



A Leader in Electric Motor Testing

# Tip Of The Week

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## Failure to Start? What's Next?

Your motor fails to start. What immediate actions do you take when a motor trips on start-up? From a reliability standpoint a variety of possibilities and questions come to mind that may help you decide which direction to take. Was it an instantaneous trip on In-Rush or a time delay trip later in the Start-Up? If instantaneous, is it a stator fault or a nuisance trip? If it's a delayed trip, is it load driven or a rotor anomaly? Oh, and how many times did the operator try to start the motor? Just clamping on an ammeter to see what the current reading is when it trips will not give you the whole story. Looking at the trend of your RMS envelop current signal and comparing it to the raw time domain of the current is ideal. Access to these values and plots, along with previously recorded In-Rush/Start-Up tests will give you the information necessary to make the right decisions for a quick return to productivity.

To see a detailed case study on a critical motor failing to start go to: <https://www.youtube.com/watch?v=fMDbhdLDu4o>

You are invited to submit an Electric Motor Testing Tip of your own and receive a free PdMA® mug or hat if we publish it! Contact Lou at 813-621-6463 ext. 166 or [lou@pdma.com](mailto:lou@pdma.com).

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