TCU800 Current Transformer Function

The TCU800 offers an enhanced Current Transformer (CT) function that displays all three-phase information (voltage and current) and provides alarm functions for overcurrent, undercurrent and phase imbalance measurements. Triplex pump currents can be measured with a single set of (3) external CTs.

When the unit is in the Motor Current mode, it derives each pump's current when running. In the Direct Input mode, it will measure the average total current being read from the CTs.

The TCU800 has a bright, five-inch touch screen. When set in the Power view, the unit clearly displays each pump number and run indicator, the average current and phase imbalance while the pump is running, and three-phase voltage and current. In the Alarm view (shown), the screen vividly displays alarms that indicate readings above the overcurrent limit or below the undercurrent limit, as well a phase imbalance. Contact our sales group for more detailed information regarding features, applications and CT requirement criteria.

WTP SCADA System Lake Wales, Florida

DFS recently completed a control and monitoring SCADA system for the water production utility in the City of Lake Wales, Florida.

This lease-purchase addition, implemented by our Systems Engineering group, replaced an inflexible, simplistic system that didn't offer a simple path for adjustments or modifications. The operating and alarm parameters had been set in PLC code and only notified the utility when pre-set alarm conditions occurred.

The new system allows the users to adjust the system's criteria--alarm conditions, pressures, chlorine levels, distribution rates, etc.--at four water treatment plants. The system also monitors two elevated storage tanks.

Chief Water Operator, Holly Britt said her old system worked okay, but was very limited.

"It wasn't as detailed. It would let us know that something was either working or it wasn't. We'd get a chlorine alarm and we'd know something was wrong, but it was very vague. Now we see that the chlorine levels are getting low or high or the distribution levels are dropping while it's actually happening. It gives me the ability to instantly see any problems that are developing. It's been really efficient."

The city already had a DFS system operating their wastewater collections and the new WTP system operates on a virtual partition on the existing SCADA server. This allows each department to utilize the system without interference from the other partition and saves the utility the cost of a second system server.

Check the Fuses, Save a Visit

Our service technicians sometimes make service calls only to find that the trouble was the result of a simple blown fuse. These costly, time-consuming visits could often be avoided with a quick inspection.

The TCU and TCU800 employ three fuses, labeled F1, F2 and F3, located on the DIN rail terminal block.

Our modular RTUs usually are protected by two fuses: F1 and F2. These fuses are also located on a DIN rail. Checking these items before calling for a service visit can reduce down-time and save the cost of a service call.