Subject: Using Fuses at 100% of Their Marked Ampere Rating

“Can I have a circuit draw 100% of my fuse’s ampere rating?”

The use of fuses at 100% of their marked ampere rating depends on their operating environment and the associated components of the electrical system, such as switches and terminations.

Underwriters Laboratories performs tests according to fuse amperage per the following:

- 600A or less fuses that are UL Listed go through a 100% test (UL 248 section 8.2.3.1)
- 601 - 6000A fuses (Class L and T) that are UL Listed go through a 110% test (UL 248 section 8.2.3.2).

The limitations are the switch and terminations. A 100% rated switch needs to go through special testing to verify that it can withstand the elevated temperatures that will exist when applied at 100% of its rating.

Therefore, if the switch is rated/listed for 100%, fuses can be applied at 100% of their ampere rating, too.

Sincerely,

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