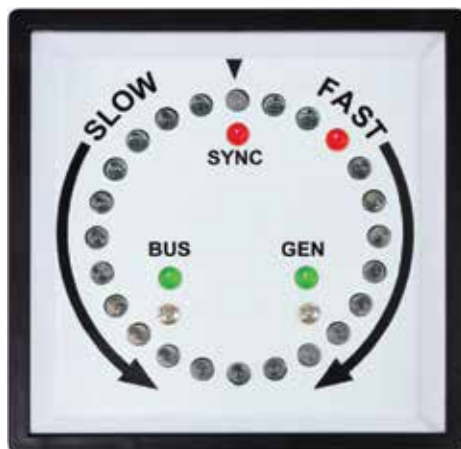




Model HLS-96 SYNC

LED Synchroscope



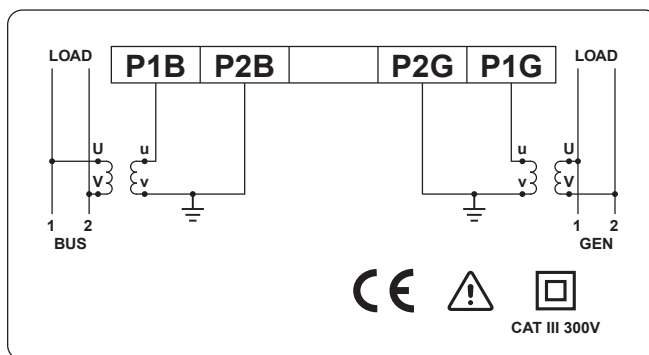
Operation Principle

- Initially, SYNC, BUS and GEN LED's are lit Red and the outer ring will show a single Red traveling LED. When voltage and phase angle are unmatched the outer ring LED rotates according to the system phase difference.
- When the BUS voltage is at $\pm 10\%$ of nominal system voltage, the BUS LED will change from Red to Green signifying proper BUS voltage has been established. When the GEN voltage is at $\pm 10\%$ of nominal system voltage the GEN LED will change from Red to Green signifying proper GEN voltage has been established.
- Finally, once all system voltages match and the systems are synchronized, the SYNC LED will change from Red to Green. All LED's are now Green when the systems are synchronized.

Features

- Input voltage: 110V AC, 120V AC or 240V AC.
- Square shape panel 96 x 96mm.
- PC window, ABS resin frame, PC case.
- 3 bi-colored LED indicators for "SYNC", "GEN" and "BUS".
- 24 LEDs in a circle display the phase angle and the frequency differences between 2 networks.
- 360° indication.
- 12 o'clock position LED is bi-colored.
- UL # E486912

Wiring Diagram





Model HLS-96 SYNC

LED Synchroscope

Specifications

	HLS-96 SYNC (110V)	HLS-96 SYNC (120V)	HLS-96 SYNC (240V)
Nominal Input Voltage	110V AC	120V AC	240V AC
Overload	1.25 × Nominal voltage		
Frequency Range	40~70Hz		
Scale	SLOW / FAST		
Pointer LED	15 degrees / LED		
BUS LED (Bi-colored)	Green : 100V-121V AC	Green : 108V-132V AC	Green : 216V-264V AC
	Red: <100V or >121V AC	Red: <108V or >132V AC	Red: <216 or >264V AC
GEN LED (Bi-colored)	Green : 100V-121V AC	Green : 108V-132V AC	Green : 216V-264V AC
	Red: <100V or >121V AC	Red: <108V or >132V AC	Red: <216 or >264V AC
SYNK LED (Bi-colored)	Green : "GEN" and "BUS" are synchronized		
	Red : "GEN" and "BUS" are not synchronized		

Dimensions

