



SEE AND UNDERSTAND

Get a better overview with CPOL3 for wiring tests.

Wiring errors commonly cause protection system failures in power supply systems. Testing the wiring during commissioning and after maintenance work is essential for preventing the danger that wiring errors can cause. This is a time-consuming process, as transformer wiring, trip signals, interlocks, remote control technology, and much more soon add up to hundreds of connections within installations. CPOL2 already provides a tried-and-tested, flexible procedure for testing transformer wiring, which – in contrast to the frequently used “battery method” – does not magnetize current transformers due to the DC-free saw-tooth signal.

However, as the trend toward more and more protection and remote-control technology continues, the complexity of wiring and challenges are rising along with it. We have developed our CPOL3 polarity checker to assist you in these areas. Like the CPOL2, the device can detect saw-tooth polarity test signals, and now, it can also detect AC and DC signals. Furthermore, CPOL3 even has some additional new features that surpass the proven functionality of its predecessor.



Indication when the test signal polarity is correct



Indication when the test signal polarity is incorrect

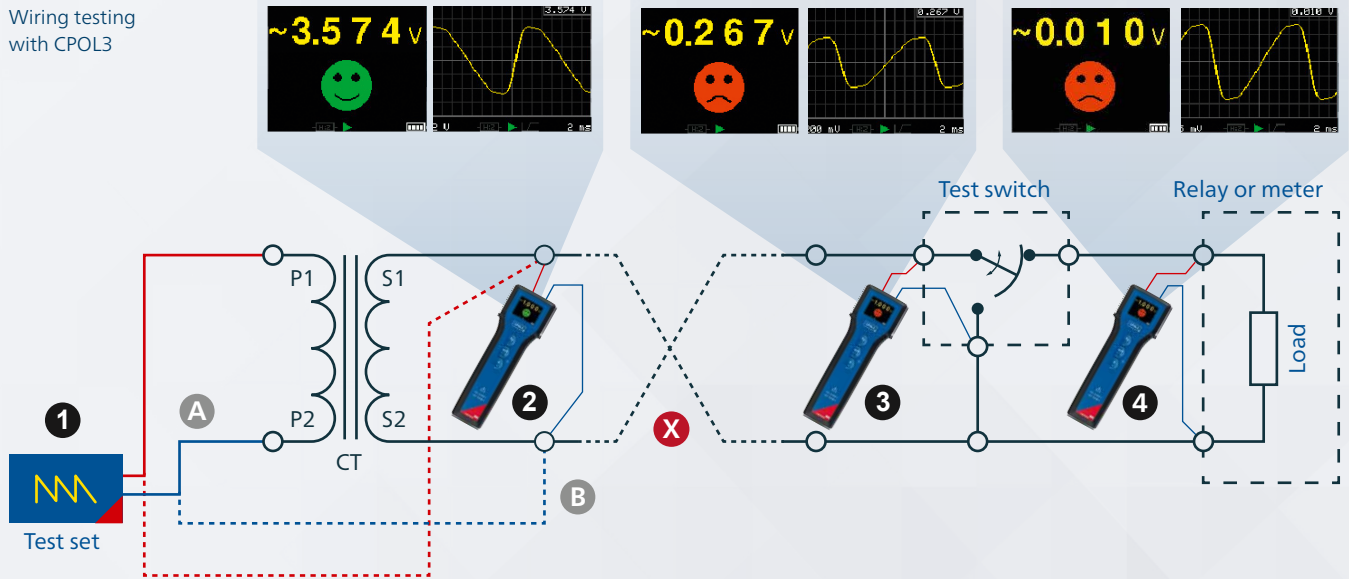


“Oscilloscope” mode for displaying the signal waveform



Spectrum mode (FFT) for detecting coupled signals

Wiring testing with CPOL3



New features

- › Displays the True RMS voltage as well as the polarity
- › “Oscilloscope” mode for displaying the signal waveform
- › Mode with low input impedance (LoZ) to suppress coupled signals
- › Viewing angle independent OLED display with high contrast for optimum readability
- › CPOL3 already displays phase information for future testing software

Highly versatile

You can combine several aspects of a wiring test using CPOL3 in conjunction with one of our test sets, such as COMPANO 100, CMC 353, or CMC 356:

- 1 During the test, introduce a saw-tooth test signal on the primary side (A) or the secondary side (B) of the current or voltage transformer. Primary injection is possible as current and voltage transformers transfer this signal waveform.
- 2 If the polarity is correct, the CPOL3 displays a green happy face. You can also display the signal in “oscilloscope” mode, and you will then see a saw tooth that quickly rises and slowly falls.
- X At this position on the secondary side, there is a wiring error.

- 3 The wiring error causes a polarity reversal, and CPOL3 displays a sad red face. You can also recognize the incorrect polarity from the reversed signal in “oscilloscope” mode.
- 4 In addition to the polarity, CPOL3 also shows you the measured voltage on the display. The nearer the load the measurement is taken, the smaller the loop impedance and displayed voltage. This allows you to easily check the terminal assignment by comparing the voltage and roughly determining the load.

Don't miss out!

Combining polarity checks with additional information by measuring the voltage and displaying the signals is an effective way of detecting the most common wiring errors. It will shorten your testing time while increasing the safety of your installation. ■

FIND OUT MORE ABOUT
THE CPOL3 HERE

[omicronenergy.com/cpol3](https://www.omicronenergy.com/cpol3)

