BS14 User Guide

Breaker Simulator for 14-pin Interfaces

Relport

Power Supply

- Use the provided charging cube and cable with a standard 120 VAC source or a power bank.
- The USB port is for power only. There is no data connection on the USB port.

Front Panel Controls

- OPEN/CLOSE breaker controls operate the simulator locally.
- 69 permissive switch (yellow handle):
  - UP allows normal operation.
  - DOWN forces the mechanism open and opens the close signal path.
- Lock: press and hold to toggle. When locked, open and close commands are blocked.
- Signal indicator lights: green for trip signals and red for close signals.
- Rotate button: provides 360 degree orientation control.

Settings

- Bluetooth on/off
- Sense A/B customization
- Colorblind mode with blue/yellow display scheme

Pairing with Relport Mobile App

- Enable Bluetooth in BS14 Settings.
- In the app, select model BS14, scan for devices, and connect to BS14-Serial Number.
- The serial number is located on the bottom of the BS14 and in Help within the BS14 settings.

Current Inputs

The 14-pin interface connectors G, H, J, and K connect to G, H, J, and K on the control cable. These often correspond to I1, I2, I3, and IN in the relay.

- See the specific relay manual for connection details and internal configuration.
- Phase designation is generally programmable in the relay.

Potential Inputs

The 14-pin interface does not include potential connections. Potential input connections must be made directly to the relay.

Breaker Time

- Initially measure operating time by timing manual trip and close operations from the relay.
- Relays can have different debounce times plus input and output delays.
- Many relays process signals at regular intervals, such as 1/8 to 1/4 cycle, which can affect timing results.
- Calibrate open time and close time separately.

Fusing

- Backup fuses are provided in the blue fuse bag.
- Current inputs: 10 A fuses
- Trip and close inputs: 500 mA fuses

Troubleshooting

- If the simulator does not close from the relay, use the red indicator light to verify that a close signal is coming from the relay.
- If there is no indication from the relay, verify that AC voltage is applied to the relay.
- Some 14-pin reclosers will not send a close signal unless supply voltage is present or a battery is connected.
- Check 79 close or stall settings for anything blocking the relay from sending a close signal.

Important Notes

- The simulator is not waterproof. Cover it when used in wet locations.
- The relay ground terminal is connected to the cable connector and internal ground conductors on terminals L, M, and K.
- Terminal K is the current circuit residual connection.

Contact

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