



A Leader in Electric Motor Testing

Tip Of The Week

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Impact of Voltage Changes on Current

Changes in voltage have a significant impact on current. When it comes to supply voltage variations, starting current and running current respond very differently. A drop in line voltage will result in a lower starting current and a higher running current. A rise in line voltage up to 5% will increase starting current and slightly reduce running current. If the line voltage increases more than 5%, both starting and running current will be higher. As a general rule of thumb a 1% voltage imbalance can create a 7% current imbalance and a motor with a 5% voltage imbalance has a reduced capacity of 25% and should not be run unless the motor is de-rated accordingly.

Visit the PdMA YouTube site at <https://www.youtube.com/channel/UC-cUONWaudkKReNwC0PPXMQ> to see a variety of case studies from the electric motor reliability industry.

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.

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