

Comment 216:

"Selected resistance values for RPSE_max and RPSE_min which provide adequate verification to Equation (33-13) or control ICon-2P-unb value are dependent upon PSE circuit implementation and as such are left to the designer."

PARSE_ERROR.

I don't know where to begin. What does this mean ?

Analysis of the help call...

1. It is always recommended to begin at the beginning of the issue and not at the middle of the clause in which explanations are provided when and where to use the recommended test method.

If you check 33B.2 at the end of 33B.2 in page 231 lines 42-45 that prepare the reader to the next test in 33B.3 that is the issue being discussed?

"The effective resistance test method applies to the general case. If pair-to-pair balance is actively controlled in a manner that changes effective resistance to achieve balance, then the current unbalance measurement method described in 33B.3 shall be used."

The 33B.3 section was written to address two use cases:

- a) When there is no access to PSE internal circuits so Rpse_min and Rpse_max need to be evaluated by indirect way that they are meeting equation 33-13.
- b) When the PSE is implementing active or passive current limit so the Rpse_min/max are implementation specific however they meet equation 33-13 due to the fact that ICon-2P_unb limits are met.

Proposed Remedy

Make the following changes to the 1st paragraph of 33B.3 page 231 lines 49-52 and Page 232 lines 1-2.

33B.3 Current unbalance measurement

The following method may be used if the internal PSE circuits are not accessible [or known due to the case when PSE is using active or passive current unbalance circuitry that results with variable effective resistance to control unbalance](#). The current unbalance requirement shall be met for any pairs of the same polarity and with the load resistances per Table 33B-1. ~~Selected resistance values for RPSE_max and RPSE_min which provide adequate verification to Equation (33-13) or control ICon-2P-unb value are dependent upon PSE circuit implementation and as such are left to the designer.~~ [A PSE which uses current unbalance circuitry and meets the current unbalance measurement test by definition also meets Equation \(33-13\)](#) .Figure 33B-4 shows a test circuit for the current unbalance requirements measurement.

[.....Test procedure -----]

Verification of ICon-2P_unb in step 6 and 7 confirms PSE RPSE_max and RPSE_min are in conformance to this specification.