





Building Technologies & Solutions – York Johnson Controls Plc.

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RE: Nuisance Fault Codes on SSE Control Boards

There have been some reports of nuisance faults on SSE control boards for <u>Fan Overload</u>, where the unit does <u>NOT</u> have a Fan Overload and the terminals have a jumper wire across them. There have also been reports of getting <u>High/Low Pressure</u> faults with the High/Low switch <u>closed</u>. These faults can arise when there is a faulty compressor contactor coil. On a call for cooling and the board sends control voltage to the compressor contactor coil and if it is faulty/shorted, the board does not know how to interpret this and therefore can result in random faults that don't seem to be associated with the contactor coil. You may not even notice this is happening because the time between the application of voltage and the fault alert is almost immediate and you will not hear the contactor try to pull in.

While the switches may check out ok, we suggest that the compressor contactor coil be ohmed out as a bad contactor coil can cause these issues to arise. When you read across a contactor coil you should read between 10 and 20 ohms. While we have seen some that have lower readings than this range and there are no issues we recommend replacing anything that is below or above this range if you are getting random faults. If you do not have any of these faults and the coil ohms out of range, you may not need to replace the contactor but be aware that in the future this may be something to consider should these nuisance faults start to occur.

One other item to mention; if you get random safety/ pressure switch faults you should test the switch while powered. Any safety switch should, in theory, read zero volts from terminal to terminal but if you read anything above 0.8 vac the switch should be replaced as it has a voltage drop that can cause nuisance faults.

Regards,

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