SYNC1320 FEATURE DESCRIPTIONS

4/10/06

Feature	Description
Master Synchronizing and Voltage Matching	• synchronizes up to a 12 genset bus to another source • output frequency offset range: +/- 1.5Hz minimum, up to +/- 3.0Hz • output voltage offset range: +/- 10% • controls frequency and voltage via PCC kW and kVAR load share lines • performs both phase synchronization **and voltage matching** • selectable phase synchronization (default) or slip frequency synchronization • adjustable slip frequency (for slip frequency synchronization method) • adjustable frequency and voltage control output ramp rates for minimizing disturbance when sync turned on • adjustable control loop gains • sync enable input for manual mode or sync only applications • synchronizer output limit diagnostic • option to lock out synchronizer if fail to sync occurs; re-enabled upon fault reset
Permissive Sync Check	• continously monitors for permissive sync conditions to be met when sources are considered acceptable • includes configurable dead bus logic • adjustable frequency window, phase window, voltage window, and window time for permissive check • sync check output • fail to synchronize diagnostic • phase rotation mismatch diagnostic (sync check OK prevented if phase rotations are different)
On-Board Diagnostics	• individual LEDs for: Utility Available Genset Available Not In Automatic Common Warning Heartbeat Synchronizing Synchronized Fail To Sync • seven segment LED for indication of: System State indication of what the control is currently doing Fault Code Readout (hold fault reset switch active for >5sec to change to fault code readout mode)

Feature	Description
Diagnostics	• diagnostics provided: Common Alarm Event Genset Available Event Synchronized Event Utility Available Event AC Metering Out of Range Warning Calibration Checksum Warning EEPROM Write Error Warning Fail To Synchronize Warning Hardware Failure Warning Not In Automatic Warning Synchronizer Output Limit Warning Synchronizer Phase Rotation Mismatch Warning • some diagnostics are mapped low side driver outputs • active warning codes can be read out on 7segment LED on board • warnings are latched until user fault reset
Engineering Setup Tool	• special application to assist with setup of the SYNC1320 • user friendly screens • help file
InPower Service Tool	• MON RS485 interface • standard InPower folders: Adjustments, Faults, Monitor, Test • capture files • download new firmware