# Case Study: Printing Company Needed Emergency Drive Repair





Objective

• Provide fast repair of a failed VFD for an out-of-state customer.

#### Solutions

- Immediately dispatched our engineer on a Sunday afternoon to make the long trip to the customer's site.
- Our engineer was prepared for various scenarios and brought with him the tools and replacement parts to expedite the diagnosis and repair.
- The testing, identification, replacement of components, and repair verification were completed within hours as there was no need to wait for parts.
- Our engineer spent time with the onsite engineer to explain the problem and potential ways to avoid a similar failure in the future.

#### **Results/Benefits**

- The customer was very relieved to be up and running again after several days of downtime prior to calling Quad Plus.
- We provided the fastest possible repair to prevent any additional downtime or expense for the customer.
- The customer was very impressed with our team's professionalism, including the speed of the repair and extra time spent at the facility to educate the onsite engineer and verify that the systems were operating correctly.

Onsite equipment manufacturer's engineer was unable to diagnose the problem and called for backup.

## Background

We received a call on a Sunday morning from a major out-ofstate printing company. They were experiencing failure from a VFD, and the onsite equipment manufacturer's engineer was unable to solve the problem after several days. With the new week's production schedule looming, the onsite engineer reached out to Quad Plus for assistance.

### **Quad Plus Solution**

Upon receiving a request for assistance, our drive specialists will discuss the issues and any fault information available. We always attempt to troubleshoot using off-site assistance and remote support to provide a fast, cost-effective solution for our customers. In the case of this customer, the initial fault reported was F002 (pre-charging fault); but after further discussion and testing with site personnel, there were indeed additional issues with the unit. The F002 was the only fault displayed initially, but A017 (safe-off) and status locked in 0008 (start inhibit) were also present.

An onsite repair was necessary, so we immediately dispatched an engineer to make the 6.5 hour trip to the location so he could be present early Monday morning. When onsite assistance is determined to be necessary based on the information collected, all the appropriate parts required to accomplish an onsite repair are organized and carried with the technician to the site to facilitate a speedy repair.

The drive was put through several functional tests to identify the defective components, and we also found an F026 issue for gating fault on IGD. The parts were replaced, and the system was retested to validate the repair before returning the VFD to normal service. The entire procedure was completed in less than eight hours. Our engineer remained at the facility for an extra day to monitor the operations of the systems to ensure everything was running smoothly.

The printing company was extremely pleased with our quick response and our engineer's preparations to complete a fast repair. After a frustrating several days with their onsite engineer unable to diagnose the problem, it was a relief to be operational again quickly to save additional downtime and expense. We also took the time to make sure the onsite engineer understood the problem and provided guidance for avoiding a similar failure in the future.