

Noise Susceptibility on Installed Circuit Breaker

A circuit breaker in a plant exhibited intermittent erratic action when installed in the customer's plant. This was occurring on various, but not all, of the circuit breakers of the same design in this plant. I coordinated a troubleshooting effort involving the manufacturer's field service technicians to determine the source of the noise and a means to eliminate the susceptibility. When the field service technicians were unable to identify the reason for the noise susceptibility on two successive visits to the facility, I was engaged to perform on-site troubleshooting. After developing and performing a methodical sequence of tests, I located a broken shield wire. Root cause investigation into the broken wire uncovered a production deficiency at the manufacturer's facility. A design modification was implemented eliminating the potential for the shield wire to break in production.