Common Control Panel Issues

[0m:0s]

[0m:4s] Hi, I'm Josh Bloom. Welcome to another video in the RSP Supply Education series.

[0m:9s] If you find that these videos are helpful to you, it certainly helps us out if you could give us a big thumbs up and subscribe to our channel. In today's video, we are going to be talking about control panels and some of the most common electrical issues we find in them. We will also talk about some things that you can do to make sure you avoid some of these common mistakes. We will cover things like improper grounding, lack of panel markings and labeling, panel retrofit work without proper documentation, as well as a few other common issues we have found when working in industrial control panels. As always, the information shared in this video is intended to provide only a basic overview of this topic

[0m:53s] and should never take the place of proper electrical instruction. With that being said, let's take a closer look at some of the most common mistakes we find when working in industrial control panels and learn about some of the things that you can do to avoid these mistakes. One of the most common problems we find in industrial control panels is improper grounding. These grounding mistakes can happen for many different reasons. Some of the most common mistakes occur when changes are made to the panel. We find that when new hardware is added to a control panel that often it is not grounded or it is grounded improperly. We also see incidents where control panels have multiple points of grounding throughout the panel, then go to different areas within the environment that the panel is actually located in. Sometimes these different grounding locations are not bonded to one another.


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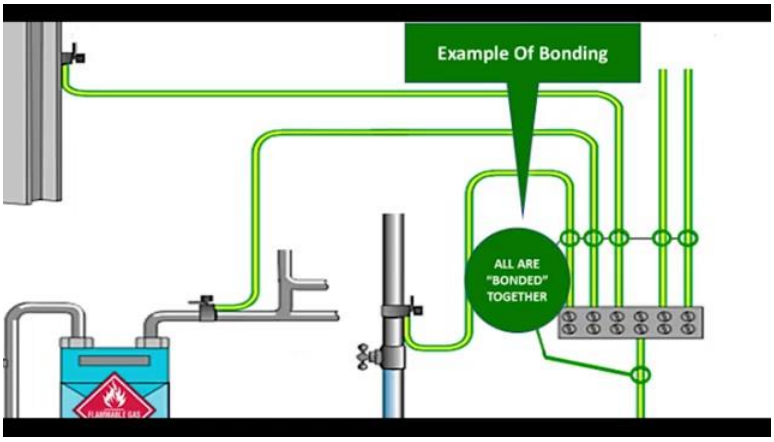
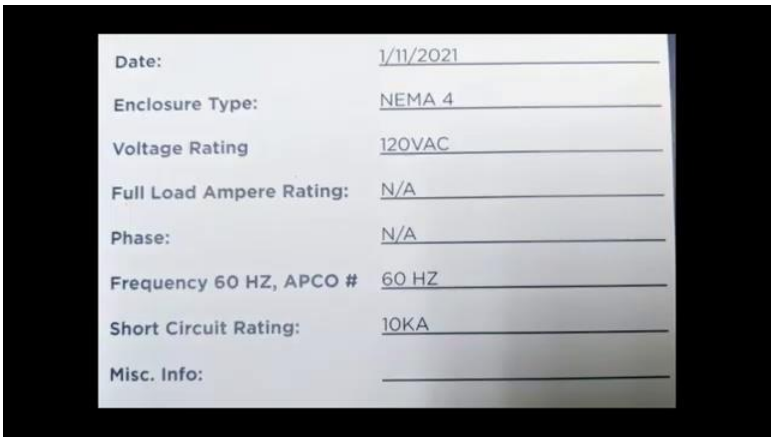
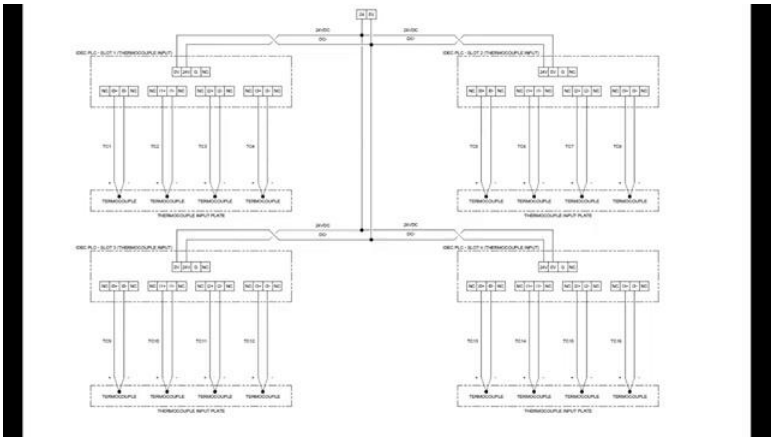
[1m:47s] This can lead to issues with the various types of hardware that are located within the panel. It is important to make sure that you always ground the hardware that you are working with. There should typically be one point in the panel that is bonded to the larger system ground. When working in older panels or retrofitting these older panels, try to identify where this one grounding point is and make sure that you are bonded to that grounding system. Another very common issue we see in control panels is the lack of identification or markings that indicate the incoming power to that panel. Without this

information displayed, it can present a danger to the operator working in that panel. There should always be a label that identifies the incoming voltage and current ratings. The short circuit ratings should also be listed. It is also important to know if more than one power source exists for that panel. If more than one power source does exist and it is not properly labeled, this can lead an operator to believe that there's no power that exists in a panel when they have shut the power off, which can be very dangerous. It is important to make sure that the panel is labeled with all incoming power sources. Another common mistake that is made in a control panel is when work has been done to that panel over a given period of time and no documentation of that work exists. For example, when a panel is installed, it is common to see that the panel will have a full drawing set that will accompany it. These drawings will indicate to any operators exactly how the panel works and how it is wired. If work happens later on in the panel and changes are made, it is important to make sure that those changes are documented and that the drawings are updated. Without these updates, it can be very difficult and potentially dangerous for operators to work within the panel because they will not be able to easily understand how the panel works or to figure out how the panel might be wired. This can also make it hard to troubleshoot any issues in the panel as well. For these reasons, it is imperative that all changes made in a control panel are properly documented and that the drawings are updated. By understanding the common mistakes that are made in control panels, you will hopefully be able to avoid these issues. It is important to make sure that the panel you work with is safe for you and any operators that might access that panel at a later date. Following a few of these guidelines, you will be able to ensure that the control panel you work with is safe and functions as expected. For a full line of industrial control hardware as well as thousands of other products, please go to our website. For more information or other educational videos, go to RSPSupply.com, the Internet's top source for industrial hardware. Also, don't forget,







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