

# CROMPTON INSTRUMENTS LED SYNCHROSCOPES

APPLICABLE UP TO 480 V



**CLEARLY INDICATES SYNCHRONISING STATE WITH RELAY OUTPUT AND REAL-TIME FEEDBACK FOR BETTER MONITORING**

## KEY FEATURES

- Clear Synchronising indication
- Relay output for remote indication

TE Connectivity's (TE) Crompton Instruments LED Synchrosopes measure and display the frequency difference of two power sources. Monitoring the display allows the user to connect two synchronized power systems.

The LED indication gives real-time feedback on the synchronisation state. When the synchronised state is achieved, the indicator stays in the synchronising position.

The LED indication gives real-time feedback on the synchronisation state with relay output for systems integration. Dead bus monitoring is also available, as an option, combined with the Voltage and phase monitoring.

## APPLICATIONS

- Switchgear Panels

## RELEVANT STANDARDS AND TEST REPORTS

- IEC 61010

## ORDERING INFORMATION

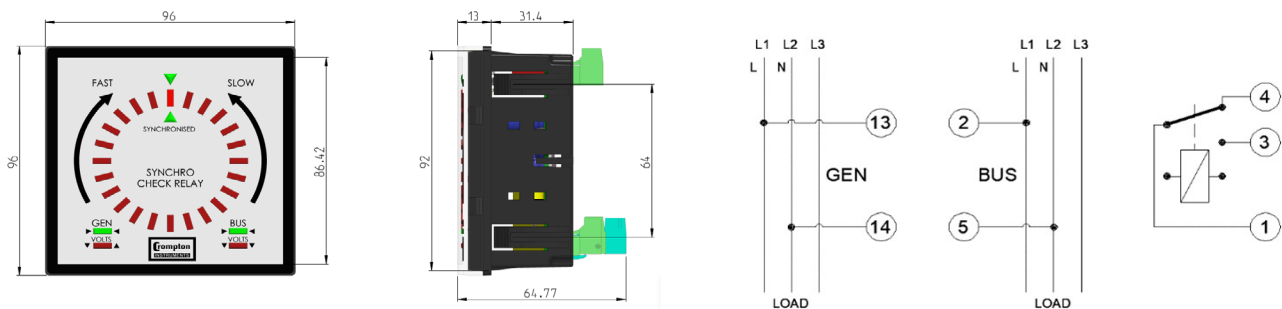
| Part Numbers | Model         | Voltage                   | Operation  |
|--------------|---------------|---------------------------|--|
| ES7318-000   | 244-14HG-L-01 | 100/120 V (110 V nominal) | Synchro check relay, Voltage Difference and Dead Bus |
| ES8092-000   | 244-14HG-M-01 | 220/240 V (230 V nominal) |  |
| ES8091-000   | 244-14HG-H-01 | 380/480 V (430 V nominal) |  |
| ES8089-000   | 244-14GG-L-01 | 100/120 V (110 V nominal) | Synchro check relay, and Voltage Difference          |
| ES8090-000   | 244-14GG-M-01 | 220/240 V (230 V nominal) |  |
| ES8088-000   | 244-14GG-H-01 | 380/480 V (430 V nominal) |  |

## COMPATIBLE PARTS

| Model           | Part Number | Case Style | Voltage | Frequency |
|-----------------|-------------|------------|---------|-----------|
| 007-14A-PRAE-C7 | ES3830-000  | ANSI 4.5"  | 120 V   | 50/60 Hz  |



## CUSTOMER DRAWING & CONNECTION DIAGRAM



## TECHNICAL SPECIFICATIONS

| Parameters                  |   |
|-----------------------------|---|
| Nominal Voltage             | ±10% of range                             |
| Nominal Frequency           | 45 / 65 Hz                                |
| Operating Position          | Panel Mounted (Vertical)                  |
| Accuracy                    | 1%  |
| Overload                    | 1.2x range max, continuous, 2x for 5 secs |
| Relay Output Type           | Single Pole changeover                    |
| Relay Output Rating         | 250 V, 5 A AC resistive                   |
| Operating Temperature       | -20°C to +45°C (-4°F to 113°F )           |
| Storage Temperature         | -30°C to +70°C (-22°F to 158°F )          |
| Humidity                    | 95% RH (non-condensing)                   |
| Pull-in Frequency           | 56 Hz                                     |
| Drop Out Frequency          | 55 Hz                                     |
| Insulation Between Circuits | 2.2 kV                                    |
| Insulation to Case          | 4 kV                                      |
| Overvoltage Category        | III                                       |
| Pollution Degree            | II  |
| Enclosure Integrity         | UL94-V0                                   |
| Enclosure Style             | DIN 96                                    |
| Case Material               | Polycarbonate UL 94V0                     |
| Electrical Connections      | Cage clamp, Plug / Socket                 |
| Mounting                    | Snap-In                                   |
| Dimensions                  | 96 x 96 x 65 mm                           |
| Weight                      | 200 g                                     |
| Burden                      | < 4 VA                                    |

