THREE-PHASE PROSPECTIVE FAULT CURRENT, WORKED THROUGH

WHY DOUBLE THE HIGHEST READING?

Guidance Note 3 · p.88 · 2.6.16, which covers single and three phase.

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LINE TO NEUTRAL, ONE CONDUCTOR AT A TIME
L1 – N  =  398 A
L2 – N  =  402 A
L3 – N  =  405 A   ← highest

405 × 2 = 810 A = 0.81 kA
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The reason for doubling: the worst case on three phase is a fault **across all three lines** (about twice the single-phase value), and on many instruments it cannot be measured directly — so the book has you double the highest single-phase reading, erring towards safety.

> **If your instrument CAN measure line to line**
> , you do not double. You divide the measured line-to-line fault current by **0.87** instead.

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