To assure that important loads are properly served, a utility may want to make an alternate power source available in case the load's primary source goes down. In this application, the utility may also want to automate the source transfer function to minimize the time that the important load is without power.

Auto-transfer control (ATC) can be integrated into Cleaveland/Price controllers through use of a pre-programmed Reliatronics RTU2000 or RTU3200 micro-RTU. Because of the RTU's small size it can be easily installed in the controller. The RTU will perform ATC functions as well as report controller statuses; opened switch,



BT-D motor operator with RTU 2000

closed switch, loss of AC, remote ready, low battery voltage alarm, and no-go alarm. The RTU is provided with DNP 3.0 protocol. Modbus protocol is also available.

Battery charging power for the controllers comes from a PT on each circuit and the RTU is powered by the controller's 12 volt, 33 AH battery. If power is lost on a circuit, the RTU would sense the loss of AC and initiate the auto-transfer sequence.

The ATC RTU, typically installed in the primary line controller, uses status indications from all of the controllers in the transfer scheme to determine if auto-transfer should be performed. Up to three controllers can be integrated into the ATC scheme. The RTU will record sequence of events with timestamp.

Auto-Transfer Control

If the controllers are in close proximity, the statuses from the non-primary controllers can be hard wired to the ATC RTU. If the controllers are a distance away from each other, radio or fiberoptic communications can be used. In this instance, a status reporting RTU would be needed in the non-primary controllers.

The RTU can be programmed with any ATC scheme that a customer determines is best suited for their application or it can be programmed with several schemes that can be menu selected. Interface with the RTU is through an RS 232 port. The RTU can be programmed to perform:

- Auto-transfer between primary and secondary sources after loss of AC and customer selected time delay with:
 - Auto-return to preferred configuration with return of voltage to the preferred line or no return if there is not a preferred setting
 - Transfer hold if both primary and secondary lines are without voltage
- Auto-transfer between primary and secondary sources with load side fault lockout (with load side fault indication)
- Transfer with an open transition or transfer with a closed transition
- Transfer test function with decoupling of switch controllers from vertical pipe

The RTU can be programmed to provide other functions as specified by a customer. The autotransfer function can be enabled or disabled through SCADA or locally. An auto-transfer active indicating light is provided.

Cleaveland/Price controllers can be shipped with the ATC RTU installed or the controller can be retrofitted with ATC at a later date.



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