ICN AND ICS, AND WHY THE SCHEDULE WANTS KA

WHY DOES THE SCHEDULE WANT KILOAMPS?

Guidance Note 3 · 2.6.16. Your I_{pf} goes on the schedule in **kA** for one reason: so it can be compared with the figure stamped on the device.

MARKING WHAT IT MEANS

I_{cn}	The rated short-circuit capacity, usually in a box on the device — what it can interrupt, though it may be destroyed doing so
I_{cs}	The **in-service** short-circuit capacity — what it can interrupt and **still keep working**

USING IT

Measured I_{pf} = 0.6 kA (the greater of PSCC and PEFC)
Device = 16 A Type B RCBO, I_{cn} 6 kA

0.6 kA is nowhere near 6 kA → the device is fine, leave it.

And where it is not fine.

The device's breaking capacity must be at least the prospective fault current where it is installed, so a 6 kA device where the fault current is 7 kA is not suitable on its own. You would need the next rating up — a 10 kA device, same type and rating, different breaking capacity — unless a device on the supply side gives back-up protection (Reg 434.5.1); domestic consumer units carry a conditional rating with the cut-out fuse. Not every brand marks I_{cs}; where it is given, it is stated as a proportion of I_{cn}, so read the device rather than assuming.

Don't assume a figure.

Fault current varies with the supply and the installation. Measure it.

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