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Tip Of The Week

September 23, 2013

Twisted Shielded Pair

Safety concerns continue to mount when discussing work being performed in the vicinity of energized gear. This issue has become important enough that new standards like IEEE 1814 (Recommended Practice for Electrical System Design Techniques to Improve Electrical Safety) are being developed to assist switchgear manufacturers and facility project managers in improving their electrical safety record. This elevation in safety considerations has prompted a large movement in products such as the M*TAP2* or M*TAP3* which allow a single technician to collect electrical data without opening the switchgear while the motor is in operation. These devices are being installed in everything from low voltage motor control centers to medium/high voltage switchgears. Given the large number of installations and the variety of enclosure configurations it is increasingly common for the current transformer (CT) wiring to extend beyond the factory distance of 8 feet. It is important to remember that when extending the CT wiring, twisted shielded pair conductors should always be used to minimize any electromagnetic interference that may be surrounding the cable run.

For more information on PdMA M*TAP*'s see http://www.pdma.com/PdMA-MTAP2-MTAP3.php.

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. 126 or lou@pdma.com.