 separate source test plugs, can be ordered as an accessory.

<table>
<thead>
<tr>
<th>FT-14D and cover options</th>
<th>Standard style numbers</th>
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<tbody>
<tr>
<td>Clear shallow cover with potential terminals 13, 14</td>
<td>FT4D14T14MN4779-01</td>
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<td>Clear shallow cover with current terminals 13, 14</td>
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<td>Black cover with current terminals 13, 14</td>
<td>FT4D14T12BN4780-02</td>
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<table>
<thead>
<tr>
<th>FT-14D test harness</th>
<th>Style no.</th>
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<td>Quantity 3 (kit for 3 phase testing)</td>
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<tr>
<td>Quantity 1</td>
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