

Automatic Paralleling Switch

Ideal For Demand Response Applications

Automatic Paralleling Switch Features

- 100 – 5000 Amp circuit breaker
- UL-891 Listed Device
- Direct Engine Control & Monitoring
- Integrated Load Shedding Capability
- Integrated Multi-function Encorp Gold Box™ (Generator Power Control)
- Load/No Load Test
- Peak Shaving Applications
- Export-to-utility Applications
- Automatically cycles the engine through the start, warm-up, load, unload, cool-down and stop sequence
- Constantly monitors the engine and sends alarms via pager and email – automatically shuts down the engine if necessary
- Complete set of protective relays
- Automatically synchronizes with the utility
- Supports Modbus™, LONWORKS™, and IEC 1131 PLC protocols



Encorp Gold Box™ Features

- Embedded software provides kW and VAR load-sharing, VAR and power factor control, base-load control, kW load-sharing and power transfer control with soft loading and unloading, a true RMS real power sensor, protective relays, harmonics meter and PLC logic – all in one box!
- Remote access and control using Encorp cloud-based monitoring system

Automatic Paralleling Switch

Description of Operation

The Automatic Paralleling Switch (APS) allows a single generator to peak shave or export-to-utility only when the utility is available. The generator can synchronize to the power source in a soft transition mode, supplementing utility power to perform peak shaving or power exporting.

System Start Options

The Encorp APS may be started in a variety of ways depending on the needs of the facility and the specific application. The ability to start and parallel a generator to the utility for the purpose of peak shaving is most effective when initiated during periods of high utility demand.

kW Demand Level

As demand for power within a facility increases, the price charged by the utility also increases. Typically, the 'peak' demand at a facility lasts for only short periods of time yet the utility charges annual rates based on this peak which is often 10 to 20 times the non-peak rate. Using a kW Demand Level start option, the APS would monitor the utility and automatically start the generator and perform a closed-transition (softload) transfer whenever necessary to avoid excessive utility charges.

Auto-Schedule (time-based)

There may be certain times of the day or week when utility charges are prohibitive. In these case, the APS may be programmed to parallel the generator to the utility to avoid high rates or simply to exercise the generator.

Remote

There are many reasons why a remote start option might be advantageous. Perhaps a utility gives its customers incentives to participate in an Interruptible rate or power exporting program. In this case, the utility uses the Remote Start capabilities of the APS to power the facility from its own generator and then curtail utility delivered power to the facility. The utility increases its own supply, and the customer experiences a 'blip-less' transfer to its own generator while receiving a favorable utility rate.

Local Operator Interface

If it ever becomes necessary to start and parallel (or transfer) facility loads to the generator manually, the APS provides an easy to use Local Operator interface. Touch-screen controls make the process of starting and stopping the generator easy. System tests may be accomplished in Load and No Load options.

The APS will start the generator and parallel with the utility grid.

