



# Mike Holt Enterprises Electrical News Source

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## NEC 725.136 - Help for a Manufacturer

Mike always appreciates being able to assist the industry with his expertise on the Code. He recently had the opportunity to help out a manufacturer that was having issues with installation requirements for their ventilation control system.

### The question.

Dear Mike,

My company manufactures and sells a ventilation control system that uses a controller powered by a class 2 power supply and class 3 wiring to control a 110VAC exhaust fan. We are getting complaints from the field that Class 3 cable is not sufficient for this task and inspectors are requiring installers to use power conductors which poses an installation problem as the devices were not designed to accept the larger power conductors.

**Can you help us explain the applicable codes and how to best meet these codes allowing class 3 conductors when installing our product?**

[Attached please find an instruction sheet](#) we include with our product.



Thank you very much for your help.

Jason Wolfson

AirCycler® - A Division of Lipidex Corporation

### Mike Holt's response.

Jason, you bring up a very interesting installation that few inspectors or installers would have experienced.

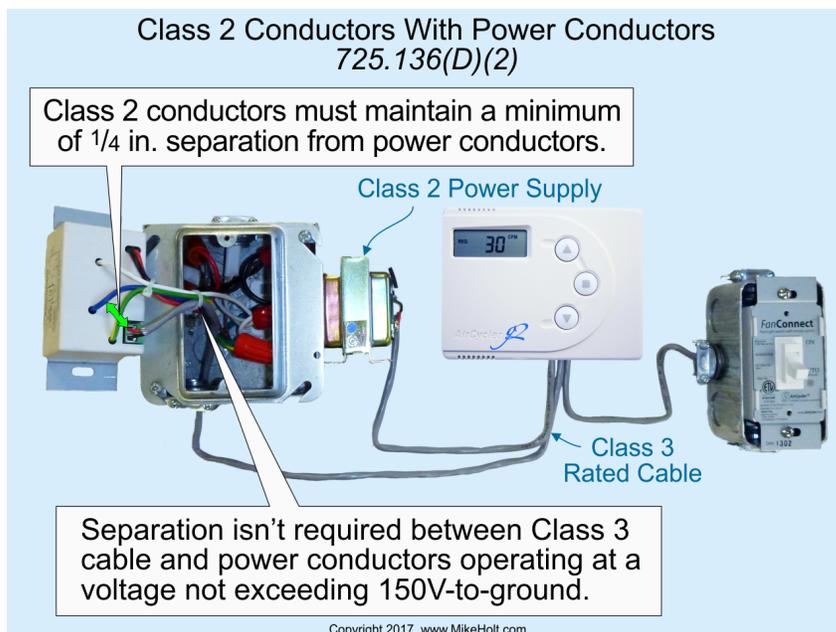
However, 725.136(D) has clear rules on how to govern this installation. 725.136(D): Class 2 circuit conductors are permitted to be installed in compartments, enclosures, and outlet boxes with electric light and power circuits where:

- They are introduced solely to connect the equipment associated with electric light and power circuit conductors operating at 150 volts or less to ground and
- The Class 2 circuits are contained in Type Class 3 cable, provided the Class 2 circuit conductors extending beyond the Class 3 cable jacket maintain a minimum of 0.25 in. separation from the electric light and power conductors.

I've created a graphic that should clear this up.

Enjoy.

God Bless,



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