POWER INSTRUMENTS

AMETEK

PRODUCT ADVISORY LETTER (PAL)

PRODUCT ADVISORY LETTER NO.: CF46-14001

DATE: May 14, 2014

AFFECTED PRODUCT(S): FSK TCF-10B Power Line Carrier units with the EM Output module option

AFFECTED MODULE(S): Receiver Logic module, 2-Freq & 3-Freq (Part # CF20-RXLMN-002 & CF20-RXLMN-004) that shipped between 1-1-2007 to 5-1-2014 with a revision level of 9.

SYMPTOM(s): Upon power down or power up the TCF-10B may intermittently output a brief (≤ 6 msec) Trip through terminal block outputs on TB5 and TB6 or an even briefer (≤ 2 msec) Trip through terminal block output TB1-4, when it shouldn't.

RECOMMENDATION: AMETEK recommends the corrective action listed below be taken for all Receiver Logic modules described above for those customers whose practice is NOT to disable their Trip outputs while powering the TCF-10B unit on and off. Customers should immediately start disabling their Trip outputs from the TCF-10B when power cycling to prevent possible misoperations if they have affected modules.

CORRECTIVE ACTION: Return the Receiver Logic modules for a hardware modification. Also advance replacements can be supplied on a limited basis, and the affected modules can be returned using the same packaging. Call AMETEK at phone # 800-785-7274 (customer service) to obtain a RMA number and reference this PAL. This modification is available at no charge and will not affect any applicable warranty.

TECHNICAL DETAILS: The EM Output module is driven by the Receiver Logic module which is driven by the Receiver module, and often the EM Output module is used to drive a LOR, protective relay or to trip a breaker directly. A hidden hardware defect was discovered where the Receiver Logic module would sometimes output an erroneous 1 - 6 msec Trip with reduced voltage level to the EM Output module (and a shorter Trip output to the solid state output on TB1-4) during the several milliseconds where the dc power supply voltage was ramping up or down when the TCF-10B was turned on or off. This could sometimes cause a false trip output that was long enough to trip a LOR or other high speed tripping device. There were subtle changes to the ICs on the Receiver Logic module by our suppliers over the years that caused this problem to arise. Also the longer the ramp up or down time of the dc power supply's output voltage to the Receiver Logic module, then the more evident this problem became. That is why certain newer vintage Power Supply modules would also exacerbate this problem as their output voltage ramp up time is longer. A hardware solution to completely disconnect this output during power up or down periods has been implemented on all new Receiver Logic modules shipments and is now available as a retrofit solution also. This hardware solution brings the module to revision 10.

AMETEK appreciates your past support and we want to continue to provide you the best service possible. Please help us by letting us know if future notices should be sent to another individual.

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