



VEBKO ONLINE HELP

“Check Test” Tab

Category	tester
Section	AMT Distance Module
Language	English
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After performing "Shot Test" in "Distance" room, it is time to do "Check Test" and "Search Test". In "Check Test" the upper and lower tolerances of the relay which are displayed as dotted line in "Impedance View" are tested and evaluated. To perform a "Check Test", first it is necessary to draw lines named "Check Line" in different parts of the diagram. To draw this line first from "Check Line" section, the origin point of this line is specified in "Origin". In "|Z|" field the test impedance value is entered as a number. Note that if a negative number, for example -2.5 is entered, since there is no negative impedance, this negative value will influence the angle; this means that it will be subtracted from 180 degrees angle in "Phi" field. The impedance angle is entered within the range of -180 to 180 in "Phi" field and if in this cell a number higher than this range is entered, automatically that number will be displayed in the specified range. For example if 455 degrees is entered in this field, 95 degrees will be displayed.

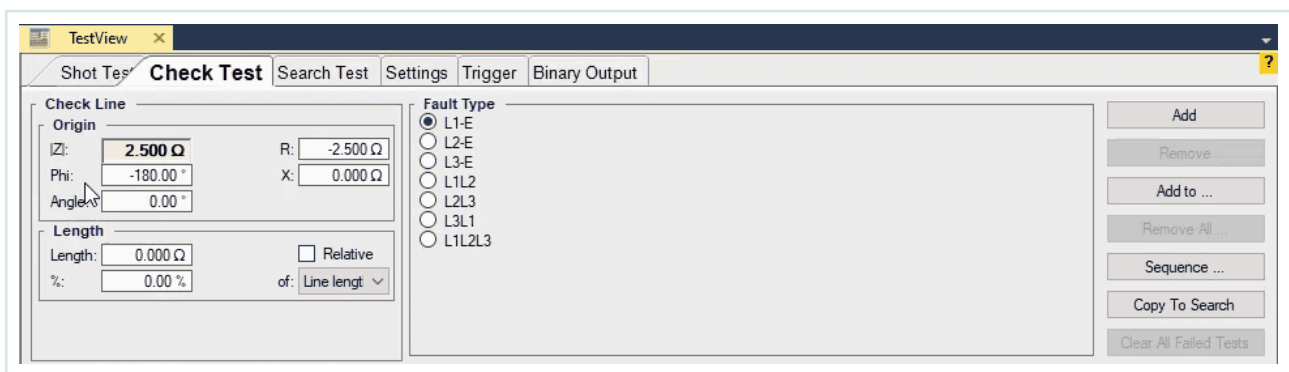


Figure 1

In addition to using |Z| & "Phi" field, you can specify origin impedance using "R" & "X" fields. "R" & "X" are real and imaginary of impedance. In fact the four fields of "|Z|", "Phi", "R" and "X" are linked and by changing the value of one of them, the others change accordingly. In "Angle" field the angle of the "Check Line" and In the cell of the "Length" section the length of the "Check Line" is entered. In "%" field it is possible to specify the length of "Check Line" in terms of a percentage of the length specified in "Test Object" by default. By enabling the "Relative" option, you can make the length of the line dependent on the parameter specified in "of" field. The value of the parameter specified in "of" field is multiplied by the value of the "%" field and the length of the line is formed. If "Relative" is checked, by changing the value of the "of" parameter, the value of the "%" cell does not change and the new value of the "Length" is calculated. If "Relative" checkbox is not enabled and the value of "of" parameter is changed, the value of "Length" field remains fixed and the value of the "%" changes. Note that the drawn "Check Lines" need to have an intersection with at least one of the tolerance lines of the characteristic curve. Then, click on "Add" option so that the "Check Line" is added to the "Check Test" lines table.

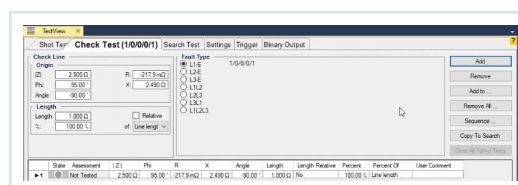


Figure 2

Another method for drawing the "Check Line" is to hold down the left-click and "Ctrl" key on "Impedance View" window and then move the cursor in the desired direction on the characteristic curve. You can see that the information of the drawn "Check Line" is displayed in "Check Test" lines table. After drawing the "Check Line", the software evaluates the crossing place of "Check Line" and tolerance lines as "Shot" test in accordance with the performance of the relay. Here, after performing the test, the relay does not perform in upper tolerance and performs a trip in the lower tolerance so the result of the test is "Passed". Other parts of this section such as "Fault Type" and "Remove All" and "Sequence" etc. options are the same at those of "Shot Test" section which have been explained in previous videos. The only additional option in this section is "Copy to Search". By marking any of the test lines and selecting this option, it is possible to copy the selected line in "Search Test" and by selecting "Add" option in "Search Test", add this line to the "Search Test" test lines table.

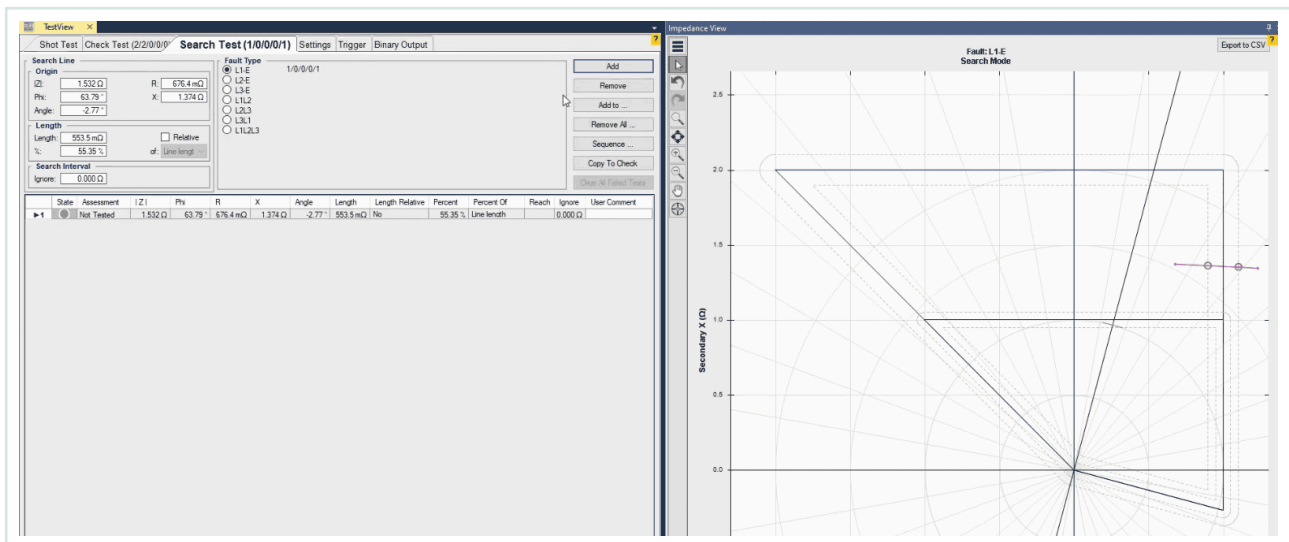


Figure 3

[jg1]CheckTest_tab