NFPA 70® -2017 Edition
National Electrical Code®
TIA Log No.: 1300
Reference: 725.144(B)
Comment Closing Date: September 14, 2017
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1. Revise 725.144(B) to read as follows:

> **725.144(B) Use of Class 2-LP or Class 3-LP Cables to Transmit Power and Data.** Types CL3P-LP, CL2P-LP, CL3R-LP, CL2R-LP, CL3-LP, or CL2-LP shall be permitted to supply power to equipment at a current level up to the marked ampere limit located immediately following the suffix LP and shall be permitted to transmit data to the equipment. For ambient temperatures above 30°C (86°F), the correction factors of 310.15(B)(2) shall apply. The Class 2-LP and Class 3-LP cables shall comply with the following, as applicable: …

Substantiation: Section 725.144(B) inadvertently omitted that the temperature correction factors of 310.15(B)(2) applies to the ampacity of LP Cabling. The change inserts that text in the first paragraph of 725.144(B) as mandatory text.

The NEC Correlating Committee, at the direction of the NFPA Standards Council, formed the Power over Ethernet Task Group (PoE Task Group) to address issues regarding the provision of power over Ethernet and communications conductors. Members of the PoE Task Group, including members of NEC Panel 3, NEC Panel 16, and the NEC Correlating Committee, are as follows: E. Gallo – Chair, M. A. Cardona, W. J. McCoy, R. Kusuma, R. Emplit, R. Foster, S. Kaufman, M. Shariff, A. Tassone, J. Kacperski, R. Ivans, T. Pope, T. C. Coleman, J. Brunssen, J. Goergen, G. A. Zimmerman, L. Ayer, P. Vanderlaan, C. Bullock, C. Jones, and M. Ode. The PoE Task Group prepared this TIA. In accordance with the Standards Council's instructions, the task group was broad based and specifically included representation of those with knowledge and experience in telecommunications and Ethernet communications.

This TIA is separate from the other TIAs on Article 725 and Article 840 which were put together by the PoE Task Group.

Emergency Nature: The standard contains an error or an omission that was overlooked during the regular revision process.

By omitting the temperature correction factors of 310.15(B)(2) in 725.144(B), the code has created a new safety concern where LP cabling may present a previously unknown overheating hazard when LP cabling is used in ambient temperatures above 30C to its marked ampere limit. Such conditions would commonly occur in warm climates or high-temperature installations. This was previously unknown because the LP rating is new in NEC 2017.