Ticket #1336

Ticket Status:	InTheirCourt	**Name:**	Eli Baum
Department:	Electrical	**Email:**	elimbaum@gmail.com
Create Date:	04/16/2016 12:09 pm	**Phone:**	12039855069
Field of Study:	Electrical Engineering		

Subject: **Yale University**
04/16/2016 12:09 pm Eli Baum

Hello,

I recently opened a ticket about conduit/connector wiring [#1332] but made the mistake of using my school email. Our URL defense system screwed up your URL so I cannot access my ticket to respond. I'm very sorry about this mix up, and I have used my personal email so this will not happen again.

To respond to your questions for ticket #1332,

1. We are using Micro-Con-X 2-conductor panel mount connectors.
2. Current limiting resistors are in a PCB directly next to the AIRs, inside the accumulator.
3. Resistors are 10kΩ 10W.

Again, I am very sorry that I had to create the extra ticket.

Thank you,

Eli Baum

04/17/2016 2:56 pm

Pasting in the previous info for reference:

Original question

We have a watertight connector entering the tractive system for the TSMPs. We are running the cables through 1/2" conduit. The connector provides strain relief for the cables, and the conduit will be immediately secured to the chassis with a cable tie, so strain relief will not be an issue.

What can we use for the connector-conduit interface? This interface is less than 1". Can we use a very short length of properly-rated (UL-94) heat shrink for this interface?

Thanks.

Eli

Our first reply
Eli -
1/ please provide info on the connector type.
2/ where are the current limiting resistors located for the TSMP?
- are they in the accumulator enclosure or external
3/ what are the resistor ohm and power ratings?
I'm sure we can find a good solution - but heatshrink is probably not OK as technically this is TS wiring.

04/18/2016 3:31 pm

Eli,

We approve of using heat shrink to seal the joint between the conduit and the connector and anchoring the conduit to the chassis. The conduit will need to be securely anchored, to meet the 200 N pull strength specification (you can expect this to be tested).

One thing that is not clear from your description is the 1" distance. The conduit should at least meet the connector, and preferably overlap it, so that all the cable is inside the conduit, inside the connector or both. The heat shrink overlapping the conduit and overlapping the connector does not need to be limited in length--the heat shrink could extend several inches over the conduit, for example. If there are any doubts or concerns about that, a sketch or a photo could help make sure we are imagining the same thing you are.

Please Wait!

Please wait... it will take a second!